

Section 1: Service Overview

Table of Contents

Description	Page
Service Overview	1-1
Special Tools	1-2
Electrostatic Discharge	1-3
Overview	1-3
Preventive Measures	1-3
Common Procedures for Service Preparation	1-3
De-energizing and Energizing the PROCESSOR	1-4
Disabling the COVER INTERLOCK SWITCHES	1-5
Placing a CLAMP on a HOSE	1-5
Identifying the RACKS and CROSSOVERS	1-6
Removing the RACKS	1-7
Installing the RACKS	1-9
Draining the TANKS	1-10
Filling the TANKS	1-11
Identifying and Removing the COVERS and PANELS	1-12
Identifying the Connections on the COMPONENT PLATE	1-14
Routing of the CABLE HARNESS	1-14

Special Tools



Warning

Dangerous Voltage. Before you remove electrical components, move the main wall CIRCUIT BREAKER to "OFF". Lock the wall CIRCUIT BREAKER and attach a MAGNETIC POWER WARNING SIGN TL-1926 to warn others not to energize the PROCESSOR while you are performing service.

If the drive side of the PROCESSOR is against the WALL, use the small OFFSET SCREWDRIVER TL-1611 and a SCREWDRIVER with HOLDER TL-1194 to remove the DRIVE SIDE ACCESS PANEL.

Tool No.	Description
TL-2431	AIR METER
TL-2170	CLAMPS
8B7068	DOWNLOAD DISKETTE
TL-4430	EXTRACTION TOOL
TL-3346	GROUNDING KIT
TL-1194	HOLDER for SCREWDRIVER
TL-4391	INTERFACE CABLE
TL-2324	LITHIUM BALL and ROLLER BEARING GREASE
TL-1926	MAGNETIC POWER WARNING SIGN
--	PORTABLE COMPUTER ¹
TL-3230	SEALANT
TL-2431	AIR METER
TL-2170	CLAMPS
8B7068	DOWNLOAD DISKETTE
TL-4430	EXTRACTION TOOL
TL-3346	GROUNDING KIT
TL-1194	HOLDER for SCREWDRIVER
TL-4391	INTERFACE CABLE
TL-2324	LITHIUM BALL and ROLLER BEARING GREASE
TL-1926	MAGNETIC POWER WARNING SIGN
--	PORTABLE COMPUTER ¹
TL-3230	SEALANT
TL-2192	THERMAL GREASE



Important

¹ Requirements of the PORTABLE COMPUTER:

- An IBM compatible computer with MS-DOS version 3.0 or higher installed on the hard disk and with a 720 kilobyte, 3½-in. disk drive.
- A serial communications port COM 1. See the user manual for the PORTABLE COMPUTER.

Electrostatic Discharge

Overview

Electrostatic discharge (ESD) is a primary source of

- product downtime
- lost productivity
- costly repairs

While you 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 you move static-sensitive components from one area to another, insert and transport the components in ESD-protective packaging.

Common Procedures for Service Preparation



Important

Use qualified personnel to service the PROCESSOR.

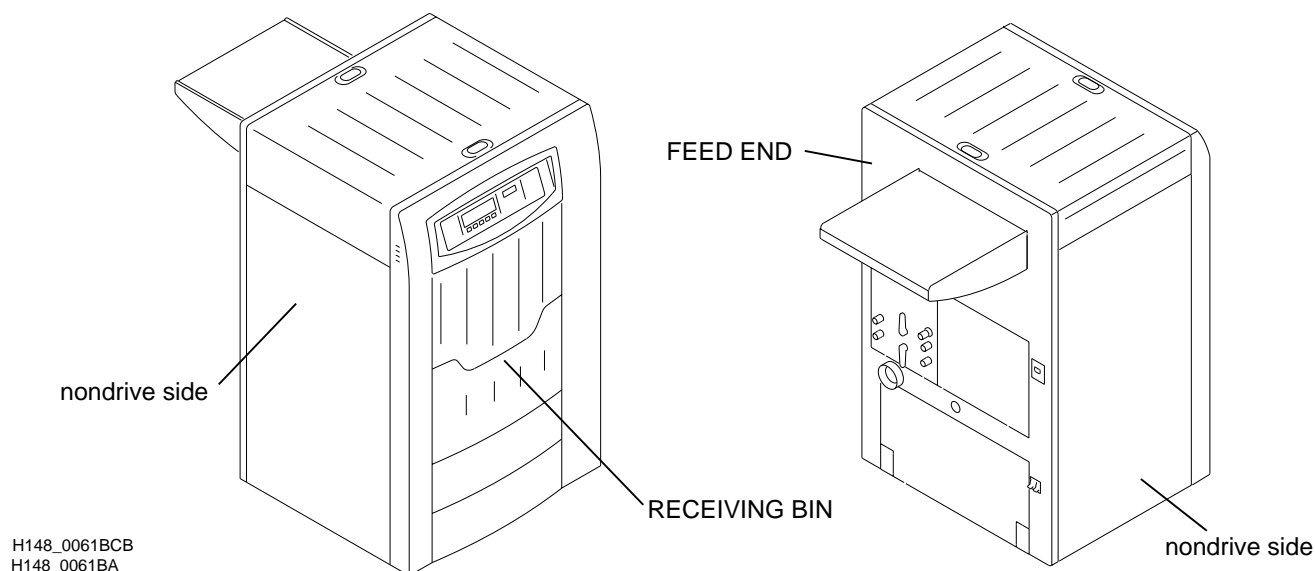


Important

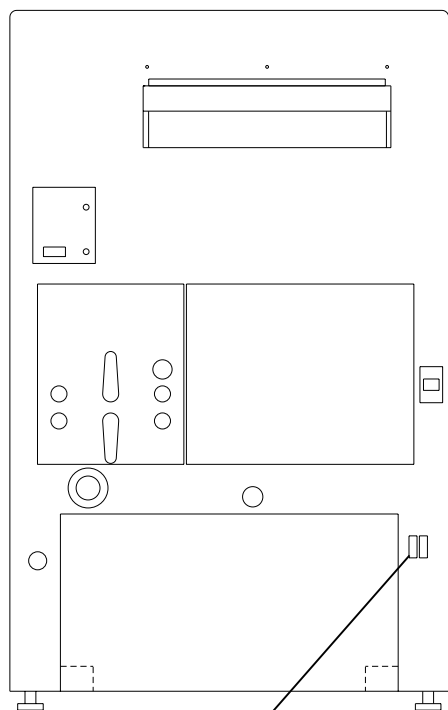
Many of the procedures in this manual require that you do one or more of the following tasks.

- De-energizing the PROCESSOR
- Disabling the COVER INTERLOCK SWITCHES
- Placing a CLAMP on a HOSE
- Draining the TANKS
- Removing the CROSSOVERS and RACKS
- Removing the ACCESS PANELS
- Removing a CABLE from the COMPONENT PLATE

The next several pages contain procedures for completing these basic tasks and illustrations identifying the major components of the PROCESSOR.



De-energizing and Energizing the PROCESSOR



H148_0001GCC
H148_0001GA



Warning

- Dangerous voltage.
- The MAIN CIRCUIT BREAKER CB1 be in the “OFF” position before you begin any service procedure.
- The PROCESSOR appears to be de-energized when it is in the Sleep Mode.

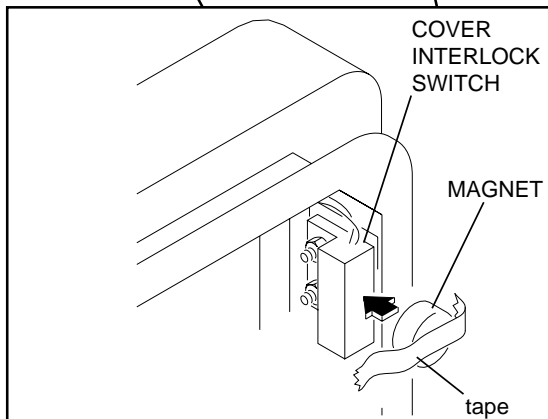
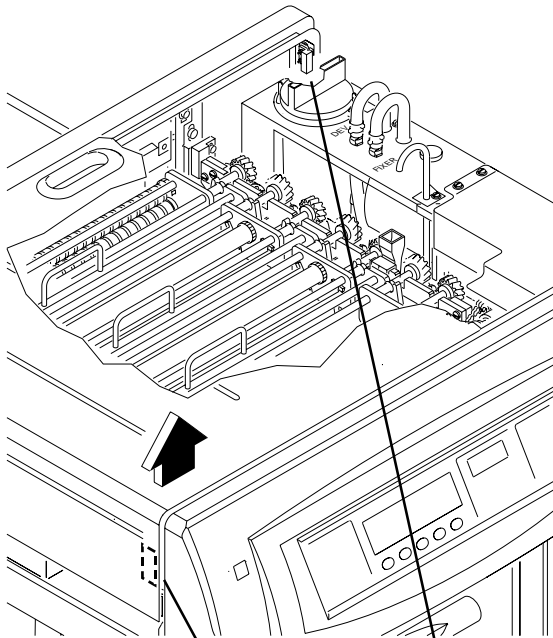
To de-energize the PROCESSOR

- [1] Move the wall CIRCUIT BREAKER to the “OFF” position.
- [2] Lock the wall CIRCUIT BREAKER and attach a MAGNETIC POWER WARNING SIGN TL-1926 to warn others not to energize the PROCESSOR while you are performing service.
- [3] Move the MAIN CIRCUIT BREAKER CB1 to the “OFF” position.

To energize the PROCESSOR

- [4] Remove the MAGNETIC POWER WARNING SIGN from the wall CIRCUIT BREAKER. Move the wall CIRCUIT BREAKER to the “ON” position.
- [5] Move the MAIN CIRCUIT BREAKER CB1 to the “ON” position.

Disabling the COVER INTERLOCK SWITCHES



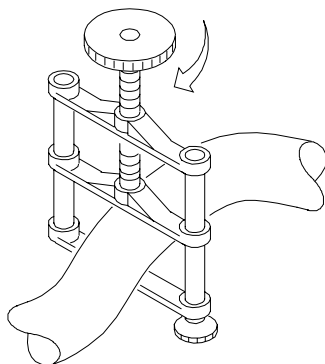
H148_0161CCA
H148_0161CA



Important

To operate the drive system during some service procedures, you must disable the COVER INTERLOCK SWITCHES. Use adhesive tape to fasten a MAGNET over each SWITCH.

Placing a CLAMP on a HOSE



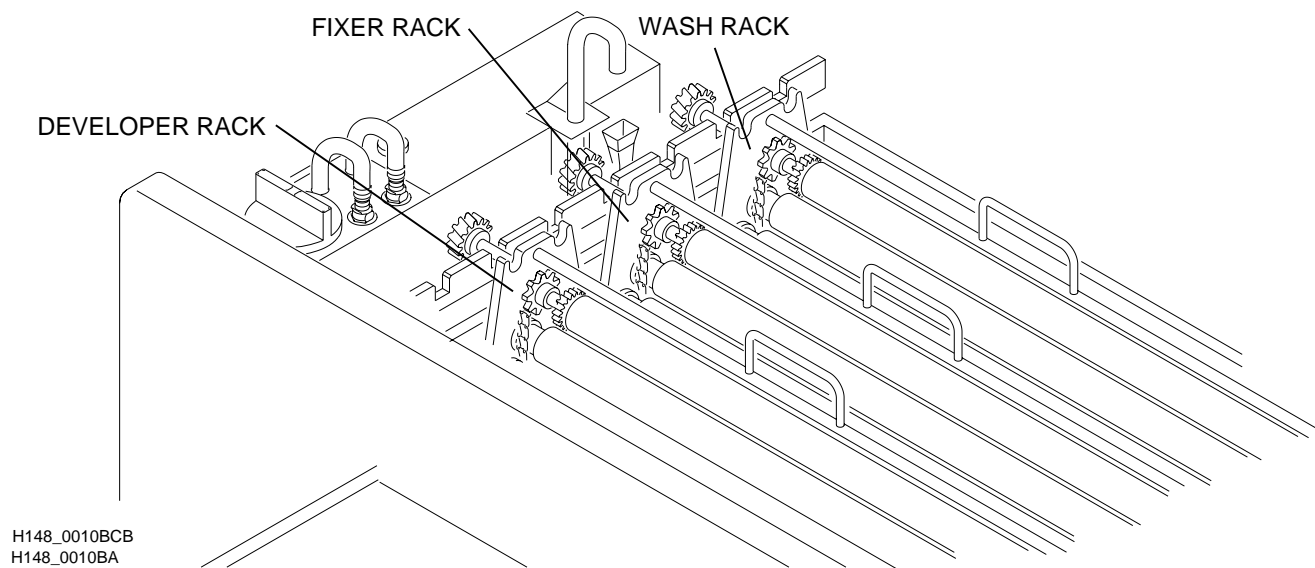
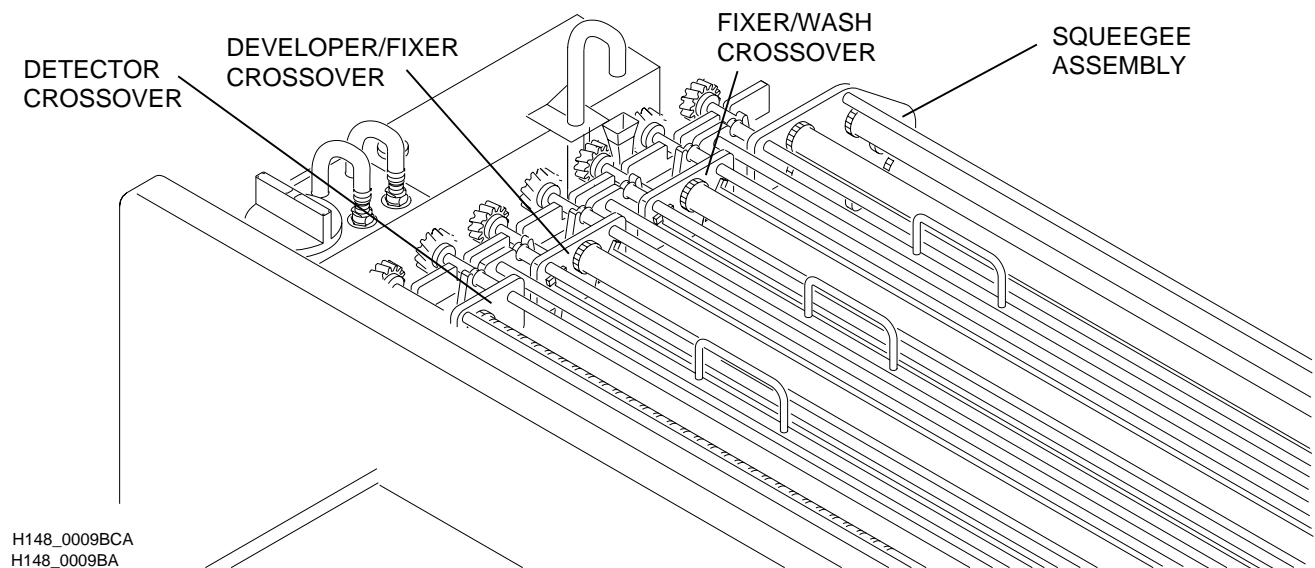
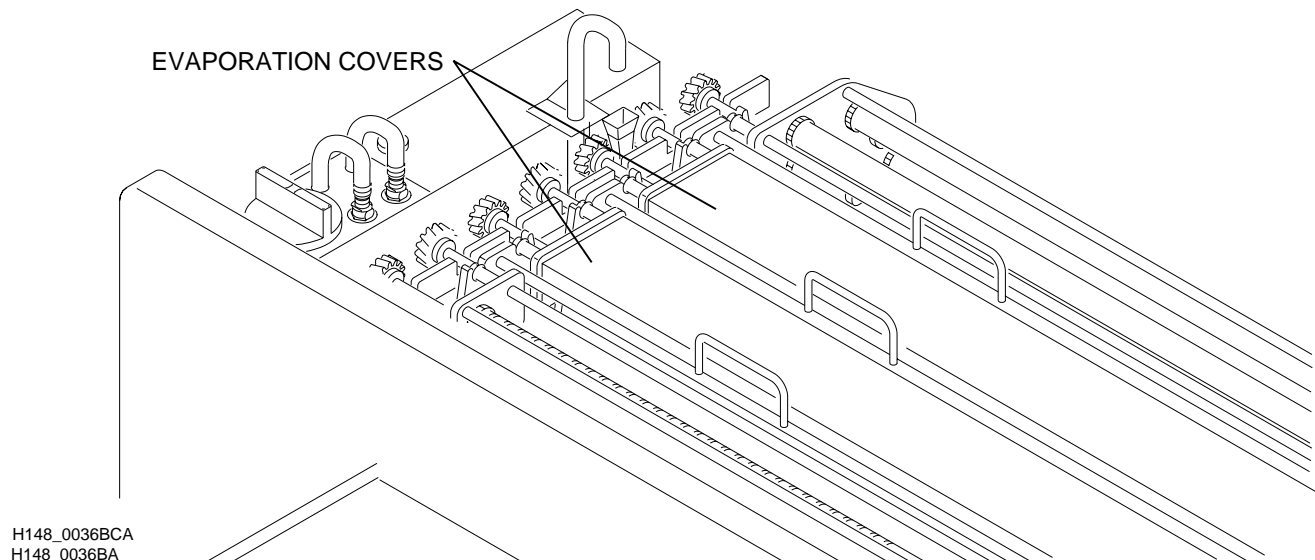
H104_0257AA



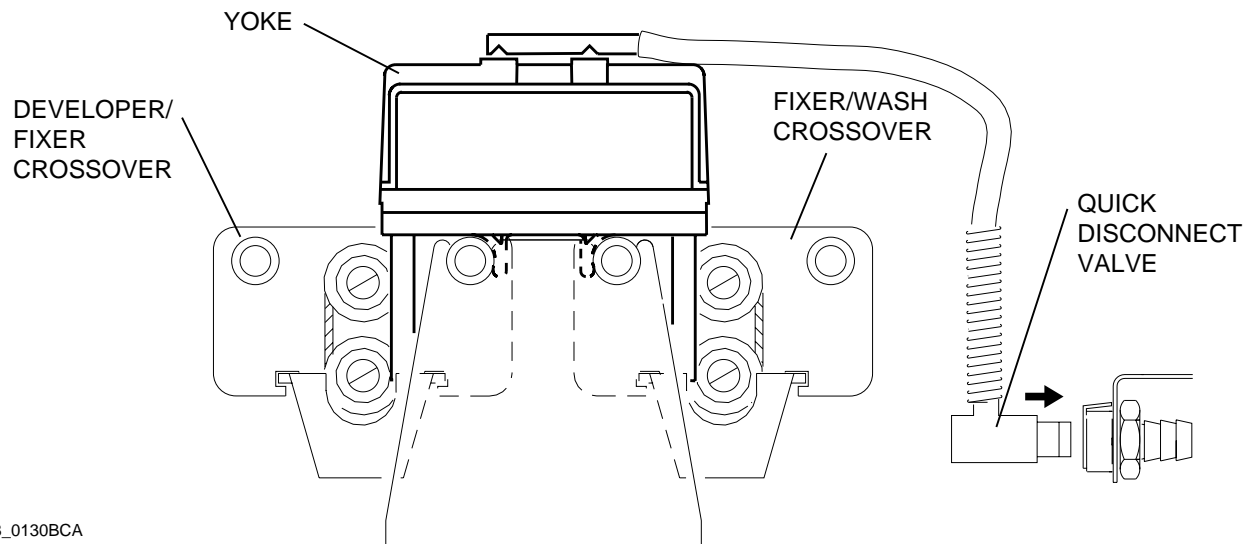
Important

To prevent solution spills during some removals, you must place a CLAMP TL-2170 on a HOSE.

Identifying the RACKS and CROSSOVERS

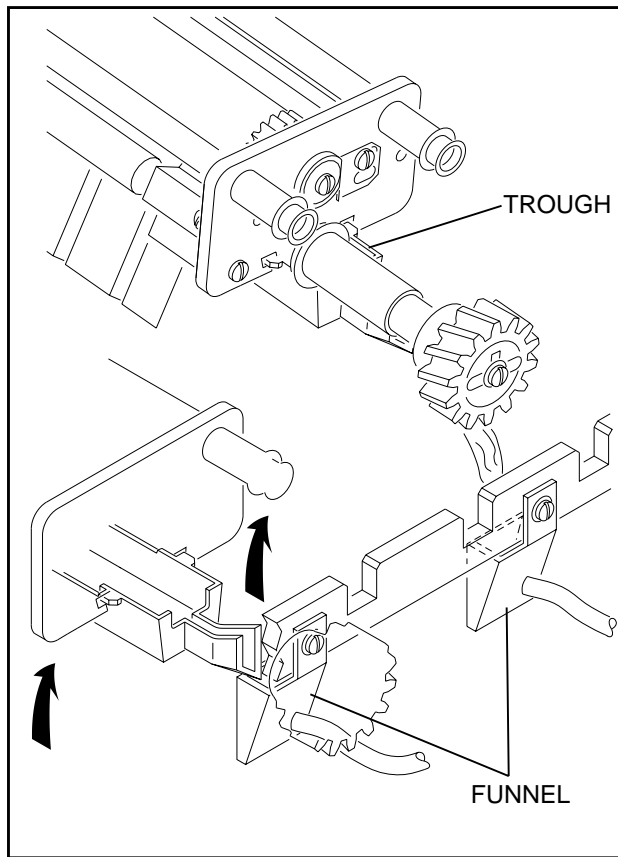


Removing the RACKS



H148_0130BCA
H148_0130BA

- [1] De-energize the PROCESSOR.
- [2] Remove the TOP COVER.
- [3] Remove:
 - EVAPORATION COVERS
 - DETECTOR CROSSOVER
 - SQUEEGEE ASSEMBLY
- [4] Disconnect the QUICK DISCONNECT VALVE.
- [5] Lift the YOKE from the CROSSOVERS.



Important

Do the next 2 steps for one CROSSOVER at a time.

[6] Carefully lift the CROSSOVER, draining the solution in the TROUGH into the FUNNEL.

[7] Use the DRIP TRAY to remove each CROSSOVER.

[8] To remove the DEVELOPER RACK

(a) Slowly lift the DEVELOPER RACK from the PROCESSOR. With the RACK over the DEVELOPER TANK, tilt the RACK to drain the developer into the TANK.

(b) Hold a DRIP TRAY under the DEVELOPER RACK when you move it.



Caution

Do *not* allow fixer to contaminate the developer solution.

[9] To remove the FIXER RACK

(a) Place the SPLASH GUARD between the developer and fixer TANKS.

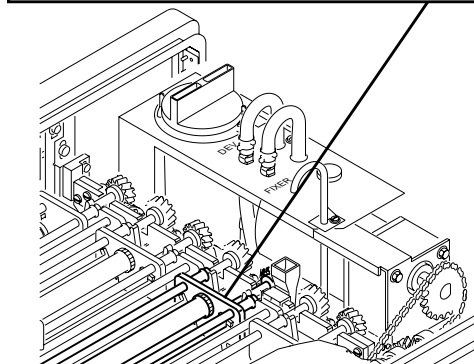
(b) Slowly lift the FIXER RACK from the PROCESSOR. With the RACK over the FIXER TANK, tilt the RACK to drain the fixer into the fixer TANK.

(c) Hold a DRIP TRAY under the FIXER RACK when you move it.

[10] To remove the WASH RACK

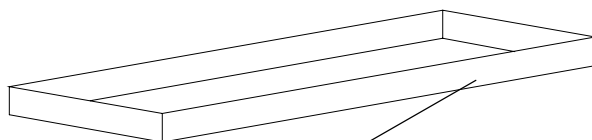
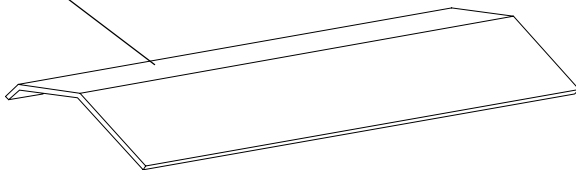
(a) Lift the WASH RACK from the WASH TANK.

(b) Hold a DRIP TRAY under the WASH RACK when you move it.



H148_0131CCA
H148_0131CA

SPLASH
GUARD



RACK
DRIP
TRAY

H108_0035ACA
H108_0035AA

Installing the RACKS



Warning

- The PROCESSOR must be de-energized when you do the following procedure.
- Install the FIXER RACK first and use the SPLASH GUARD.

[1] Place the SPLASH GUARD between the TANKS for the developer and fixer.



Caution

Do not splash fixer solution when you install the FIXER RACK.

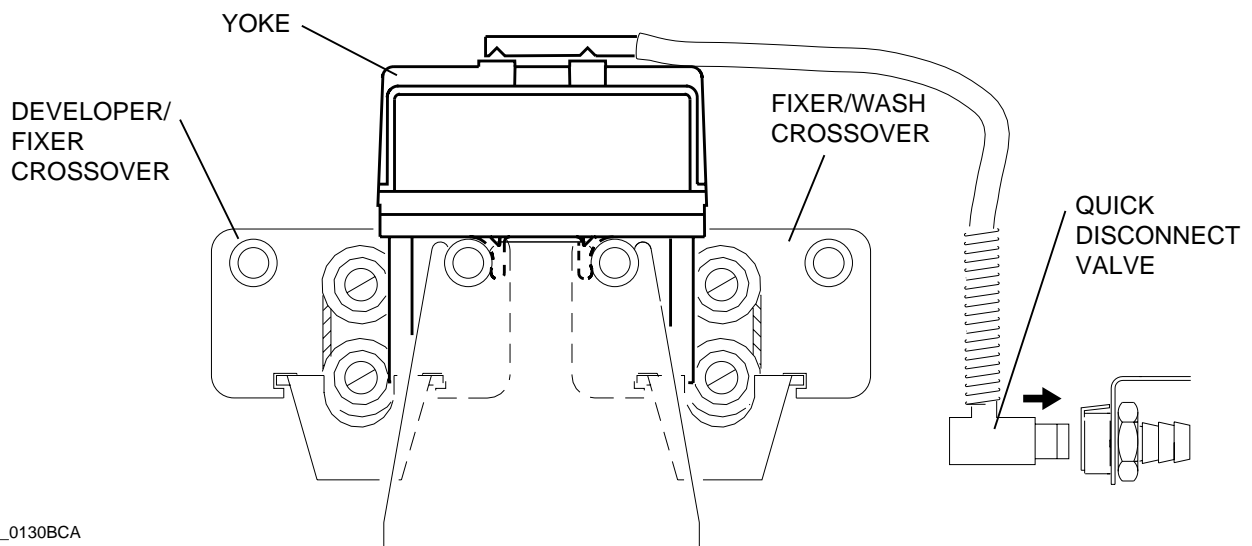
[2] **Slowly** install the FIXER RACK in the FIXER TANK.

[3] Remove the SPLASH GUARD.

[4] Slowly install the DEVELOPER RACK.

[5] Install:

- WASH RACK
- DETECTOR CROSSOVER
- FIXER/WASH CROSSOVER
- DEVELOPER/FIXER CROSSOVER
- SQUEEGEE ASSEMBLY
- EVAPORATION COVERS
- YOKE correctly between the 2 CROSSOVERS
- QUICK DISCONNECT VALVE
- TOP COVER



H148_0130BCA
H148_0130BA

Draining the TANKS

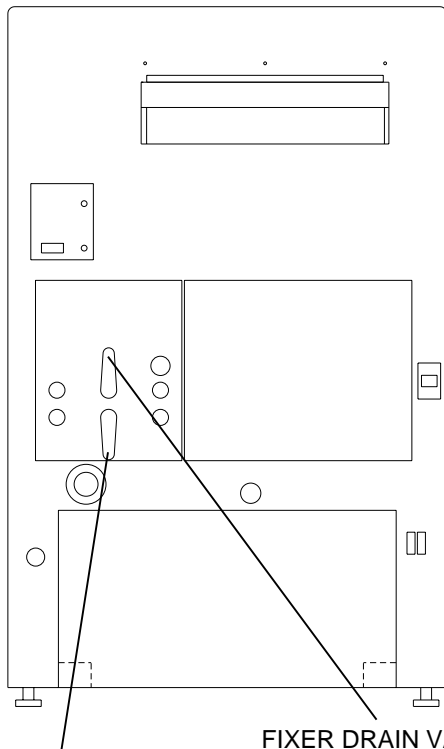
[1] De-energize the PROCESSOR.

Note

The WASH TANK will drain automatically.

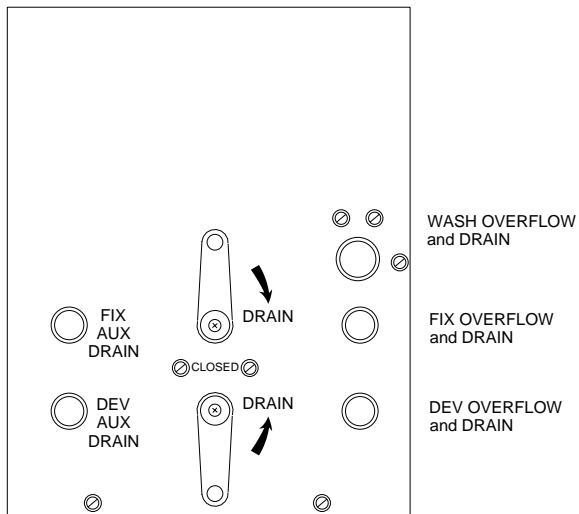
[2] Open:

- FIXER DRAIN VALVE
- DEVELOPER DRAIN VALVE



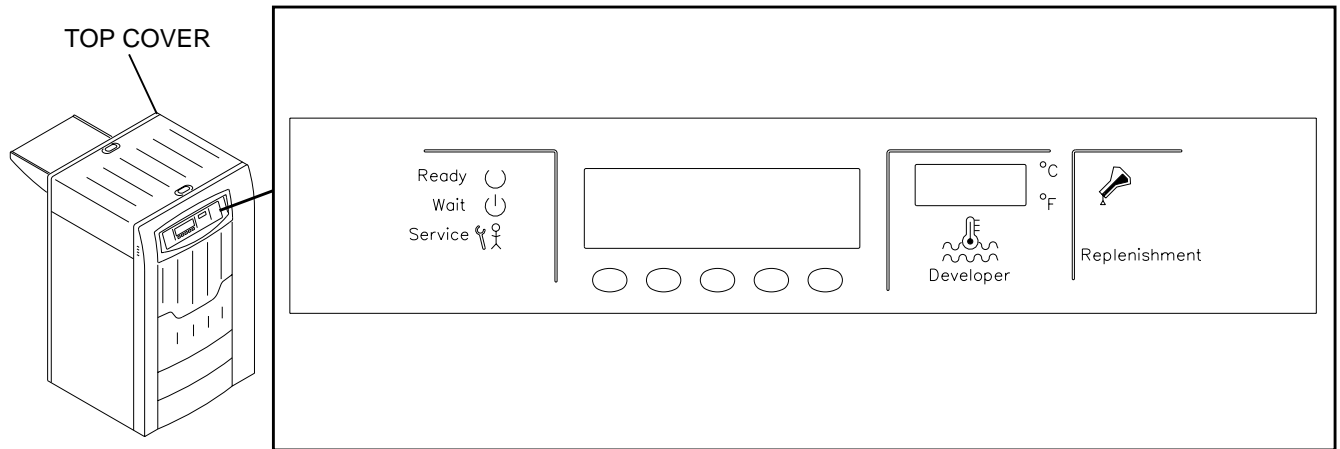
DEVELOPER DRAIN VALVE

H148_0001GCB
H148_0001GA

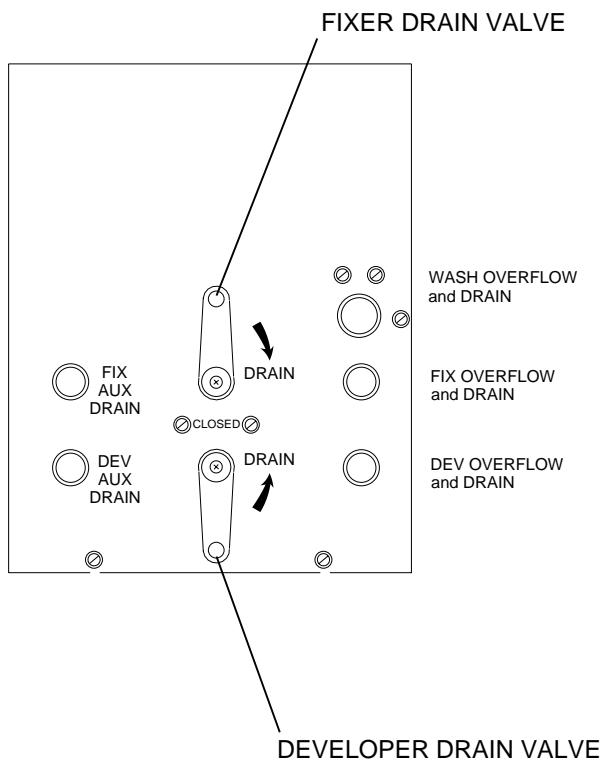


H148_0110GA

Filling the TANKS



H148_0105BCB
H148_0105BA



H148_0110GCA
H148_0110GA

- [1] De-energize the PROCESSOR and remove the TOP COVER.
- [2] Check that the RACKS, CROSSOVERS, and YOKE are in the correct positions.
- [3] Close the DEVELOPER and FIXER DRAINS.
- [4] To fill the processing TANKS,
 - close the FIXER DRAIN VALVE
 - close the DEVELOPER DRAIN VALVE
 - install the TOP COVER
- [5] Energize the PROCESSOR.

Important

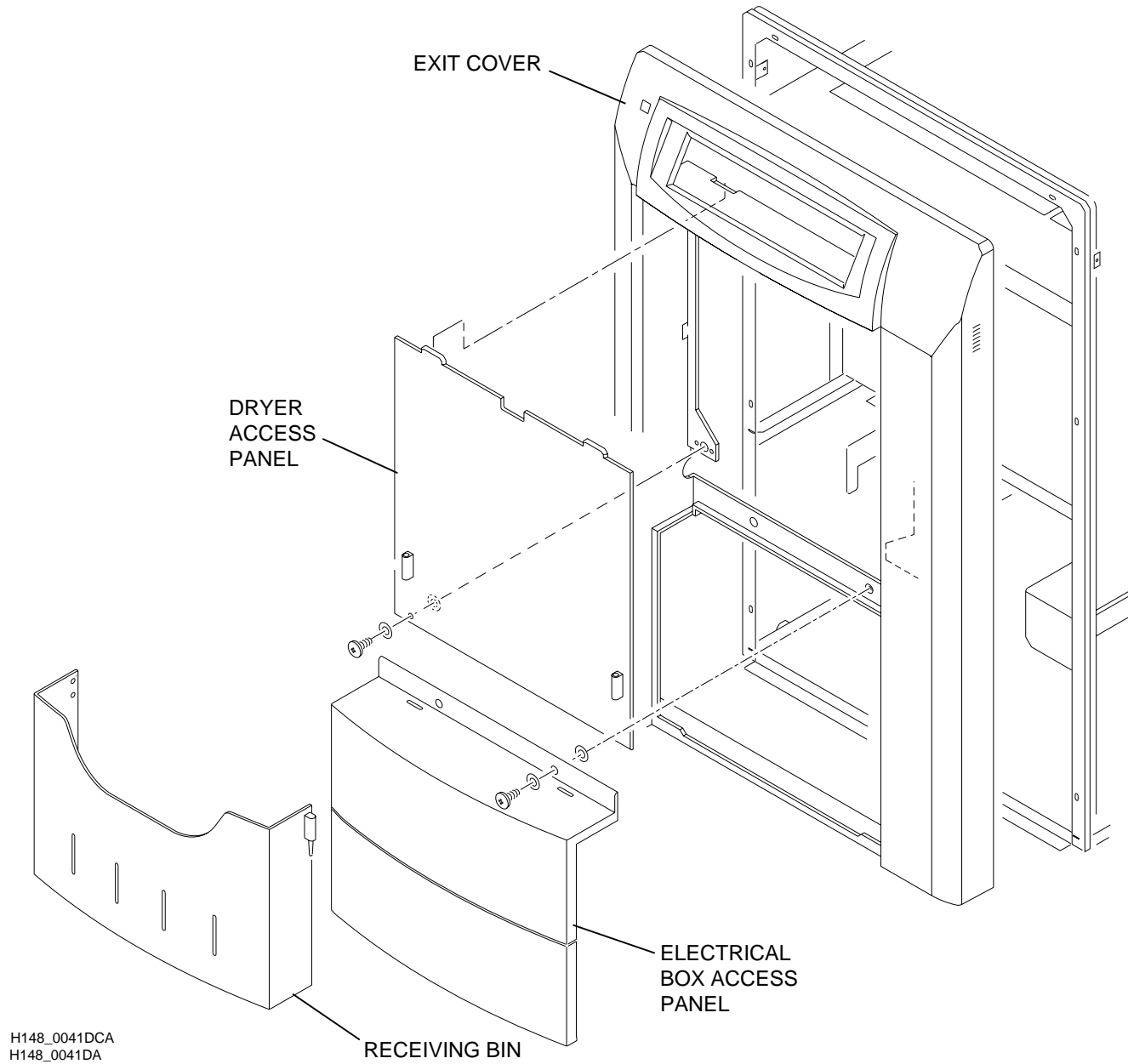
When you energize the PROCESSOR, the REPLENISHMENT PUMPS automatically operate but will not fill the TANKS with solution.

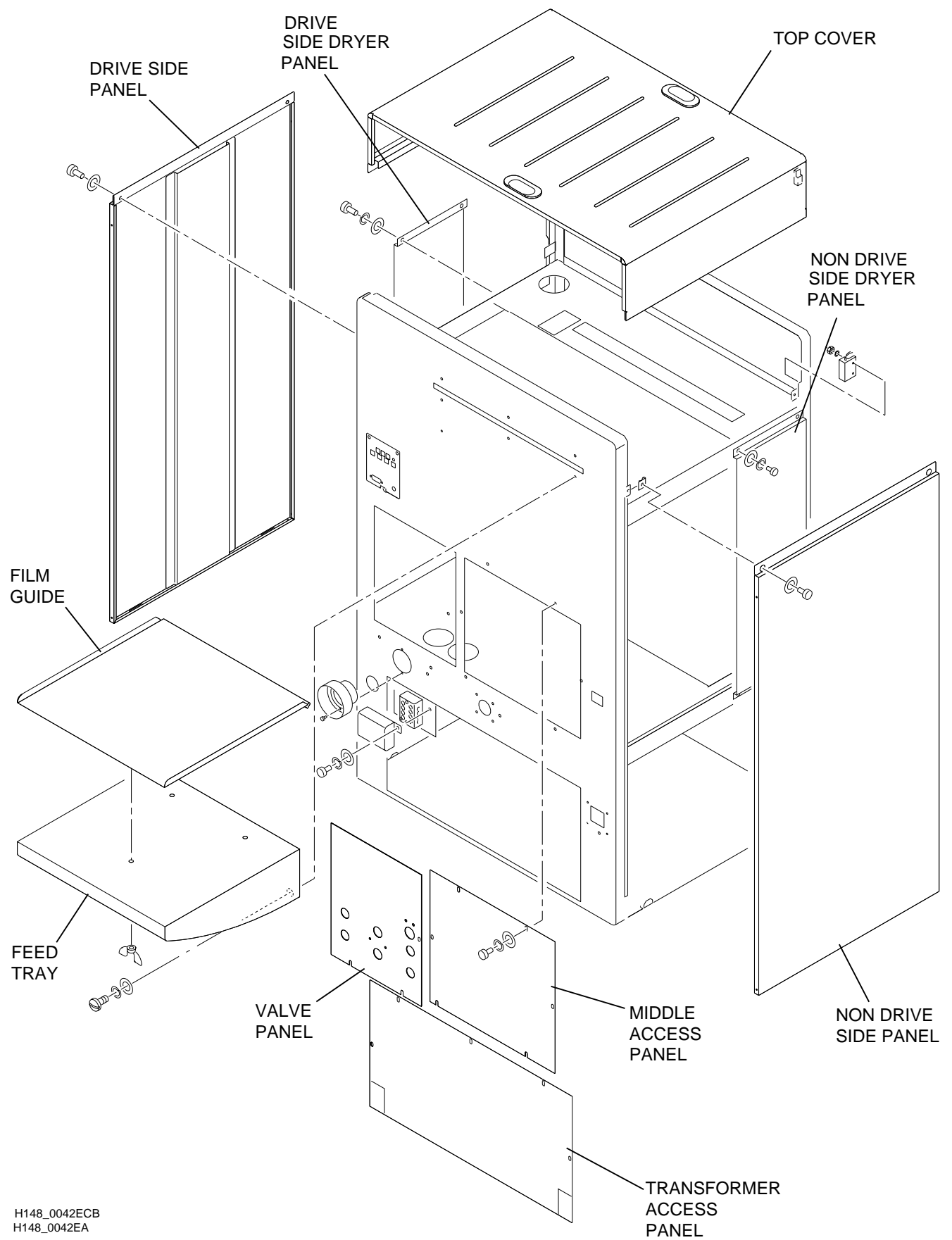
- [6] At the DISPLAY PANEL, press
 - “GO TO SETUP”
 - the 4-digit access code
 - “MORE”
 - “OPTIONS”
 - “REPLEN MODE”
 - “TANK FILL”

Note

See the Operator Manual, Publication Part No. 5B6729, for more information on draining and filling the TANKS.

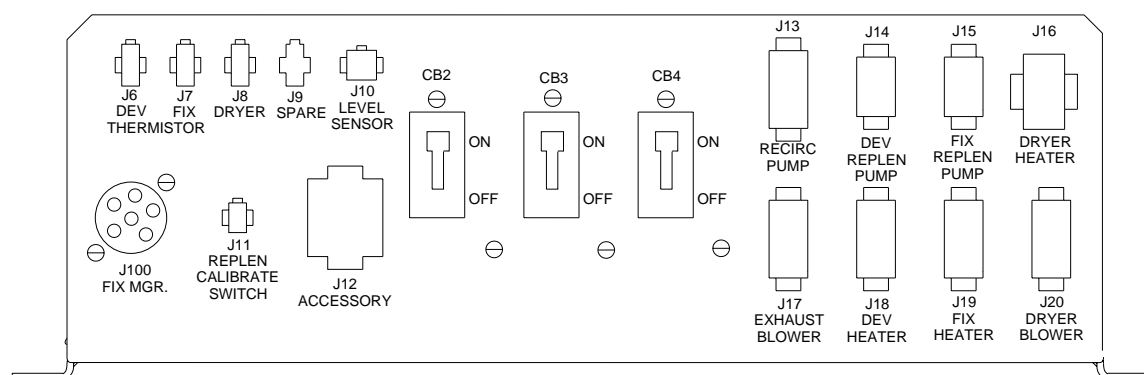
Identifying and Removing the COVERS and PANELS





H148_0042ECB
H148_0042EA

Identifying the Connections on the COMPONENT PLATE



H148_0044BA

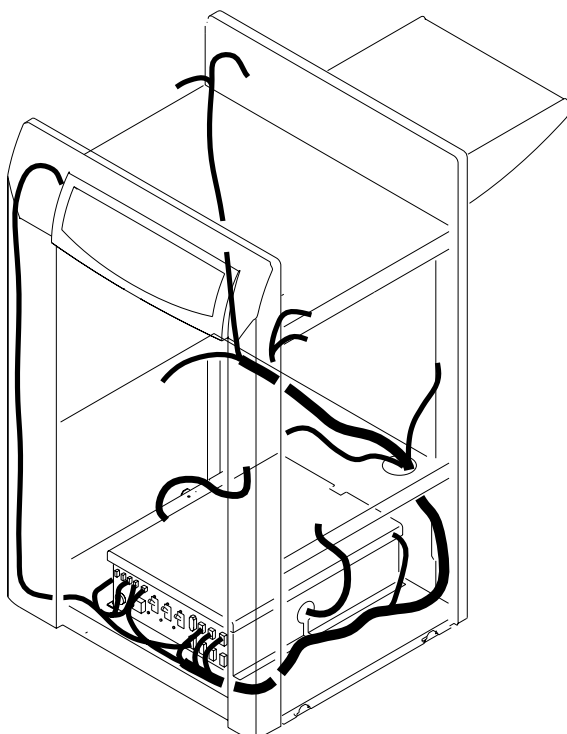
Routing of the CABLE HARNESS



Important

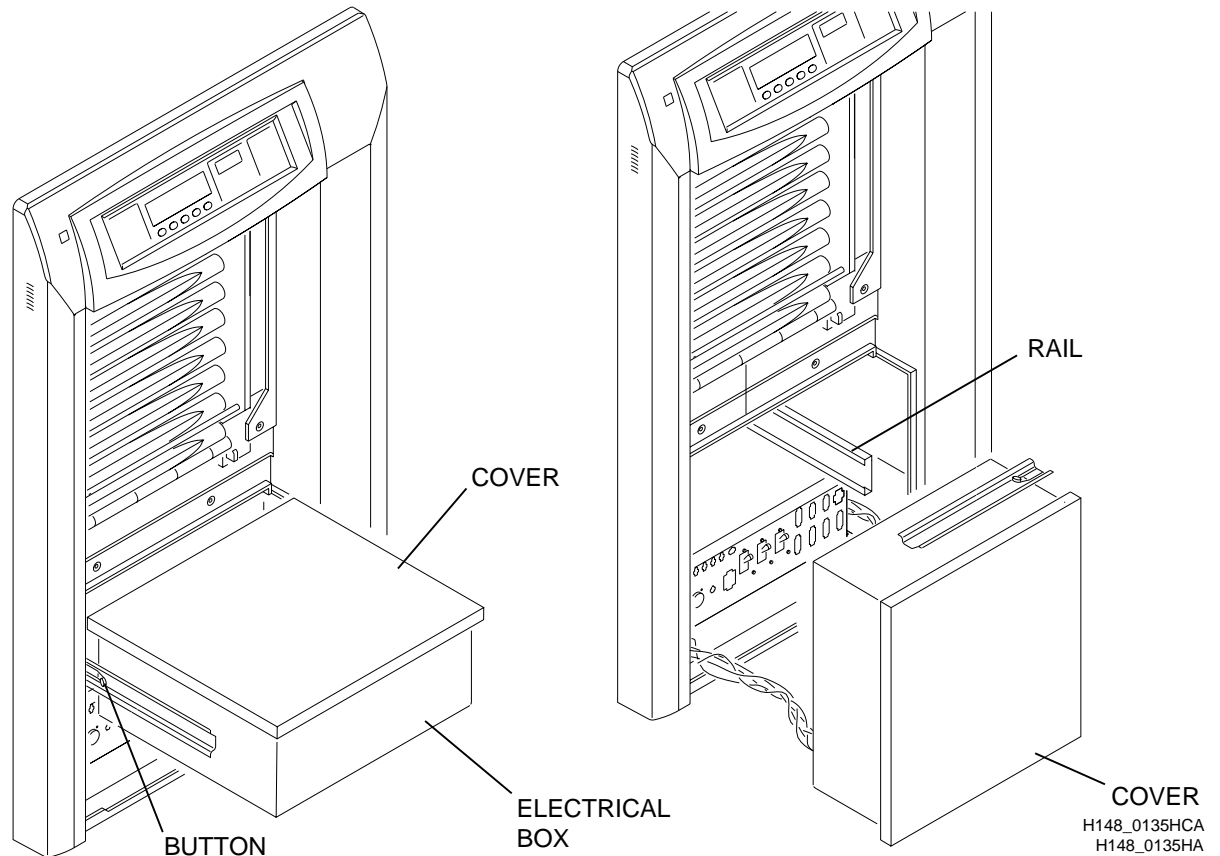
The diagram at left indicates the routing of the CABLES from several main components of the PROCESSOR to the COMPONENT PLATE.

- LEVEL SENSOR
- REPLENISHMENT PUMPS
- RECIRCULATION PUMP
- HEATERS
- THERMISTORS
- DRYER BLOWER
- EXHAUST BLOWER



H148_0133CA

Removing the ELECTRICAL BOX



Important

To perform certain service procedures, you must remove the ELECTRICAL BOX.

- [1] Pull the ELECTRICAL BOX.
- [2] Press the 2 BUTTONS on either side of the ELECTRICAL BOX to free it from the RAILS.



Caution

When you remove the ELECTRICAL BOX

- To prevent damage to the CABLES, do not use excessive force to remove the ELECTRICAL BOX.
- Be careful that the COVER does not open.

- [3] Remove the ELECTRICAL BOX from the RAILS and place it on the floor.

