Publication No. 9B8817
February 1997

SERVICE MANUAL
for the
Kodak AUTOMIXER III PLUS

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Warning

To avoid hazardous conditions, keep floors and floor coverings around your *Kodak X-Omat* Processors and associated drains clean and dry at all times. Any accumulation of fluids from mixing tanks, drain lines, etc., should be cleaned up immediately. In the event of an accumulation of liquid due to backup, overflow, or other malfunctions of the drain associated with you *X-Omat* Processor, call a plumber or other contractor to correct any problem with the drain. Kodak accepts no responsibility or liability whatsoever for the serviceability of any drain connected to or associated with a *Kodak X-Omat* Processor. Such drains are the sole responsibility of the customer.

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

Important

Use qualified personnel to service the AUTOMIXER III PLUS.

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Section 1: Service Overview

Special Tools

Tool No.	Description
TL-2791	EXTRACTION TOOL
1C7806	HYDROMETER KIT

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.

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.
- 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.

Section 2: Installation Instructions

Unpacking the AUTOMIXER

H115_0065HCA
H115_0065HA

[1] Remove the AUTOMIXER from the packing material.

[2] Check that the contents of the PRE-PACK matches the Packing List.

[3] Remove the 4 WIRE TIES from the 4 RAILS.

[4] Remove any WIRE TIES from the DRAW-OFF SPIGOT.

H115_0101ACA
H115_0101AA

Important

Do Steps 6 and 7 for both REPLENISHMENT TANKS.

[5] Remove the TANK COVER.

[6] Remove tape and any residual adhesive from:

- TANK COVER
- LIQUID LEVEL SENSOR
- SUBMERSIBLE PUMP and BRACKET

[7] Remove any debris from the bottom of the REPLENISHMENT TANK.

Installing the LEVELING SCREWS

H115_0067ACA
H115_0067AA

[1] Place the AUTOMIXER in the correct position for installation.

[2] Install the 4 LEVELING SCREWS.

Caution

Do not allow more than 2.5 cm (1 in.) between the bottom of the AUTOMIXER and the HEAD of the LEVELING SCREW.

The FLOOR PLATES are provided with the PROCESSOR.

[3] Place a FLOOR PLATE under each LEVELING SCREW.

[4] Level the AUTOMIXER.

Activating the AUDIBLE ALARM When the Mix Level is Low

H115_0068HCA
H115_0068HA

Important

Opening the DRAWER to stop the AUDIBLE ALARM is an option. To enable this option, do Steps 1 - 4.

[1] Disconnect CONNECTORS P/J1 and P/J11.

[2] Install the 2 JUMPERS 5B6872.

[3] Connect P/J1 and P/J11.

[4] Install 2 WIRE TIES.

Installing the SPECIFIC GRAVITY FLOATS

Caution

- The SWITCH HINGE PINS break easily. If the SPECIFIC GRAVITY FLOATS are not installed correctly, damage to the SWITCH HINGE PINS can occur.
- Do not move the AUTOMIXER with the SPECIFIC GRAVITY FLOATS installed.

[1] Remove packing material from the SPECIFIC GRAVITY FLOATS.

[2] Holding the SPECIFIC GRAVITY FLOAT parallel to the floor of the REPLENISHMENT TANK, engage the SPECIFIC GRAVITY FLOAT on one SWITCH HINGE PIN.

[3] Rotate the SPECIFIC GRAVITY FLOAT carefully until it engages with the other SWITCH HINGE PIN.

[4] Move the REPLENISHMENT TANK forward.

[5] Check that the SPECIFIC GRAVITY FLOAT is in the correct position under the FLOATING LID.

[6] Install:

- FLOATING LID
- TANK COVER

Installing the PROCESSOR onto the AUTOMIXER

[1] Connect the REPLENISHMENT HOSES for both of the REPLENISHMENT TANKS.

[2] Feed the REPLENISHMENT HOSE through the BACK PANEL of the AUTOMIXER.

Caution

Light leakage can occur through the REPLENISHMENT HOSES.

[3] If necessary, place opaque material around the REPLENISHMENT HOSES.

[4] Remove the BACK PANEL from the AUTOMIXER.

[5] Align the PROCESSOR onto the AUTOMIXER.

Caution

Do not tighten the fasteners until all 4 fasteners are installed.

[6] Install the 2 feed-end fasteners, through the AUTOMIXER into the PROCESSOR.

[7] Install the 2 receiving-end fasteners, through the AUTOMIXER into the PROCESSOR.

[8] Tighten the 4 fasteners.

[9] Do one of the following procedures:

- “Installing Through the Wall” on Page 9.
- “Connecting the AUTOMIXER to the PROCESSOR” on Page 13.

Installing Through the Wall

Installing the LIGHT-LOCK GASKET

H115_0021DCA
H115_0021DA

Note

This installation procedure assumes that a hole has already been made in the wall for the PROCESSOR and the AUTOMIXER III PLUS and that the PLYWOOD has been mounted to the wall around the hole. The recommended minimum size of the hole is 106 x 76 cm (41.75 x 30.0 in.) at the correct height from the floor. See the “SITE SPECIFICATIONS” for the AUTOMIXER III PLUS.

[1] Install the LIGHT-LOCK GASKET to the MOLDING for the 2 openings.

Checking the Dimensions of the Plywood

Dimensions of the wall opening:

Height:	106.0 cm (41.75 in.) from 2.5 cm (1.0 in.) above the floor
Width:	76.2cm (30.0 in.)

Installing the BRACKETS

H115_0070DCA
H115_0070DA

Important

The customer provides the hardware used to install the BRACKETS to the PLYWOOD.

[1] Install the 2 BRACKETS onto the PROCESSOR.

[2] Move the PROCESSOR against the wall.

[3] Check that the LIGHT-LOCK GASKET is tight against the PLYWOOD and the PROCESSOR.

[4] Install the BRACKETS onto the PLYWOOD.

[5] Check for light leakage with the DRAWERS open and closed.

Making the Plumbing Connections

H115_0006GCE
H115_0006GA

Warning

- Drains must be made chemically resistant, non-corrosive material. Use PVC or equivalent.
- The Drain must have a minimum diameter of 7.6 cm (3 in.) and be free of obstruction.
- Drain service must comply with all local codes.

[1] Connect a high pressure HOSE from the water supply to the WATER INLET ADAPTER. The customer provides the HOSE.

Caution

Use DRAIN HOSE with more than 2.54 cm (1.0 in.) inside diameter.

[2] Connect the DRAIN HOSES to the Fixer and Developer DRAINS. The customer provides the DRAIN HOSES.

[3] Check the position of the DRAIN HOSES and that the solutions drain into the FLOOR DRAIN.

Making the Electrical Connections

Warning

Dangerous voltage

[1] Connect the POWER CORD to the POWER ENTRY MODULE, IEC and to a grounded outlet.

Connecting the AUTOMIXER to the PROCESSOR

H115_0033CCA
H115_0033CA

H115_0012CCA
H115_0012CA

Caution

Prevent debris from falling into the PROCESSOR.

[1] Install the STRAINERS into the REPLENISHMENT HOSES. The STRAINERS are provided with the PROCESSOR.

[2] Connect the REPLENISHMENT HOSES to the Developer and Fixer Replenishment Connections on the PROCESSOR.

[3] Do the procedure “Priming the AUTOMIXER” on Page 23.

Installing the KNIVES, NEST, and TEMPLATE

Note

See the figure for the correct configuration of the DRAWERS.

[1] Install for each DRAWER:

- KNIVES
- NEST
- TEMPLATE
- 4 SCREWS

Section 3: Theory of Operation

The *Kodak* AUTOMIXER III PLUS has two electrical systems -- the Specific Gravity Sensing System and the Liquid Level Sensing System.

Specific Gravity Sensing System

The following are components of the Specific Gravity Sensing System:

- SPECIFIC GRAVITY FLOAT and SWITCH
- ISOLATION RELAY
- TIME DELAY RELAY
- SUBMERSIBLE PUMP
- WATER SOLENOID VALVE
- 12-V POWER SUPPLY

The SPECIFIC GRAVITY FLOAT is designed to float in chemical concentrate and sink when the dilution of the concentrate reaches a predetermined specific gravity.

A voltage of 12 V DC is applied to the FLOAT SWITCH. When concentrate is added to the REPLENISHMENT TANK, the SPECIFIC GRAVITY FLOAT rises. A MAGNET in the SPECIFIC GRAVITY FLOAT closes the SWITCH applying 12 V DC to the WATER SOLENOID VALVE and to the ISOLATION RELAY. The ISOLATION RELAY energizes the TIME DELAY RELAY. The TIME DELAY RELAY then energizes the SUBMERSIBLE PUMP.

When the correct amount of water is added to the concentrate, the SPECIFIC GRAVITY FLOAT sinks. As it sinks, the SWITCH opens and removes the 12 V DC power from the WATER SOLENOID VALVE and the ISOLATION RELAY. The TIME DELAY RELAY continues to provide power to the SUBMERSIBLE PUMP for one minute after power is removed from the WATER SOLENOID VALVE.

Level Sensing System

The following are the components of the Level Sensing System:

- LIQUID LEVEL SENSORS
- AUDIBLE ALARM
- POTENTIOMETER
- LOW-LEVEL LED
- ALARM DISABLE SWITCH
- LEVEL INDICATOR LEDs
- 12-V POWER SUPPLY

The solution level in the REPLENISHMENT TANK is monitored by the LIQUID LEVEL SENSORS. When the REPLENISHMENT TANK is full, the top 2 SWITCHES are closed and the bottom SWITCH is open. The open SWITCH provides a path for current to the 3 LEVEL INDICATOR LEDs on the FRONT PANEL.

As the solution level in the REPLENISHMENT TANK decreases, the MAGNETIC FLOATS on the LIQUID LEVEL SENSORS move down opening the SWITCHES that control current to the “3/4” and the “>1/2” LEVEL INDICATOR LEDs. When the solution reaches a low level, the bottom SWITCH closes -- the LOW-LEVEL INDICATOR illuminates and the AUDIBLE ALARM operates. The “1/4” LEVEL INDICATOR LED is turned off when the low-level SWITCH actuates. The volume of the AUDIBLE ALARM is controlled by a POTENTIOMETER. Operation of the AUDIBLE ALARM is stopped by either opening a DRAWER to open the ALARM DISABLE SWITCH or increasing the solution level to open the bottom LEVEL SENSING SWITCH.

System Sequence of Operation in Low Level State

H115_9000EC

Leveling Sensing System in Low Level State

H115_9002DC

Specific Gravity Sensing System in Low Level State

H115_9001EC

Section 5: Electrical Diagrams

POWER SUPPLY
+12 +12 +12 RTN RTN RTN RTN +12 +12 NC NC NC NC
J/P6 1 2 3 4 5 6 7 8 9 10 11 12 13
LINE
NEU
GND
P/J7
EMI FILTER
1 A
E2
POWER CONNECTOR/FUSE/EMI FILTER
5 A
TB1
TB3
TB2
TB4
+12 Vdc
P/J5
FIXER FULL
FIXER 1/2
FIXER 1/4
FIXER LOW
FIXER DRAWER SWITCH CLOSED WHEN DRAWER IS CLOSED
J/P1
SERVICE SWITCH
D1
D2
ALARM VOLUME CONTROL
ALARM
AA1
DEV WATER SOLENOID
L2
DEV DRAWER SWITCH CLOSED WHEN DRAWER IS CLOSED
J/P11
J/P8
DEV FULL
DEV 1/2
DEV 1/4
DEV LOW
J/P2
FIXER FULL CLOSED WHEN FULL
FIXER 1/2 CLOSED WHEN FULL
FIXER LOW OPEN WHEN FULL
J/P3
FIXER SPECIFIC GRAVITY FLOAT CLOSED WHEN FLOATING
J/P4
FIXER PUMP
F1
1 A
560 Ω
FIXER WATER SOLENOID
TRIGGER
TIME DELAY RELAY
P/J10
DEV FULL CLOSED WHEN FULL
DEV 1/2 CLOSED WHEN FULL
DEV LOW OPEN WHEN FULL
P/J9
DEV SPECIFIC GRAVITY FLOAT CLOSED WHEN FLOATING
P/J12
DEV PUMP
F2
AUTOMIXER III SCHEMATIC
C:\DGN\1C7629.CES
01/08/1997 12:44
1C7629.CES

Section 6: Adjustments and Replacements

Introduction

Important

Before you do most of the procedures in this service manual, you must do one or more of the following:

- Removing the FRONT PANEL and 2 DRAWERS
- Draining the REPLENISHMENT TANK
- Manually Filling the REPLENISHMENT TANK
- Priming the AUTOMIXER

The next several pages contain procedures for completing these basic tasks.

Removing the FRONT PANEL and 2 DRAWERS

[1] Open the 2 DRAWERS.

[2] For each DRAWER:

- **(a)** press the SLIDE LOCKS
- **(b)** remove the DRAWER

[3] Open the FRONT PANEL and disconnect the 2 CONNECTORS P/J5 and P/J8.

[4] Remove the FRONT PANEL.

Draining the REPLENISHMENT TANK

[1] Remove the FRONT PANEL.

[2] Move the DRAIN VALVE ↶ to open the DRAIN.

[3] Allow the REPLENISHMENT TANK to drain completely.

[4] Move the DRAIN VALVE ↷ to close the DRAIN.

Manually Filling the REPLENISHMENT TANK

[1] Remove the FRONT PANEL.

Caution

To prevent contamination use clean containers.

[2] Using the DRAW-OFF SPIGOT, fill a container with solution:

- red HOSE for developer
- blue HOSE for fixer

Priming the AUTOMIXER

[1] Remove the FRONT PANEL.

[2] Check that the 2 DRAIN VALVES are closed.

[3] Turn on the incoming water supply.

[4] Energize the AUTOMIXER.

[5] Move the SERVICE SWITCH to the left to allow 7.6 cm (3.0 in.) of water to flow into the Developer REPLENISHMENT TANK.

[6] Move the SERVICE SWITCH to the right to allow 7.6 cm (3.0 in.) of water to flow into the Fixer REPLENISHMENT TANK.

Removing the REPLENISHMENT TANK

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

[3] Drain the REPLENISHMENT TANK.

To remove:

[1] Disconnect:

- DRAIN HOSE
- REPLENISHMENT HOSE

[2] Disconnect:

CONNECTOR	Developer	Fixer
FLOAT SWITCH	P/J9	P/J3
LIQUID LEVEL SENSOR	P/J10	P/J2
SUBMERSIBLE PUMP	P/J12	P/J4

[3] Remove:

- REPLENISHMENT TANK
- TOP COVER
- FLOATING LID

[4] Remove:

Component	See the procedure on
SPECIFIC GRAVITY FLOAT	Page 31
SUBMERSIBLE PUMP and BRACKET	Page 25
LIQUID LEVEL SENSOR	Page 27
FLOAT SWITCH	Page 28

Postrequisite:

[1] Prime the AUTOMIXER. If necessary, see Page 23.

Removing the KNIVES

To remove:

[1] Open the DRAWER.

[2] Remove:

- 4 SCREWS
- TEMPLATE
- NEST
- KNIVES

Removing the SUBMERSIBLE PUMP

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

[3] Drain the REPLENISHMENT TANK.

To remove:

[1] Remove:

- REPLENISHMENT TANK
- TANK COVER
- FLOATING LID
- 2 SCREWS

[2] Disconnect:

- CONNECTOR P/J12 for the Developer SUBMERSIBLE PUMP
- CONNECTOR P/J4 for the Fixer SUBMERSIBLE PUMP

Caution

Do not interchange the wires.

[3] Label the wires.

[4] Remove the wires from the CONNECTOR. Use EXTRACTION TOOL TL-2791.

[5] Route the CONNECTOR through the hole on the top of the REPLENISHMENT TANK.

[6] Remove the SUBMERSIBLE PUMP and BRACKET.

[7] Remove the 2 SCREWS and BRACKET.

[8] Reverse the removal procedure to install the SUBMERSIBLE PUMP.

Postrequisite:

[1] Prime the AUTOMIXER. If necessary, see Page 23.

Removing the LIQUID LEVEL SENSORS

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

[3] Drain the REPLENISHMENT TANK.

To remove:

[1] Remove:

- REPLENISHMENT TANK
- TANK COVER
- FLOATING LID

[2] Disconnect:

- CONNECTOR P/J10 for the Developer LIQUID LEVEL SENSOR
- CONNECTOR P/J2 for the Fixer LIQUID LEVEL SENSOR

Caution

Do not interchange the wires.

[3] Label the wires.

[4] Remove the wires from the CONNECTOR. Use EXTRACTION TOOL TL-2791.

[5] Remove the plastic NUT.

[6] Route the 6 wires through the NUT.

[7] Remove the LIQUID LEVEL SENSORS.

[8] Reverse the removal procedure to install a LIQUID LEVEL SENSOR.

Postrequisite:

[1] Prime the AUTOMIXER. If necessary, see Page 23.

Removing the FLOAT SWITCH

Prerequisite:

[1] Remove the SPECIFIC GRAVITY FLOAT. If necessary, see Page 31.

To remove:

[1] Disconnect:

- CONNECTOR P/J9 for the Developer SPECIFIC GRAVITY FLOAT
- CONNECTOR P/J3 for the Fixer SPECIFIC GRAVITY FLOAT

[2] Remove the plastic NUT.

[3] Route the 2 wires through the NUT to remove the NUT from the FLOAT SWITCH.

[4] Remove the FLOAT SWITCH.

To install:

[1] Reverse the above steps to install a FLOAT SWITCH and new O-RING.

Note

Check for the correct position of the FLOAT SWITCH. See the Figure on Page 28.

Postrequisite:

[1] Prime the AUTOMIXER. If necessary, see Page 23.

Adjusting the SPECIFIC GRAVITY FLOAT

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

[3] Drain the REPLENISHMENT TANK.

To check:

Adjustment Specification

H115_0008GCA
H115_0008GA

Tools: HYDROMETER KIT IC7806

Important

The following specifications are for the developer and fixer solutions at 21C (70F).

[1] Fill the GRADUATED CYLINDER 3/4 full with the newly mixed solution.

[2] Place the GRADUATED CYLINDER on a flat surface.

[3] Insert the HYDROMETER into the GRADUATED CYLINDER.

[4] Carefully hit the side of the GRADUATED CYLINDER to release any air bubbles from the HYDROMETER.

[5] Check that the HYDROMETER reads the correct specific gravity:

SPECIFIC GRAVITY FLOAT	CHEMICAL SOLUTION	SPECIFIC GRAVITY
D-RP	RP Developer	1.085 0.005
D-RA	RA Developer	1.100 0.005
F-RP-LO	RP LO Fixer	1.085 0.005
F-RA	RA Fixer	1.065 0.005

To adjust:

[1] To increase or decrease the specific gravity of the solution:

- **(a)** Loosen the ADJUSTMENT SCREW.
- **(b)** Move the ADJUSTMENT SCREW.
- **(c)** Tighten the ADJUSTMENT SCREW.

Removing the SPECIFIC GRAVITY FLOAT

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

[3] Drain the REPLENISHMENT TANK.

To remove:

[1] Remove:

- REPLENISHMENT TANK, if necessary see Page 23
- TANK COVER
- FLOATING LID

Caution

The SWITCH HINGE PINS break easily.

[2] Carefully remove the SPECIFIC GRAVITY FLOAT from the SWITCH HINGE PINS.

Postrequisite:

[1] Adjust the SPECIFIC GRAVITY FLOAT. If necessary, see Page 30.

[2] Prime the AUTOMIXER. If necessary, see Page 23.

Adjusting the Volume of the AUDIBLE ALARM

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove the FRONT PANEL.

To adjust:

[1] Adjust the POTENTIOMETER:

- ↷ to increase the sound
- ↶ to decrease the sound

Removing the AUDIBLE ALARM

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove the FRONT PANEL.

To remove:

H115_0077BCA
H115_0077BC

[1] Disconnect the 2 CONNECTORS.

[2] Remove the AUDIBLE ALARM.

Removing the SERVICE SWITCH

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove the FRONT PANEL.

To remove:

H115_0078BCA
H115_0078BC

[1] Disconnect the 3 CONNECTORS.

[2] Remove the SERVICE SWITCH.

Removing the POTENTIOMETER

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove the FRONT PANEL.

To remove:

H115_0079HCB
H115_0079HC

[1] Disconnect the 2 CONNECTORS.

[2] Remove the POTENTIOMETER.

Postrequisite:

[1] Adjust the AUDIBLE ALARM. If necessary, see Page 32.

Adjusting the POWER SUPPLY

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove the BACK PANEL.

Adjustment Specification

[3] Using a VOLTMETER connect:

a. positive to the FUSE

b. negative to the PIN at CONNECTOR P/J8-4

[4] Energize the AUTOMIXER.

Specification:

The correct voltage is 11.7 0.1 V DC.

To adjust:

[1] Rotate the POTENTIOMETER clockwise ↷ to increase the voltage or counterclockwise ↶ to decrease the voltage.

Removing the POWER SUPPLY

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

To remove:

H115_0093BCA
H115_0093BA

[1] Remove:

- LOWER RIGHT PANEL
- POWER SUPPLY COVER and disconnect CONNECTORS P/J6 and P/J7
- Fixer REPLENISHMENT TANK DRAIN HOSE

[2] Disconnect FLOAT SWITCH CONNECTOR P/J3. If necessary, see Page 23.

[3] Move the Fixer REPLENISHMENT TANK to access the 4 SCREWS.

[4] Remove the 4 SCREWS and the POWER SUPPLY.

Postrequisite:

Warning
Dangerous voltage

[1] Adjust the POWER SUPPLY. If necessary, see Page 34.

Removing the AUTOMIXER PANEL LED's

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove the FRONT PANEL.

To remove:

H115_0081CCA
H115_0081CA

Caution

Do not interchange the wires.

[1] Label the wires.

[2] Disconnect the 2 LED wires from CONNECTOR:

- Fixer P/J5

  or

- Developer P/J8

Use EXTRACTION TOOL TL-2791.

[3] Remove:

- E-RING from the LED
- LED

Removing the RELAYS and TERMINAL BLOCKS

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Remove:

- FRONT PANEL
- BACK PANEL

To remove:

H115_0096HCA
H115_0096HA

[1] Remove the RIGHT or LEFT SIDE PANEL.

[2] Removing one wire at a time, install the existing wires onto the new component.

[3] Remove the existing RELAY or TERMINAL BLOCK.

[4] Install the new component.

Removing the WATER SOLENOID

Prerequisite:

[1] De-energize the AUTOMIXER.

[2] Turn off the incoming water supply.

[3] Remove:

- FRONT PANEL
- BACK PANEL

To remove:

[1] Disconnect:

- Fixer DRAIN HOSE
- CONNECTOR P/J2
- CONNECTOR P/J3
- CONNECTOR P/J4

[2] Move the REPLENISHMENT TANK to access the MANIFOLD.

Caution

Some water leakage occurs when you disconnect the Water Connection.

Do not interchange the wires. Label the wires.

[3] Disconnect the Water Connection and the 2 WIRES.

[4] Rotate the plastic NUT ↷ and remove the WATER SOLENOID.

[5] Check for water leakage.

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Section 7: Illustrated Parts List

Figure 1 PANELS

H115_0003HCD
H115_0003HA

H115_0006GCF
H115_0006GA

Figure 1 PANELS

Item	Part No.	Description	Qty.
1	5B6319	FRONT PANEL	1
2	1C7810	LED - includes e-ring	8
3	914891	SIDE PANEL	2
4	5B6320	BACK PANEL	1

Figure 2 ELECTRICAL

Figure 2 ELECTRICAL

Item	Part No.	Description	Qty.
1	1C4888	POTENTIOMETER - alarm volume control	1
2	1C4776	AUDIBLE ALARM	1
3	1C4886	SERVICE SWITCH	1
4	1C4917	MOUNTING PAD BRACKET	1
5	1C7883	POWER SUPPLY FUSE - 1/4 x 1 in., 5.0 A,	1
6	1C7817	POWER SUPPLY STRAIN RELIEF	1
7	1C7809	FUSE HOLDER	1
8	1C7875	FUSE - 1/4 x 1 in., 5.0 A *SLO-BLO* - not shown	1

Figure 3 ELECTRICAL, continued

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Figure 3 ELECTRICAL, continued

Item	Part No.	Description	Qty.
1	9B8670	FIXER TANK	1
2	9B8669	DEVELOPER TANK	1
3	5B6872	ALARM JUMPER - not shown	2
4	1C4884	DEVELOPER PROXIMITY SWITCH	1

Item	Part No.	Description	Qty.
5	1C4882	TERMINAL STRIP	4
6	1C7815	ISOLATION RELAY BASE - not shown	2
7	1C4881	ISOLATION RELAY	2
8	1C4880	TIME DELAY RELAY	2
9	1C7884	PUMP FUSE - 1/4 x 1 in., 1.0 A *SLO-BLO*	1
10	1C4916	POWER SUPPLY HOUSING	1
11	1C4875	POWER SUPPLY - 12 V DC	1
12	1C4905	WATER INLET - brass, 3/4 in. FGHT	1
13	594431	HOSE ADAPTER - to 1/2 in. NPT - not shown	1
14	1C4878	POWER ENTRY MODULE - IEC	1
15	1C4879	FUSE - IEC, 5 x 20 mm, 1.0 A *SLO-BLO*	1
16	1C7821	FIXER PROXIMITY SWITCH	1

Figure 4 DRAWER ASSEMBLY

Figure 4 DRAWER ASSEMBLY

Item	Part No.	Description	Qty.
1	8B6776	DEVELOPER DRAWER AY	1
	8B6777	FIXER DRAWER AY	1
2	8B6762	DRAWER SLIDE AY	2
3	1C4884	DEVELOPER PROXIMITY SWITCH	1
	1C7821	FIXER PROXIMITY SWITCH	1
4	8B6779	FIXER TEMPLATE - RA	1
5	8B6765	FIXER TEMPLATE - RP	1
6	8B6766	FIXER TEMPLATE - EUROPEAN BOTTLE	1
7	8B6763	FIXER TEMPLATE - UNITIZED BOTTLE	1
8	8B6778	DEVELOPER TEMPLATE - RA	1
9	8B6768	DEVELOPER TEMPLATE - RP	1
10	8B6769	DEVELOPER TEMPLATE - EUROPEAN BOTTLE	1
11	8B6761	DEVELOPER TEMPLATE - UNITIZED BOTTLE	1
12	852682	SCREW	4
13	8B6751	KNIFES	5
14	8B6767	FIXER NEST - RA, RP, EUROPEAN BOTTLE	1
	8B6755	FIXER NEST - UNITIZED BOTTLE	1
	8B6764	DEVELOPER NEST - RA, RP, EUROPEAN BOTTLE	1
	8B6754	DEVELOPER NEST - UNITIZED BOTTLE	1

Figure 5 TANK ASSEMBLY

Figure 5 TANK ASSEMBLY

Item	Part No.	Description	Qty.
1	9B8669	DEVELOPER REPLENISHMENT TANK	1
	9B8670	FIXER REPLENISHMENT TANK	1
2	1C4901	ELBOW	2
3	1C7881	DEVELOPER DRAW-OFF HOSE - red	1
	1C7882	FIXER DRAW-OFF HOSE - blue	1
4	1C7820	TUBING - 1.9 cm (3/4 in.), vinyl, not shown (inside hose)	2
5	1C4903	DRAW-OFF SPIGOT AY	2
6	1C4900	OVERFLOW ELBOW	2

Item	Part No.	Description	Qty.
7	1C4898	FIXER DRAIN MANIFOLD AY - includes items 3 - 6	1
	1C4897	DEVELOPER DRAIN MANIFOLD AY - includes items 3 - 6	1
8	1C4890	FLOAT SWITCH	2
9	1C4889	LIQUID LEVEL SENSOR	2
10	1C7812	PUMP MOUNTING BRACKET	2
11	1C7803	FIXER SPECIFIC GRAVITY FLOAT - RP/RP LO	1
	1C4907	FIXER SPECIFIC GRAVITY FLOAT - RA	1
	1C7802	DEVELOPER SPECIFIC GRAVITY FLOAT - RP/RA	1
12	1C4885	SUBMERSIBLE PUMP - 12 V DC	2
13	9B8882	DEVELOPER FLOATING LID	1
	9B8883	FIXER FLOATING LID	1
14	1C7811	TANK COVER	2

Figure 6 WATER MANIFOLD AND SOLENOIDS

Figure 6

Item	Part No.	Description	Qty.
1	1C7888	WATER SOLENOID AY	2
2	1C7887	NIPPLE	2
3	1C7886	WATER MANIFOLD	1
4	1C7818	MANIFOLD MOUNTING STANCHION - includes block, clamp, and screw	2
5	1C7819	TUBING - 1.27 cm (1/2 in.), vinyl	1

Figure 7 AIR GAP ASSEMBLY

Figure 7

Item	Part No.	Description	Qty.
1	1C7816	AIR GAP AY	2
2	9B8665	DEVELOPER HOSE	1
3	9B8666	FIXER HOSE	1
4	246801	CLAMP	1

Figure 8 MISCELLANEOUS PARTS

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Figure 8 MISCELLANEOUS PARTS

Item	Part No.	Description	Qty.	Notes
1	-	AC POWER CORD 100-120 V - United States, Japan	1	CAT. No. 7171622
	-	AC POWER CORD 100-120 V - Switzerland	1	CAT. No. 7171522
	-	AC POWER CORD 100-120 V - Australia	1	CAT. No. 7171606
	-	AC POWER CORD 100-120 V - Europe	1	CAT. No. 7171564
	-	AC POWER CORD 100-120 V - England	1	CAT. No. 7171598
2	472261	STRAINER AY	2	
3	1C7806	HYDROMETER KIT - includes hydrometer and graduated cylinder	1	
4	462991	REPLENISHMENT TUBING	1	
5	650938	LIGHT-LOCK GASKET - 10 ft. roll	1	

Section 8: Publication History

Print Date	Pub No.	Affected Pages	File Name	Notes
February 1997	9B8817	All	sm3402_1.doc	First Printing

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sm3402_1.fm

Printed In USA

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