User Guide

English

Dolev 4press V/V^2

www.creo.com | **creo**™

Dolev 4press V/V²

User Guide

creo™

Patents

This product is covered by one or more of the following U.S. patents:

RE37,376	5,283,140	5,517,359	5,699,740	5,969,872	6,134,393	6,283,589
4,456,924	5,291,273	5,519,852	5,708,736	5,973,801	6,136,509	6,295,076
4,500,919	5,323,248	5,526,143	5,713,287	5,986,819	6,137,580	6,299,572
4,558,302	5,325,217	5,532,728	5,742,743	5,995,475	6,147,789	6,318,266
4,743,091	5,339,176	5,561,691	5,764,374	5,996,499	6,158,345	6,340,817
4,992,864	5,343,059	5,568,595	5,764,381	5,998,067	6,159,659	6,352,816
5,049,901	5,355,446	5,576,754	5,771,794	6,003,442	6,164,637	6,353,216
5,079,721	5,359,451	5,579,115	5,785,309	6,014,471	6,180,325	6,366,339
5,081,617	5,359,458	5,592,309	5,802,034	6,016,752	6,181,362	6,371,026
5,103,407	5,367,360	5,594,556	5,813,346	6,031,932	6,181,439	6,377,739
5,111,308	5,384,648	5,600,448	5,818,498	6,043,865	6,186,068	6,387,597
5,113,249	5,384,899	5,608,822	5,854,883	6,060,208	6,189,452	6,396,422
5,122,871	5,412,491	5,615,282	5,861,904	6,063,528	6,191,882	6,396,618
5,124,547	5,412,737	5,625,766	5,861,992	6,063,546	6,204,874	6,407,849
5,132,723	5,420,702	5,636,330	5,875,288	6,072,518	6,208,369	6,414,755
5,150,225	5,420,722	5,649,220	5,894,342	6,090,529	6,214,276	6,422,801
5,153,769	5,459,505	5,650,076	5,900,981	6,096,461	6,217,965	6,435,091
5,155,782	5,473,733	5,652,804	5,934,196	6,098,544	6,252,522	
5,157,516	5,481,379	5,680,129	5,942,137	6,107,011	6,260,482	
5,208,818	5,488,906	5,691,823	5,946,426	6,112,663	6,266,080	
5,208,888	5,497,252	5,691,828	5,947,028	6,115,056	6,266,134	
5,247,174	5,508,828	5,696,393	5,958,647	6,121,996	6,267,054	
5,249,067	5,509,561	5,699,174	5,966,504	6,130,702	6,268,948	

Contents

Using this Guide

This Guide Includes

The Dolev 4press imagesetter is operated from a Host workstation. This guide describes the imagesetter and some procedures performed via the workstation.

The guide includes the following chapters:

Chapter 1, Introduction to the imagesetter, introduces the imagesetter, explains how to start it up, shut it down, and use the control panel.

The last section of this chapter lists the specifications of the imagesetter.

Chapter 2, Handling Cassettes & Media, discusses topics related to loading and unloading of film.

The first section explains how to remove the loading cassette, load film into it, place it back in the imagesetter, and trim the film.

The following section explains how to place the unloading/accumulating cassette in the imagesetter, and update the Media Info table.

The next section describes the exposure process, and the actions that may be taken during it.

The last part of the chapter explains how to remove the unloading/accumulating cassette, and process the film.

Chapter 3, Aligning to Punch, explains how to align images to any point on the imageable area on film (that is, not just according to the punch holes).

Chapter 4, Calibration and Service Utilities, explains how to guarantee high quality exposures using a unique laser intensity for each plotting resolution.

In addition, the functions available in Service Utilities mode are listed.

Chapter 5, Media Related Troubleshooting, explains how to solve problems related to the exposure media, and especially how to clear film that is stuck in the imagesetter.

For related documents, see Dolev 4press V/V^2 Installation Guide, 399Z2G647D.

Conventions Used in This Guide

This section describes the fonts, terminology, and symbols used in this manual.

Fonts

Frutiger bold is used to refer to buttons and other items in a dialog box, file names, folders, menu names, and menu commands.

Minion Italic is used to refer to other chapters in the manual, book titles, and titles of other manuals.

Frutiger is used for figure and table captions.

`Letter Gothic` is used for messages on your computer screen and for information that you must type.

SMALL CAPS is used for a key or key combination on your keyboard.

Terminology

Clear	Place the mouse pointer over the check box for the specified option, and click the left mouse button so that the X or check mark is removed from the check box.
Click	Place the mouse pointer over the specified option or button and press and release the left mouse button.
Double-click	Place the mouse pointer over the specified option or button and quickly press and release the left mouse button twice.
Drag	Hold down the left mouse button while moving the mouse and release the button.
Enter	Type the information and press the ENTER or RETURN key.
Point	Position the mouse pointer over a submenu or menu command. For example, point to the **File** menu.

Press	Press the specified key or key combination on your keyboard, for example, press CTRL+ALT+DEL.
Right-click	Place the mouse pointer over an area of the application window, and then press and release the right mouse button to display the shortcut menu. For more information about using shortcut menus, see your Windows documentation.
Select	Place the mouse pointer over the check box for the specified option, then click the left mouse button so that an X or check mark appears in the check box.
	Or:
	Place the mouse pointer over the specified box or button, and then click the left mouse button.
Type	Type the information. Do not press the ENTER or RETURN key.

Symbols

DANGER: This indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury. This does not alert you to a property damage accident unless personal injury risks are associated with the accident.

WARNING: This indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury. This does not alert you to a property damage accident unless personal injury risks are associated with the accident.

CAUTION: This indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. This may also alert you to unsafe practices or potential property-damage-only accidents.

Important: This symbol tells you about things that may cause process delays or reduce functionality, reliability, or quality.

Note: A note provides additional information that you may need to consider.

The reference symbol tells you that related information on the topic is available in another Creo document.

Safety Precautions

Note: Read this chapter carefully before installing, operating, or maintaining the Dolev 4press V/V^2 imagesetter.

Installation Safety Precautions

CAUTION: Installation must be done by authorized service personnel only. To avoid the risk of fire, no connections to the supply are to be made before setting the line voltage selector.

Setting the Line Voltage Selector

At the factory, the imagesetter is set to a line voltage of 220 volts. If this setting does not match your local voltage, you need to change the position of the voltage selector.

Note: For all voltage settings, leave the two (2) fuses supplied by the factory (T 6.3A 250V).

The present voltage selector setting appears in a small window on the electronic power drawer assembly located on the rear side of the imagesetter (adjacent to the master circuit breaker).

To set the line voltage:

1. Measure the line voltage at the wall outlet. The measured line voltage should suit the nominal line voltage in your country.

2. Use the following table to determine the required setting:

Measured Voltage	Voltage Selector Setting
90 V to 109 V	100 V
110 V to 127 V	120 V
180 V to 229 V	220 V[a]
230 V to 254 V	240 V

a. Factory setting

To change the voltage setting:

1. Ensure that the power cord is not connected to the imagesetter.

2. Locate the electronic power drawer assembly at the rear left side of the imagesetter.

3. Remove the fuse holder from the unit to provide access to the voltage selector.

4. Place a small pen knife or flat head screwdriver under the tab at the bottom of the fuse holder, and lift the tab slightly to release the holder.

Master Power Breaker
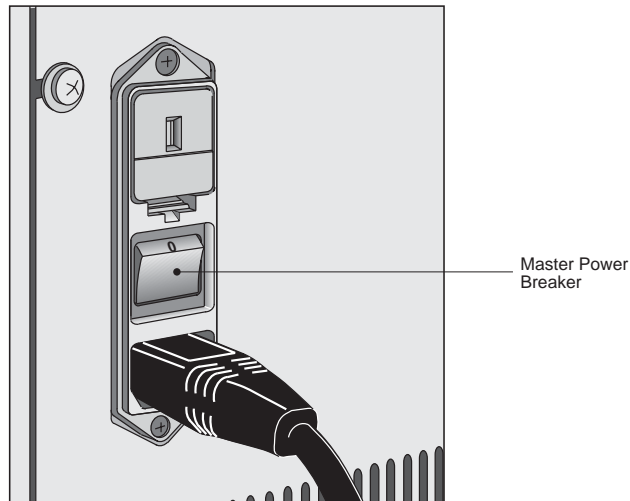
5. Once it is released, pull the holder completely out of the unit.
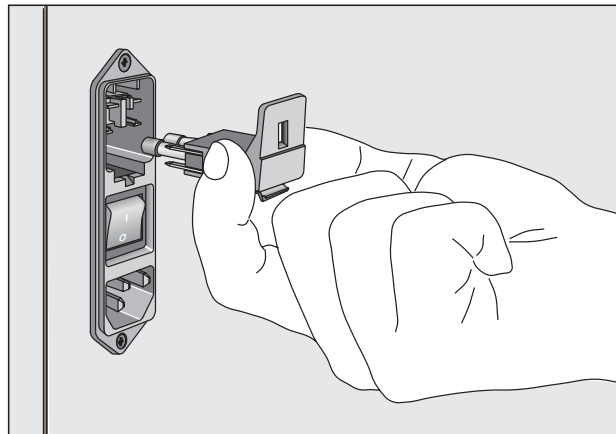
6. Remove the voltage selector from the unit.

7. Grasp the selector and pull it straight out. Note that voltage settings are printed on each of its four (4) posts. The appropriate voltage setting for the imagesetter should face outward for viewing through the fuse holder window.

Selected
Voltage
Faces
Outward
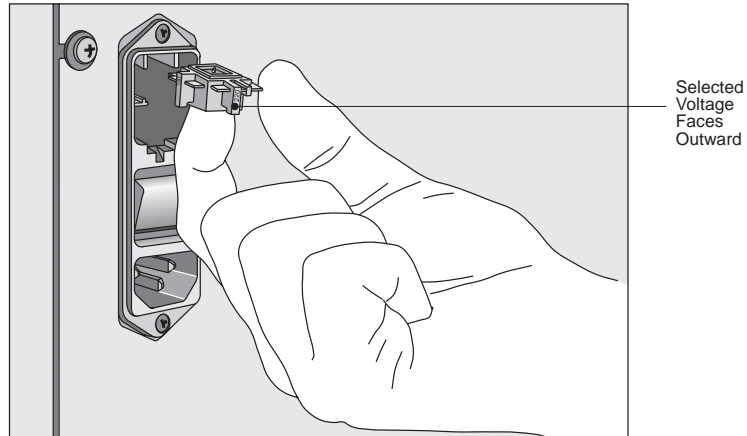
8. Rotate the voltage selector until the required voltage setting faces outward for viewing through the fuse holder window (refer to the table above for the correct setting).

9. Reinsert the voltage selector into the electronic power drawer assembly.

10. Push the selector slightly to ensure that it is completely inserted.

11. Replace the fuse holder in the unit. When properly seated, the holder will snap into place with only slight finger pressure.

12. Verify that the appropriate voltage setting appears in the window.

Selecting the Power Supply Cord

The Dolev 4press V/V^2 is supplied without a power supply cord.

➢ Select one of the following:

• **In the United States and Canada -**
   Use a UL-listed/CSA-certified cord set that includes a flexible cord of type SJ, SJE, SJO, SJOO, SJT, SJTO, SJTOO, S, SE, SO, SOO, ST,

STO, or STOO, with minimum 16 AWG, three (3) conductors. The cord set must include a parallel blade grounding type attachment plug (min. 12 Amp), and an IEC 320 type appliance coupler.

- **In Europe -**
  Use only a three (3) conductors HAR-type cord. The cord set used must be approved for the country in which the equipment is installed. The cross section of the conductor must be at least 1.25 mm^2 and the cord set must include a grounding type attachment plug and an IEC 320 type appliance coupler.

Having completed setting of the voltage sector, proceed as follows:

1. Connect the appropriate power cord to the power inlet plug of the Electronic Power Drawer assembly.

2. Plug the opposite end of the cord into the electrical power supply located in the wall.

Selecting an Inline Processor

An opening is located at the back of the Dolev 4press V/V^2 imagesetter. The inline processor is connected via this opening. The exposed media is conveyed through this opening and through a mating opening in the processor to the inside of the processor.

For the safe use of Dolev 4press V/V^2 with the processor connected to it, the processor used should be designed so you are not exposed to hazards.

To achieved this, an inline processor with the following properties should be used:

- The mating opening in the processor should not enable you to touch hazardous moving parts inside the imagesetter, even while operator openings in the processor are open.

- The opening in the processor should not enable you to touch hazardous moving parts inside the processor through any of the imagesetter service doors.

- The processor should be designed so that, while imagesetter service doors are open, it is not possible to touch (through these doors) any hazardous processor part that penetrates the imagesetter.

To decide whether a part can or cannot be touched, see *Standards for Safety UL1950 or IEC950: Figure 19: Test Finger.*

Note: An inline processor that complies with these safety requirements must be used.

General Safety Precautions

Disconnection from the Mains Supply

The Dolev 4press V/V^2 is equipped with a master circuit breaker, located at the lower rear part of the imagesetter, and an On/Off switch, located near the control panel at the front part of the imagesetter.

To achieve complete disconnection from the mains supply, the master circuit breaker must be disconnected (switched to **0** position).

CAUTION: Switching off only the **On/Off** switch leaves several circuits of the imagesetter energized.

Lithium Battery

The Dolev 4press V/V^2 contains a Lithium battery in the CPU board.

The battery should be replaced by qualified service personnel. The battery must not to be replaced by the user.

CAUTION: Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer. Dispose of the used batteries according to the manufacturer's instructions.

Interlocks

Upon opening the left/right service door:

- Interlock switches are designed to disconnect power from the laser and motors.

- You are forbidden, under any circumstances, to defeat any interlock switch.

CAUTION: Beware not to touch the spinner motor or the rotating prism while they are rotating.

Note: It may take up to 30 seconds for the rotating prism to rest after the service door has been opened.

WARNING: Even when the interlocks are not defeated, the media loading rollers located inside the loading drawer may be rotating. Keep your hands off the running loading rollers.

Upon opening the unloading drawer:

- An interlock switch is designed to disconnect power from the media unloading motor.

- You are forbidden, under any circumstances, to defeat this interlock switch.

- You are forbidden, under any circumstances, to open covers that need a screwdriver or any other tool to do so.

Laser Safety Precautions

The Dolev 4press V/V^2 imagesetter consists of a laser system that exposes the media (film).

DANGER: Even brief exposure of the eyes to the laser beam or its reflections may cause permanent loss or permanent degradation of eyesight.

CAUTION: Use of controls and/or adjustments, or performance of procedures other than those specified in this guide may result in hazardous radiation exposure.

The Dolev 4press V/V^2 imagesetter is installed and serviced exclusively by specialized technicians trained in the proper procedures for working with and adjusting the semiconductor laser beam power and its optical path.

You are allowed to perform only one (1) maintenance procedure, that is, to remove film (supply media) stuck inside the imagesetter drum area.

When film gets stuck inside the imagesetter drum area, proceed as follows:

1. To access the inside of the imagesetter drum area, open the left or right service door (as explained in *Chapter 1, Introduction to the Imagesetter, Opening Service Doors* on page 18).

   Upon opening the left or right service door:

   - Interlock switches are designed to disconnect power from the laser and motors.

   - You are forbidden, under any circumstances, to defeat any of the interlock switches.

   Note: Beware **not** to touch the spinner motor or the rotating prism while they are rotating. It may take up to 30 seconds for the rotating prism to rest after the service door has been opened! Even when the Interlocks are not defeated, the media loading rollers located inside the loading drawer may be rotating. Keep your hands off the running loading rollers.

   - You are forbidden, under any circumstances, to open covers that need a screwdriver or any other tool to do so.

2. Remove the stuck media (as explained in *Chapter 5, Media Related Troubleshooting* on page 87*).*

While the imagesetter is switched on and the interlocks are defeated:

- There is power present in the electrical, optical and mechanical assemblies.

DANGER: Electrical, mechanical and laser hazards exist.

- Up to 5 mw of laser power at a wavelength of approx. 650 nm may be present in the Output optical connector of the static optics assembly, Dynamic optics assembly, optical fibers and connectors, and on the inside of the imagesetter drum.
- Up to 10 milliwatt of laser power at the same wavelength may be present inside the static optics assembly.

DANGER: This laser radiation is hazardous to the eye and skin! Avoid direct exposure to the beam and its reflections!

Laser Precaution Labels

The following pages show the locations of the laser warning signs. Please notify Creo service personnel if any of them are damaged.

Types of Labels

(1)

DANGER

LASER LIGHT WHEN OPEN AND INTERLOCKS DEFEATED.

AVOID EXPOSURE TO BEAM.

(2)

DANGER
LASER LIGHT
WHEN OPEN AND
INTERLOCK
DEFEATED.

AVOID
EXPOSURE
TO BEAM.

(3)

WARNING

DO NOT
REMOVE THIS
CONNECTOR
WHILE POWER
IS ON ! ⟶

Serial No.

- - - - - - - - - - - - - - - - -

(4)

CLASS 1
LASER PRODUCT

APPAREIL LASER
CLASSE 1

LASER APPARAT
KLASSE 1
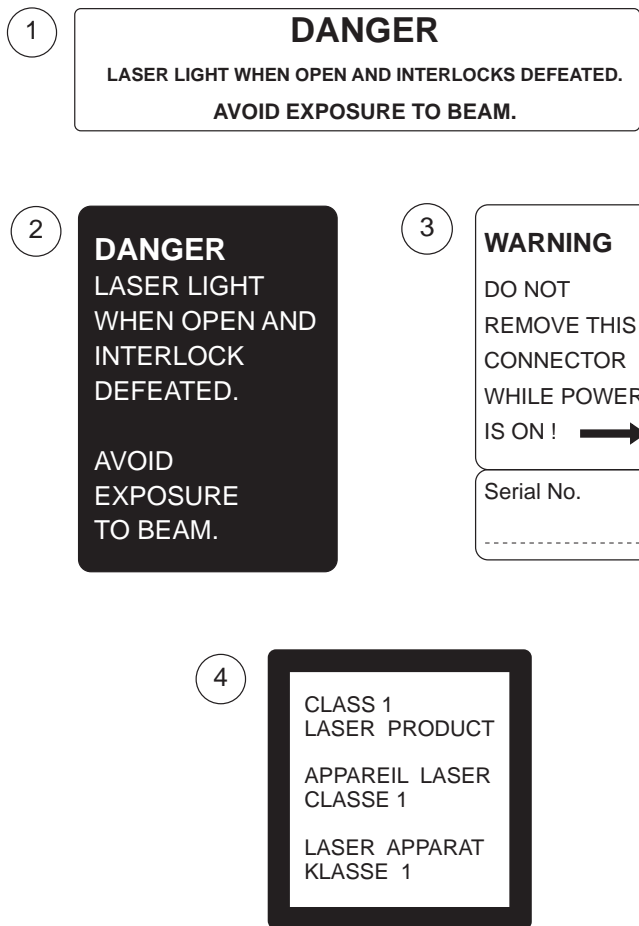
Laser precaution labels

Location of Labels

Right door open

Left door open

Left
side view

Right
side view
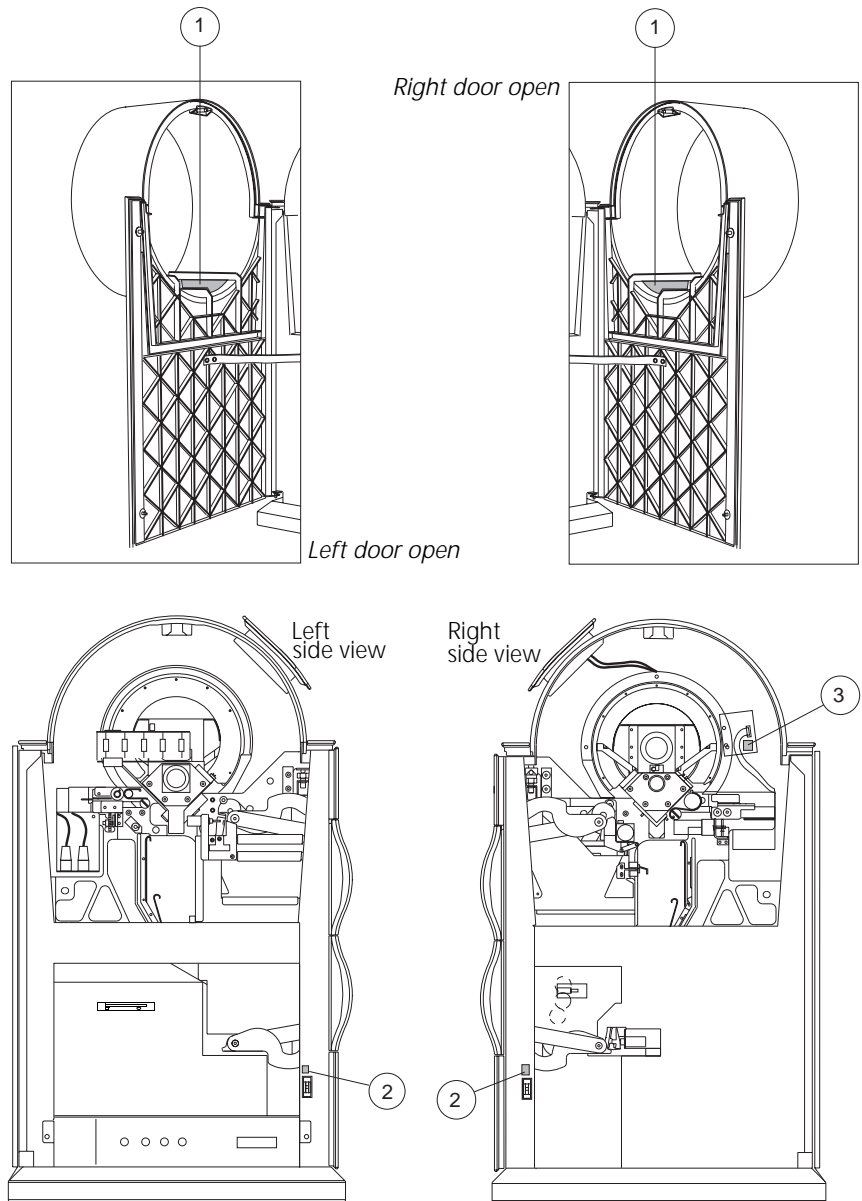
Location of Labels
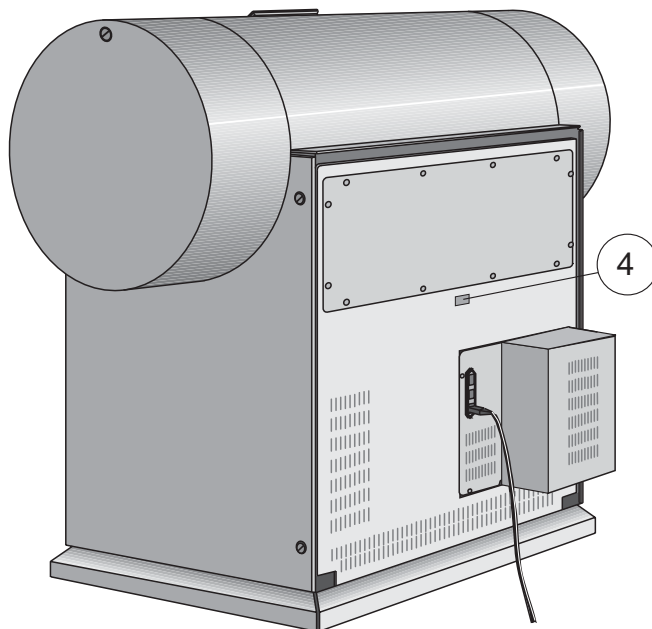
Rear side view

1

Introduction to the Imagesetter

Overview

This chapter introduces the imagesetter, and explains how to start it up, shut it down, and use the control panel. The last section of this chapter lists the specifications of the imagesetter.

The Dolev 4press V/V^2 imagesetter is a high-speed internal drum output device. The imagesetter uses laser optics to output images onto film, paper, or polyester plates. The imagesetter does not require computer experience to operate. During normal use, once exposing starts, there is no need for intervention since all functions are performed automatically.

The imagesetter handles high-volume film output of color and black-and-white pages of text and graphics, and processes this data to produce high-quality film output.

The media that is loaded into the loading cassette can be exposed in single or multiple runs in a continuous manner.

A punch option allows the definition of customized registration marks. This functionality is especially important when preparing films for impositioning.

The exposed film is cut at the user's request, and is unloaded into a removable accumulating cassette. At the completion of a work session, the cassette is taken to a film processor for development. Alternatively, a conveyor and inline processor can be used for continuous film development.

The imagesetter changes the way images for plate-imposition are prepared. Instead of using time consuming step-and-repeat machines, the imagesetter prepares plate-ready separation films. After the files that are transferred from the workstation to the imagesetter are exposed on the film, the film is transferred to the plate department.

Dolev 4press V/V^2 Features

Front View

On/Off Switch
Reset Button

Control
Panel

Film Loading
Drawer

Film Unloading
Drawer

Left Service
Door

Door Securing
Bolts (3)
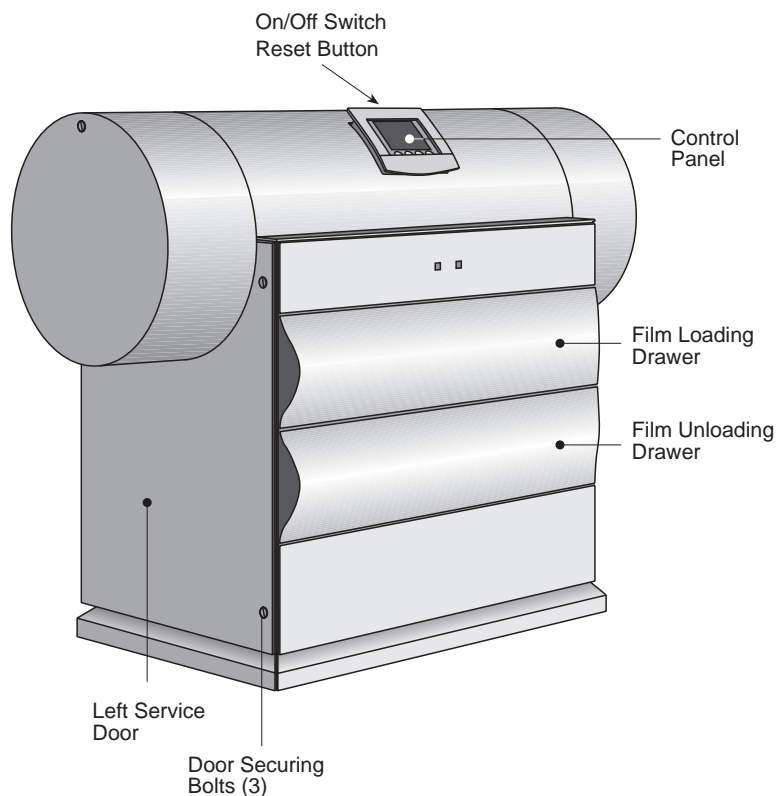
Imagesetter front view

Left Service Door - This door allows access to the carriage area and to the Film Path selector (for details, see *Chapter 2, Handling Cassettes & Media, Setting the Film Path Selector*). Service engineers access the electronics and optomechanics via the service doors.

Door Securing Bolts - Release these bolts to open the left service door in order to clear stuck media (for details, see *Opening Service Doors* below, and to *Chapter 5, Media Related Troubleshooting*).

Film Loading Drawer - The loading cassette lies in this drawer (see *Chapter 2, Handling Cassettes and Media* on page 39).

Film Unloading Drawer - The unloading/accumulating cassette lies in this drawer. Exposure media can be output either to the cassette or to an inline processor (see *Chapter 2, Handling Cassettes & Media, Setting the Film Path Selector and Unloading Film*).

Control Panel - The LCD screen of the control panel displays messages, icons, and imagesetter views that inform you of the current status of the imagesetter and of the cassettes. In addition, the soft buttons enable you to perform both the basic and the advanced operations related to the machine and to the exposure media (see the control panel section further on).

On/Off Switch - Use this switch to turn the imagesetter on or off (see the Startup and Shutdown sections further on).

Reset Button - In case of a fatal software error, press this button to resume work (see the reset and control panel sections further on).

Rear View
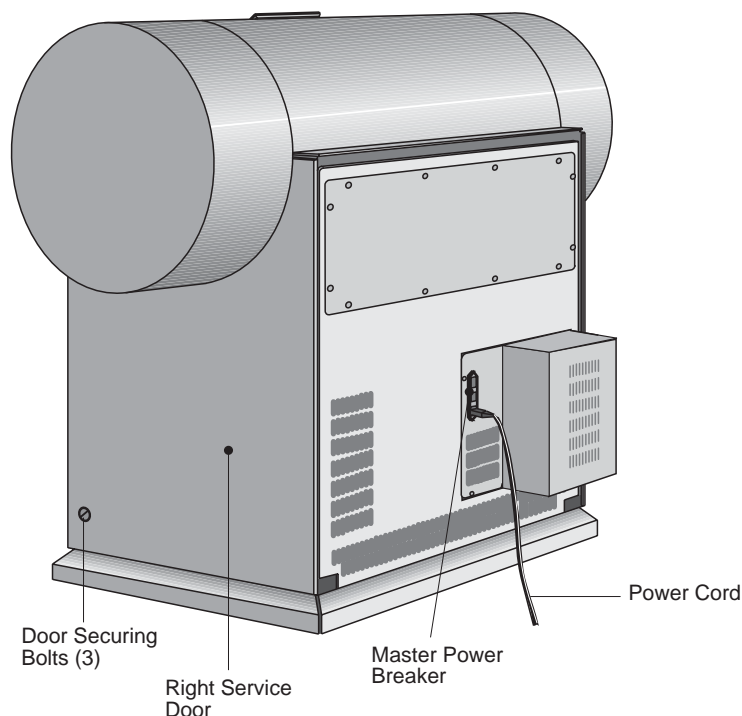
Imagesetter rear view

Right Service Door - This door allows access to the carriage area. Service engineers access the electronics and optomechanics via the service doors.

Door Securing Bolts - Release these bolts (3) to open the left service door in order to clear stuck media (for details, see *Opening Service Doors* below, and to *Chapter 5, Media Related Troubleshooting*).

Power Cord - The power cord should be plugged into the wall outlet (or electrical strip) on one end, and to the imagesetter on the other (for details, see the *Startup* and *Shutdown* sections).

Master Power Breaker - During normal operation, do not shut down the power from this breaker (for details, see *Chapter 1, Starting Up* on page 20, and *Chapter 1, Shutting Down* on page 23).

Floppy Disk Drive - In case you need to update the imagesetter software, insert a 3½ inch floppy disk into the drive.

Opening Service Doors

Please see the *Safety Precautions* chapter for details on laser and other safety precautions before proceeding.

You may open the left/right service doors for the following:

- To access the film path selector (see *Chapter 2, Handling Cassettes and Media, Before starting to expose, proceed as follows:* on page 40).

- To clear stuck media (see *Chapter 5, Media Related Troubleshooting* on page 87).

To open the door, proceed as follows:

Note: The procedure for opening the imagesetter service doors is identical for both left and right doors.

1. Release the three (3) securing bolts.

   Note: There is no need to remove the bolts since the door springs open when they are loosened.

Left Service
Door

Door Securing
Bolts (3)
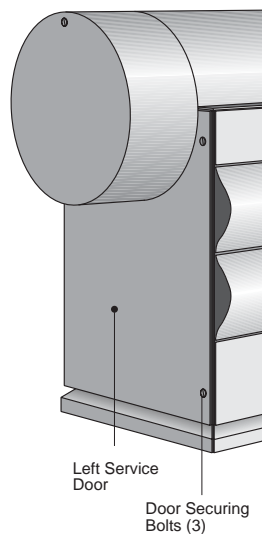
Left service door closed

2. **Open the service door.**
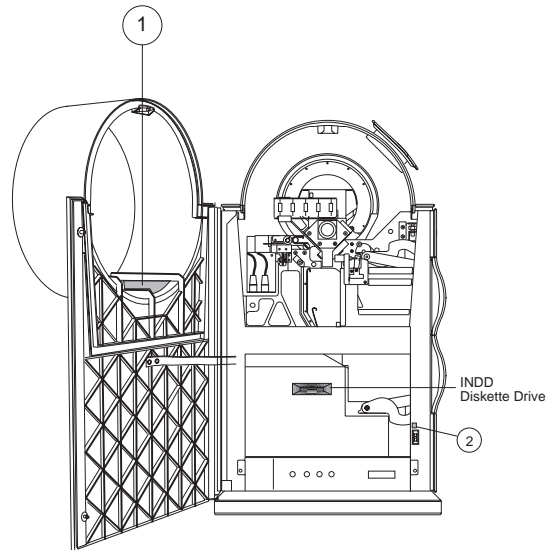
Left service door open

CAUTION: Be sure not to defeat the safety interlocks of the side doors. Beware not to touch the spinner motor or the rotating prism while they are rotating.

Note: It may take up to 30 seconds for the rotating prism to rest after the side door has been opened.

WARNING: Even when the interlocks are not defeated, the media loading rollers located inside the loading drawer may be rotating. Keep your hands off the running loading rollers.

To close the door, proceed as follows:

➢ Secure the three (3) bolts in the following order: bottom, middle and top.

Starting Up

To start the imagesetter:

1. **To power on the imagesetter, press on the upper part of the master power breaker, (located on the rear side of the imagesetter).**

    Note: This is required only the first time you power on the imagesetter.
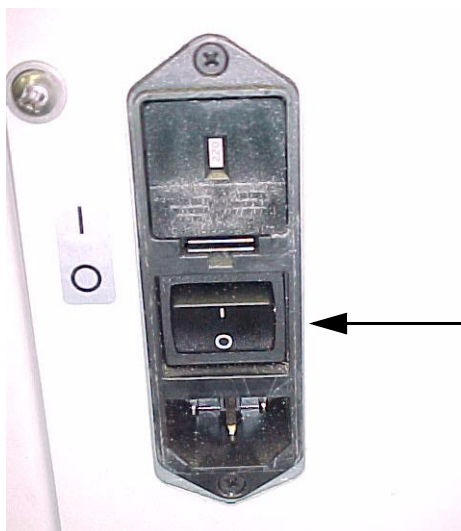
Master power breaker

Master power breaker (Off position)

2. To turn on the imagesetter, face the imagesetter and press on the right part of the On/Off switch (located on the top edge of the control panel).

On/Off switch on top edge of control panel

The system beeps, and the control panel indicates the currently performed startup stage (StartUp 1 . . . StartUp 7. Stages #8-#12 are not specifically indicated).

Note: This information is helpful in case the imagesetter hangs during startup, as it indicates the stage at which the problem occurred.

After the startup procedure is completed, one of the following is indicated on the control panel's LCD screen:

- STANDBY indicates that the imagesetter is ready to expose (that is, film is already loaded, and both the loading and unloading drawers are closed).

- NOT READY indicates that the imagesetter is not ready to expose (for example, film is not loaded; one of the drawers/doors is open; Startup failed). For further information, see *Chapter 1, Control Panel* on page 24.

If, after switching on, the beep is not heard, proceed as follows:

1. Press on the left side of the On/Off switch to turn off the imagesetter.

2. Press on the lower part of the master power breaker to power off the imagesetter.

3. Check that the power cord is plugged into the wall outlet (or electrical strip) on one end, and to the imagesetter on the other.

4. Check that a current reaches the outlet (that is, there has not been a short circuit).

5. Press on the upper part of the master power breaker to power on the imagesetter.

6. Press on the right side of the On/Off switch to turn on the imagesetter.

Shutting Down

Under normal conditions, leave the imagesetter operational at all times (you do not need to turn off the power overnight).

If you intend to leave the imagesetter idle for 48 hours:

➢ Press the On/Off switch on the left side of the panel to turn off the imagesetter.

Note: In case a power surge or some other electrical problem has shorted power to the imagesetter, the Master Power Breaker may shut down the machine. See *Chapter 1, Starting Up* on page 20.

If you want to turn off only the motors of the imagesetter:

1. Access Service Utilities mode on the control panel.

2. Select Release Motors (see *Chapter 4, Calibration and Service Utilities* on page 71).

Resetting

When a fatal error message appears, reset the imagesetter (software and hardware).

Note: For details on system messages, see the control panel section.

The Reset button is recessed on the top edge of the control panel.

To reset the imagesetter:

➢ Use a narrow blunt instrument and depress the Reset button.

Note: Resetting the imagesetter does not help in case of film crash.

To reset the imagesetter software:

➢ Select **Start Up**, on the control panel (*Chapter 2, Handling Cassettes and Media, Control Panel Functionality* on page 55).

Control Panel

The control panel is located on the upper part of the imagesetter (see *Chapter 1, Imagesetter front view* on page 15).

The control panel is both an informational tool and an action-oriented user interface.
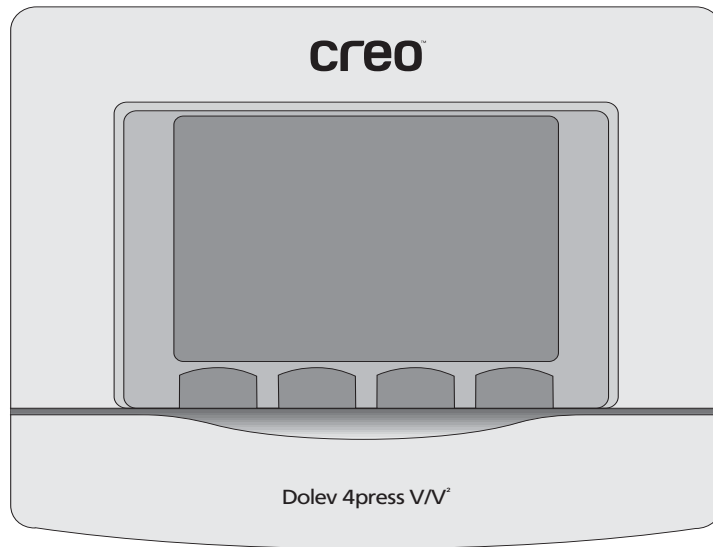
Control panel

(For details on the **On/Off Switch** and **Reset** Button, see *Chapter 1, Starting Up* on page 20, *Shutting Down* on page 23, and *Chapter 1, Resetting* on page 23).

The control panel consists of the following:

• LCD Screen (see *Chapter 1, LCD Screen* on page 25).

• Four (4) Soft Buttons (see *Chapter 1, Soft Buttons and Soft Functions* on page 32).

LCD Screen

The LCD screen displays text (for example, messages) and a variety of graphical representations (for example, icons, imagesetter views) that inform you of the current status of the imagesetter and of the cassettes.

In addition, it displays menus and windows through which you may perform both basic and advanced operations related to the machine and to the exposure media.

Note: You can control the brightness of the display. For information, contact your Creo service personnel.

The LCD screen is activated during startup (see *Chapter 1, Starting Up* on page 20).

➢ After startup is completed, press the soft button below **Status** to display the following:
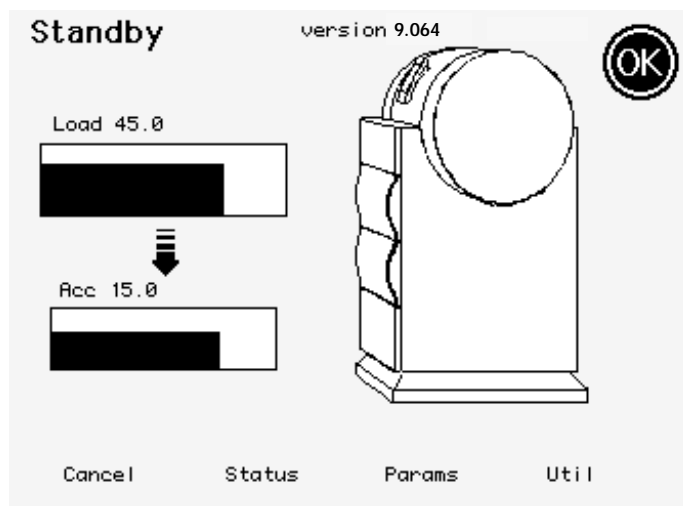
LCD screen following startup

The LCD screen display includes the following areas:

- Current Process (or Progress Indicator)
- Imagesetter micro version
- Status icon
- Imagesetter view
- Status of loading cassette and accumulating cassette or inline processor
- Soft functions.

Current Process

This area (on the top left corner of the screen) displays the name of the process that is currently running, or the current state of the imagesetter (Advance or Not Ready).

> **HostOnLine**

Sample current process

The Dolev 4pressV/V^2 may display any of the following processes:

- **StartUp** - the startup process includes 12 stages, some of which are indicated by StartUp # (# specifying a number), while others are indicated by the name of the task (for example, Attach).
- **Standby** - appears when the imagesetter is ready to expose (that is, film is already loaded, and both the loading and unloading drawers are closed).
- **Not Ready** - appears when the imagesetter is not ready to expose (for example, film is not loaded; one of the drawers/doors is open).
- **HostOnLine** - appears when communication between the host and the imagesetter has been established (for example, at the beginning of the expose process or after selecting **Get Params from Plotter**).

Progress Indicator

When the imagesetter is exposing, a progress indicator is displayed in the Current Process area.

The bar extends from left to right to show the amount of exposing completed.

0%   100%

Sample Progress indicator

Imagesetter Micro Version

This area (on the top center part of the screen) displays the number and the date of the imagesetter micro software version that is currently installed on the imagesetter's PC.

VERSION 9.064   6.21.01

Sample software version number and date.

Note: The date format is **month**:**day**:**year**.

Before starting to work, you need to verify that this software version is compatible with the Creo software version installed on the host workstation.

Status Icon

This area (on the top right corner of the screen) displays one of the following icons:

- **OK**
  This icon appears when the imagesetter is ready to start working (for example, following startup).

- **WAIT**
  This icon appears when the imagesetter (or its PC) is performing an action (for example, during startup).

  Note: At this stage, you may not perform any actions on the control panel.

- **WARNING**
  This icon appears when NOT READY appears in the Current Process area (for further information, see *Status in the Soft Buttons* and *Soft Functions* section below).

- **EXPOSING**
  This icon appears when the imagesetter is exposing.

Note: At this stage, the Progress indicator (that appears in the *Current Process* area) shows the amount of exposing completed.

Imagesetter View

This area (on the right part of the screen) displays one (1) of the following representations of the imagesetter:

- Without inline processor
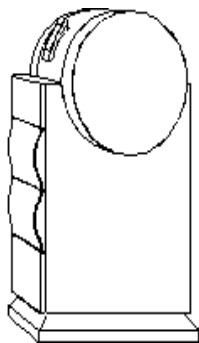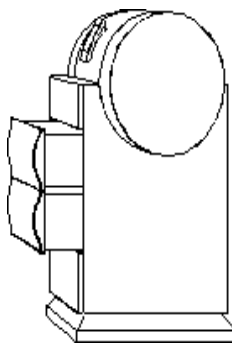
Ready to expose   Both drawers are open   Unloading drawer is open
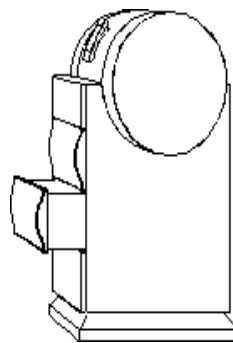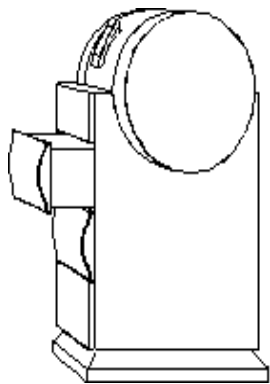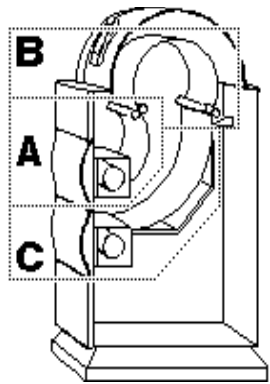
Loading drawer is open   Fatal error

No inline processor

Location of Fatal Error

A Loading area	[**D** Inline processor]
B Drum area	**E** Other areas (for example, PC)
C Unloading area	

- With inline processor
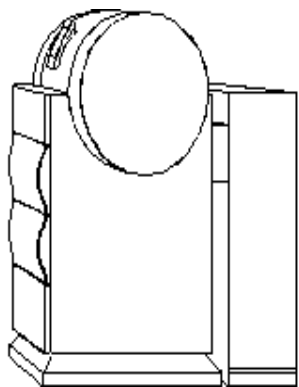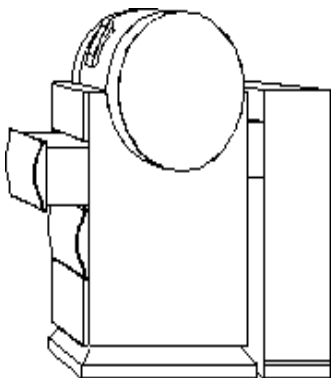
Ready to expose   Loading drawer is open
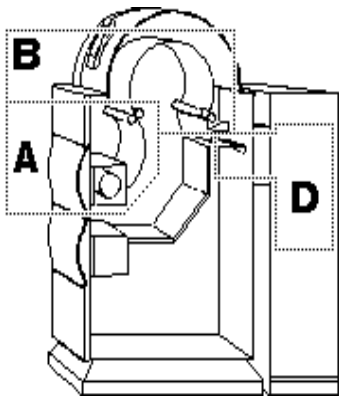
Fatal error

Inline processor

Location of Fatal Error

A Loading area	**D** Inline processor
B Drum area	**E** Other areas (for example, PC)
[**C** Unloading area]	

Status of Loading and Unloading Cassettes (or Inline Processor)

This area (on the left side of the screen) displays one bar that represents the loading cassette, and one bar that represents the unloading cassette (or inline processor, when relevant).

Length of film - The filled part of the bar represents the length of the film that is currently detected in the cassette/Inline processor (that is, a completely full bar represents a loading cassette with 60 meters or an unloading cassette with 23 meters).

Note: The Inline processor bar is either completely full (when it contains 0.1-0.6 meters) or completely empty (when it contains no film).

The actual length of the film (in meters) is indicated above the bar (for example, **Load 45.0**, **Acc 15.0**, or **InLine 0.2**).

Punch option - The width of the filled part within the bar is determined by the currently set punch option (according to the current location of the left flange of the film spool), and by the width of the currently loaded film (according to the current location of the right flange of the film spool).

(For further details, see *Chapter 2, Handling Cassettes and Media, Loading Film* on page 41.)

Status of Loading Cassette:

Side punch (narrow film)   Head punch
or No punch (narrow film)   No punch
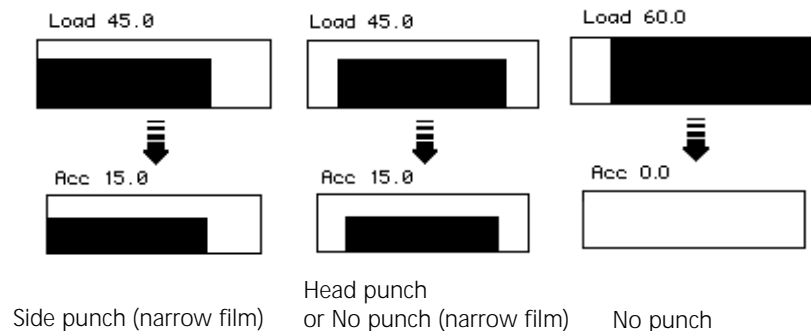
Status of Inline Processor:

Side punch (narrow film)   Head punch
or No punch (narrow film)   No punch
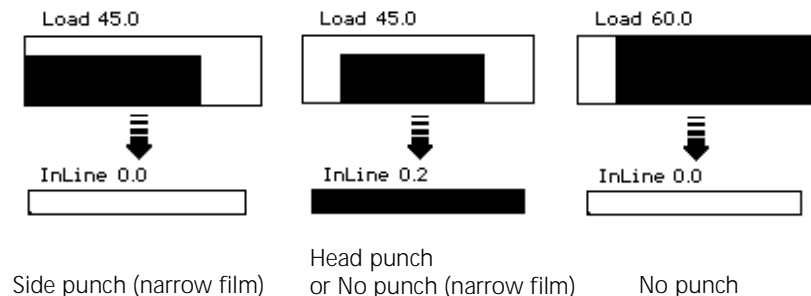
Soft Buttons and Soft Functions

Soft Buttons - Four (4) soft buttons are located below the LCD screen of the control panel.

Press a soft button to activate the function that is indicated on the LCD screen directly above it.

Soft buttons

Soft Functions - Four (4) soft functions are indicated on the bottom part of the LCD screen.

Each soft function indicates the action that is activated when you press the corresponding soft button (that is directly below it).


```
    Cancel          Status          Params          Util
```
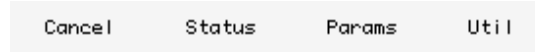
Sample soft functions

Note: The functionality related to a specific soft button (for example, the second on the right) is variable (depending on the soft Function that is currently indicated on the LCD screen).

To activate the functionality:

1. Press the soft button that corresponds to the desired soft function. For example, to activate **Status**, press the soft button that is directly below it. The relevant soft function becomes active (its name appears highlighted on a black background). A menu or a window appears (for example, the **Util** menu or the **Media Info** window), and a new set of soft functions is indicated.

2. To activate another soft function, press the relevant soft button.

Main Screen Soft Functions

Cancel - Inactive on this screen.

Status - Press the soft button below **Status** to view system messages.

Params - Press the soft button below **Params** to view the parameters of the last/current exposure that the host sent to the imagesetter. For further details, see *Chapter 2, Handling Cassettes and Media, Params* on page 55.

Util - Press the soft button below **Util** to perform various functions related to the exposure media, and to get information on the media and the detectors. For further details, *Chapter 2, Handling Cassettes and Media, Util* on page 56.

Control Panel Status

➢ Press the soft button below **Status** to view system messages. The screen refreshes to list basic messages.

Basic Messages:

```
STATUS
A: [F] Film
E: [E] Expose
B: [W] Spinner
```

Sample basic messages

➢ To view a more detailed format of all the listed basic messages, press the soft button below **Status** once (see *Chapter 1, Detailed Messages* on page 35),
or
to return to the previous screen, press the soft button below **Status** twice.

A basic message is composed of the following parts:

```
Location: [SEVERITY] Message text
```

Structure of basic message

LOCATION [A]: [B]: [C]: [D]: [E]:

The letter followed by the colon (:) indicates the location in the imagesetter that is related to the message.

One of the following locations may be indicated:

```
A: Loading Area        D: Inline Processor

B: Drum Area           E: Other Areas

C: Unloading Area
```

[SEVERITY] [F] [E] [W]

The letter enclosed by the square brackets indicates the severity of the message.

One of the following severity types may be indicated:

```
F Fatal error message

E Error message

W Warning message
```

A fatal error message indicates that the imagesetter is unable to continue operation.

An error message indicates that the current process failed. You may continue to the next function.

A warning message provides information related to the current process.

Note: This type of message does not necessarily indicate an erroneous situation.

Message text - The word(s) that follow the [severity] part of the message (for example, SPINNER) specify the part of the imagesetter (or the process) that is related to the message.

Detailed Messages

Below each basic message, a more detailed message appears (in smaller print).

Note: Several detailed messages (for example, [F] Startup failed) appear when you list basic messages (since they do not have related basic messages).

```
A: [F] Film
    [F] Film crash

E: [E] Expose
    [E] Media width exceeded

B: [W] Spinner
    [W] Illegal spinner speed
```

Sample detailed messages

➢ Press the soft button below **Status** again to list detailed messages.

A detailed message is composed of the following parts:

```
    [SEVERITY] Message text
```

Structure of detailed message

[SEVERITY] [F] [E] [W]

See *Chapter 1, Introduction to the Imagesetter, [SEVERITY] [F] [E] [W]* on page 34.

Message text - The text of the detailed message attempts to explain the nature of the error. If this does not suffice, see *Chapter 5, Media-related Troubleshooting* or to a Creo service engineer.

Note: An exclamation mark that follows a message (for example, Open Door!) indicates an action that you should perform.

Imagesetter Specifications

Technology

Structure	Internal Drum.
Light Source	Laser Diode 650 nanometers.
Spot Size (variable with intensity)	17 microns nominal.
Raw Imaging Speed For V @2540 dpi @2032 dpi	29.1 cm^2/sec (270 in^2/minute) @31300 RPM. 42 centimeter^2/second ((390 inches^2/minute) @36000 RPM.
Raw Imaging Speed For V^2 @2540 dpi @2032 dpi	52.41 cm^2/sec (487.38 in^2/minute). 69.88 cm^2/sec (649.84 in^2/minute).
Raw Imaging Speed @2032 dpi	
Repeatability (on film)	±15 microns.

The Imagesetter

Maximum Net Image Area	743x580 mm (29.25 x 22.83 in.) 743 x 550 mm (29.25 x 21.65 in.) with optional head punch.
Page Formats Capability	Up to 4 A4, 2 A3, 4 B4, 2 B3, 1 A2, 1 B2.
Press Formats Capability	Heidelberg GTO, MO, SM 72; Man Roland 100; Komori 26, 28.
Resolution	60, 80, 100, 120, 140, 160 pt/mm (1524, 2032, 2540, 3048, 3556, 4064 dots per in.); continuously variable (optional).
Multi-Image Capability	Flat, 1-Up, 2-Up, Auto.
Screen Technology	Turbo Screening including Conventional Dot shapes: Round, Square, Diamond, Gravour, Creo Composite, Geometric Dot and FM.
Screen Frequency	2-24.6 lines/mm (50-625 lines/in.)
Screen Angles	User-selectable from a variety of preset angles.
Communications	TSP cable.
Inline Processor	Optional.

Registration System	Customized head and side punch; tail on special order (optional).
Dimensions	Width: 1400 mm (55 in.) Depth: 630 mm (25 in.) Height: 1140 mm (45 in.)
Weight	230 Kg (506 lbs).

The Media

Film Type	Medium-to-high contrast red sensitive, orthochromatic litho or line film, paper or polyester plates; emulsion-out type.
Film Width	254-737 mm in steps of 25 mm (10-29 inches in steps of 1 in.)
Film Length	Minimum 100 mm; maximum 20 m with Accumulating Cassette Minimum 250 mm; maximum 609 mm with Inline Processor (optional).
Film Thickness	4 or 7 microns.
Loading/Unloading	Fully automatic loading, cutting and unloading in daylight to Accumulating Cassette or Inline Film Processor.
Loading Cassette	Roll film; 61 m (200 ft.) @ 0.004 mm; 30 meters (100 ft.) @ 0.007 mm.
Unloading Cassette	Accumulating roll; 20 m(60 ft.) capacity.

Environment

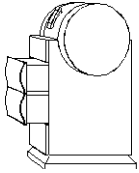| Electrical Requirements	100/110/120 Volts AC ±10%; 200/220/240 Volt AC ±10%; Single Phase, 50/60 Hertz ±2 Hertz.
Operating Environment	Lighting: Daylight operation; no direct sun. Temperature: 22° C ±2°C Relative Humidity: 55% ±5% Audible Noise: < 55dbA Cleanliness: Standard work area Heat Dissipation: 1500 BTU/hour.
Area Requirements	6.32 cubic meters.

2

Handling Cassettes and Media

Overview

This chapter explains how to remove the loading cassette, load film into it, place it back in the imagesetter, and trim the film.

The following section explains how to place the unloading/accumulating cassette in the imagesetter, and update the Media Info table.

The next section describes the exposure process, and the actions that may be taken during it.

The last part of the chapter explains how to remove the unloading/accumulating cassette, and process the film.

Before Starting

Before starting, make sure the following conditions are met:

- The imagesetter is powered **ON** (see *Chapter 1, Introduction to the Imagesetter, Starting Up* on page 20).

- Both the film loading and film unloading drawers are open.

Note: Both drawers open automatically if the loading cassette contains no film, or if you requested change media on the control panel. If one of the drawers is closed, select **Open Load Drawer** or **Open Unload Drawer** on the control panel (see *Control Panel Functionality* on page 55).

- The **NOT READY** message appears on the control panel (see *Chapter 1, Introduction to the Imagesetter* on page 13).

Before starting to expose, proceed as follows:

1. Open the left service door (see *Chapter 1, Introduction to the Imagesetter, Opening Service Doors* on page 18). The film path selector is located on the left side of the machine.
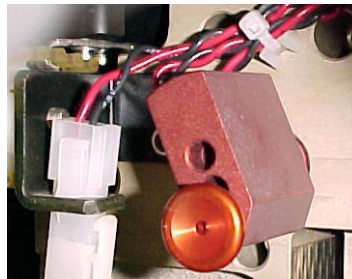
Film path selector (set for unloading/accumulating cassette)

2. To direct the exposed film to the unloading/accumulating cassette, turn the selector to the left (counter-clockwise).
Or,
To direct the exposed film to the inline processor, turn the selector to the right (clockwise).

Note: The film path selector determines whether the exposed film is output to the film unloading cassette or to the inline processor. Since the selector is arrow-shaped, it points to the selected output device (that is, to the film unloading cassette or to the inline processor).

Loading Film

When the loading cassette runs out of film, the control panel prompts end of film, and the loading drawer opens.

The loading film procedure consists of the following stages:

- Removing the loading cassette from its drawer
- Loading a roll of film into the loading cassette
- Placing the loaded cassette in its drawer
- Trimming the film.

Removing the Loading Cassette from its Drawer

To remove the loading cassette from its drawer:

1. Pull the film loading drawer to open it to its full extent.

2. Grasp the loading cassette by the inset handles on both sides.

Warning: To avoid hurting your knuckles, keep your fingers straight.

3. Lift the cassette, and remove it from the drawer.
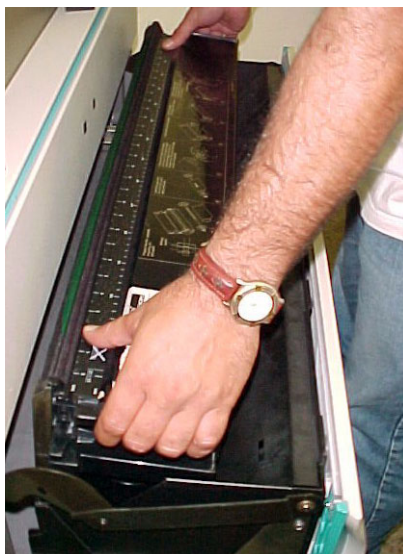
Removing the loading cassette from its drawer

Loading a Roll of Film into the Loading Cassette

Note: Be sure to load film under the appropriate lighting conditions (depending on the type of film). Load only emulsion-out films.

To remove film from cassette:

1. Clear sufficient space on a dry tabletop in the darkroom.

2. Place the loading cassette on the table with its two (2) spring-loaded tabs facing upward.

    Note: Position the cassette so that the tabs are closest to you.

The loading cassette

3. Push the tabs toward the center and lift the cover.

4. Lift the film spool, remove it from the cassette and place it on the table.

   A different flange is attached to each side of the film spool, namely, the left flange and the right flange (see *Handling the Left Flange* on page 43 and *Chapter 2, Handling Cassettes and Media, Handling the Right Flange* on page 44).

Handling the Left Flange

The left flange should be situated at one of the following positions:

- Closer to the middle of the spool if side punches are not installed (by default, the flange is set to this position).

- Closer the end of the spool if side punches are installed.

Situate the flange
here if side punches
are installed

(29 1/2″)
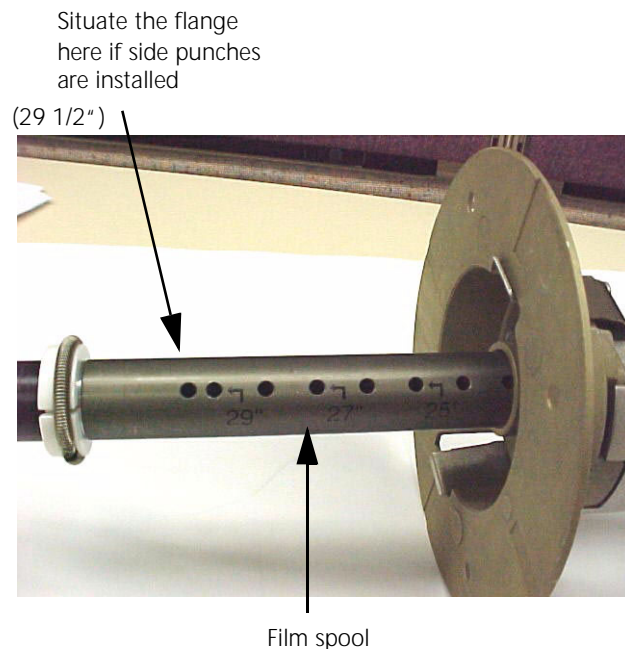
Film spool

Left film flange on film spool (situated for no side punches)

To set the left flange:

1. To adjust the flange, press on its inner part, and move it to the appropriate position (see *Chapter 2, Handling Cassettes and Media, Attaching the right flange* on page 45).

2. When the flange is at the desired position, release its inner part to lock it into position. Attempt to move the flange slightly to ensure that it is locked in position.

    Note: Make sure to update the Media Position parameter accordingly (see *Updating the Media Info Table* on page 51).

Handling the Right Flange

The right flange should be situated according to the width of the film.

To set the right flange:

1. Press on the inner part of the right flange and move it until it is detached from the spool.

2. Insert the spool into the film roll so that the roll rests on the inner part of the left flange.

3. Attach the right flange to the opposite side of the spool.

4. Press on the inner part of the right flange and move it to the film width groove nearest to the edge of the film roll (see *Chapter 2, Handling Cassettes and Media, Left film flange on film spool (situated for no side punches)* on page 43).

Attaching the right flange

5. When the flange is at the desired position, release its inner part to lock it into position.

6. Attempt to move the flange slightly to ensure that it is locked in position.

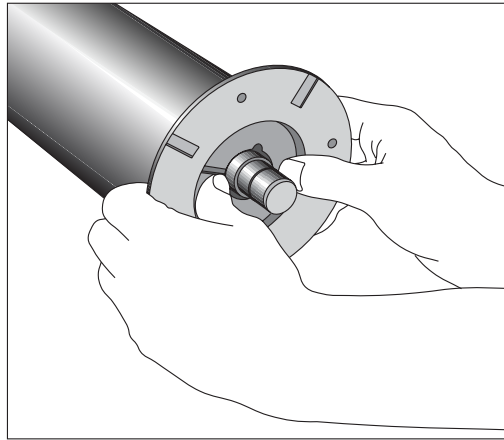### Placing the Film in the Loading Cassette

To place the film into the cassette:

1. Insert the loaded film spool into the loading cassette film emulsion facing **upward**.

Emulsion
facing
upward

Inserting the film spool into the loading cassette

2. Rest the film spool ends in the V-shaped channels on both sides of the cassette.

3. Pull at least 50 mm (2 inches) of film so it extends beyond the edge of the cassette.

4. Close the cover of the cassette until it locks soundly with a click.

Note: To make sure that the cover is closed, push the tabs toward the sides of the cassette.

5. Turn the cassette and grasp it by the inset handles on both its sides.

6. Exit the darkroom.

Placing the Loaded Cassette in its Drawer

To place the loaded casette in its drawer:

1. Pull the Film loading drawer to open it to its full extent.

2. Grasp the loading cassette by the inset handles on both sides.

WARNING: To avoid hurting your knuckles, keep your fingers straight.

3. Place the loaded cassette in the film loading drawer so that its tabs face the imagesetter, and the film exits from the **top** of the cassette.

Placing the loading cassette in its drawer

4. Rest the cassette against the rear side of the film loading drawer (the side furthest from you).

Trimming the Film

The special film trimmer is included in the accessories kit.

Note: Apart from the trimmer, the kit includes two (2) interlock keys and four (4) fuses.

To trim the film:

1. Grasp the edge of the film with one hand.

2. Hold the trimmer with two (2) fingers (of your other hand).
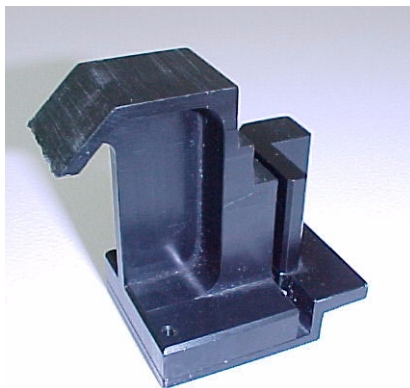
Film trimmer

3. Place the trimmer on the left side of the film, and slide it to the right along the width of the film.

Note: To make sure that trimming is straight, hold the trimmer steadily, and push it downward.

Trimming the film

Note: If the trimmed film is not parallel to the edge of the cassette, repeat the trimming procedure.

4. **Close the film loading drawer. Push firmly until it clicks shut.**

Before Exposing

Note: If the unloading/accumulating cassette is already in its drawer, check whether it contains film. If it does, skip to the Unloading Film section; if not, close the film unloading drawer and push it firmly until it clicks shut; then skip to the Updating the Media Info Table section.

This section includes the following topics:

- Placing the unloading/accumulating cassette in its drawer
- Updating the Media Info Table
- Reading settings from the imagesetter.

Placing the Unloading/Accumulating Cassette in its Drawer

To place the cassette in the drawer:

1. Hold the unloading/accumulating cassette by the inset handle at its top center.

2. Place the cassette in the film unloading drawer.

Placing the unloading/accumulating cassette in its drawer

3. Rest the cassette against the front side of the drawer (that is, the side closest to you).

Unloading/accumulating cassette resting against the front side of the drawer

4. Close the film unloading drawer. Push firmly until it clicks shut.

Updating the Media Info Table

After you close the film loading drawer (and the film unloading drawer is already closed), the Media Info window is displayed on the control panel's LCD screen.

Note: Alternatively, select **Util: Media Info** on the control panel (see *Control Panel Functionality* on page 55).

```
Material^                    >Film          [Film]
Media Thickness^             4              [4mil]
Media Width^                 254            [254]
Media Position^             Punch          [Punch]
Res/Int Table #^            D              [D]
Vendor^                     None           [None]
Cur. Length (m)^            61             [61]
```

Media Info window

The Media Info window shows the parameters of the Media Info table of the currently loaded film (the square brackets enclose the default value of the field).

The system uses this data to inform you of the status of the cassettes during exposure. Therefore, each time you load film, you need to check the values in the table, and modify them to suit the film you loaded.

To update a parameter:

1.   Press the soft button below **Toggle**. This switches between available options.

2.   When you wish to confirm the values and exit, press the soft button below **Done**.

     A First Feed is performed and the new film is loaded into the imagesetter drum. When the imagesetter completes the first load, a STANDBY message is displayed on the control panel. (For further information on the soft buttons, see *Control Panel Functionality* on page 55).

Media Info window fields

Material - [Toggle field; default is **Film**]
Toggle this field to **Film** (the default), **Plate**, or **Paper**, according to the media you loaded.

Media Thickness - [toggle field; default is **4** (mil)]
Toggle this field to **4 mil** (the default) or **7 mil**, according to the media you loaded.

Media Width - [toggle field; default is **254** (mm)]
Toggle this field to the width of the media you loaded.

Media Position - [toggle field; default is **Punch**]
Toggle this field to **No**, **Cnt Punch** (center), or (side) **Punch** (the default), to match the way you positioned the media inside the loading cassette (that is, unrelated to the existence or the absence of a punch). For details, see *Chapter 2, Handling Cassettes and Media, Handling the Left Flange* on page 43.

Note: The imagesetter hardware does not yet support **Cnt Punch**.
For example, if you have positioned the media in order to accommodate built-in side punches, toggle the field to **Punch**. The position of the left flange affects the representation of the cassettes on the control panel (see *Chapter 1, Introduction to the Imagesetter, Status of Loading and Unloading Cassettes (or Inline Processor)* on page 30).

Res/Int Table # - [toggle field; default is **D**]

Toggle this field to **D** (the default) to automatically select a Res/Int table to suit the vendor (if such is indicated in the Vendor field).

If the loaded film is not of the same type as the one previously loaded, toggle this field to the appropriate Res/Intensity table number (refer *Chapter 4, Calibration and Service Utilities* on page 71).

Vendor - [toggle field; default is **None**]

Toggle this field to **None** (the default) in order to use the table specified in the Res/Int Table field.

Toggle this field to the name of the vendor of the loaded media to use the Res/Int table that is specified in the Res/Int Table # field.

Note: If the Res/Int Table specifies D, the system automatically selects a Res/Int table to suit the specified vendor.

Cur. Length (m) - [default is **61**]

Note: This is the only field that updates during exposure.

The default (61 m) specifies that the loaded film is a full roll.
If you did not load a full roll of film, toggle this field to its current length
(in meters).

Note: If the required value falls between suggested options, select a higher
value.

Exposing

After you press the **Done** soft button on the Media Info window,
FIRST LOAD and ATTACH are performed (see *Chapter 4, Calibration and
Service Utilities, Service Utilities Mode* on page 75).

STANDBY appears on the control panel. (If it does not, see *Chapter 1,
Introduction to the Imagesetter, Control Panel Status* on page 33).

Now is the time to send the file you want to expose from the host to the
imagesetter.

After communication between the imagesetter and the host has been
established, the control panel prompts:

HostOnLine

The imagesetter starts to expose, and the following icon appears on the
control panel:

The Progress indicator on the control panel shows how much exposing has
been completed.

0%   100%

During exposure, you may view the system messages (see *Chapter 1,
Introduction to the Imagesetter, Control Panel Status* on page 33), or the
exposure parameters (see *Chapter 2, Handling Cassettes and Media, Control
Panel Functionality* on page 55).

When the exposure has been completed, the carriage returns to the HOME position (the left side), the imagesetter punches the film (if a punch is installed and active), and performs ADVANCE (according to the size of the file). STANDBY appears on the LCD of the control panel.

At this stage, you may perform various functions (for example, Cut and Collect).

Control Panel Functionality

For further details on the display of the control panel's LCD screen, and on system messages, see *Chapter 1, Introduction to the Imagesetter* on page 13.

For details on Service Utilities mode, see *Chapter 4, Calibration and Service Utilities* on page 71.

Params

To view the parameters of the last/current exposure that the host sent to the imagesetter:

1. Press the soft button below **Params**. The Params screen appears.

```
Flatleft                   01
Total Height            50.00
Total Width            100.00
Width Pixels         00044000
Height lines         00018959
Height Offset            0.00
Width Offset            15.00
Laser Value                00
Res Int Table #             1
Spinner Speed               *
Resolution               80.0
Simulation                 00
```

*Dolev 4PressV - 36.000; Dolev 4pressV2- 60.000

Params screen

2. To return to the previous screen, press the soft button below **Params** again.

3. To activate **Status** or **Util**, press the related soft button.

Params screen fields

Note: All the fields are read-only fields (you cannot enter values into them). All the parameters see the last/current exposure.

Flatleft - This field indicates how may files, related to the flat batch, still have to be exposed.

Total Height - This field indicates the height of the exposed file.

Total Width - This field indicates the width of the exposed file.

Width Pixels - This field indicates the width (in print dots) of the exposed file.

Height lines - This field indicates the height (in lines) of the exposed file.

Height Offset - This field indicates the height offset (in mm) of the exposed file as measured from the origin of the film.

Width Offset - This field indicates the width offset (in mm) of the exposed file as measured from the origin of the film.

Laser Value - This field indicates the laser intensity value of the exposure.

Res Int Table # - This field indicates the number of the Res Intensity table. (For further details, see *Chapter 4, Calibration and Service Utilities*).

Spinner Speed - This field indicates the speed of the spinner in RPM.

Resolution - This field indicates the resolution of the exposed file.

Simulation [for service engineers only] -
This field indicates 00 for no simulation, 01 for communication simulation, 02 for ready simulation, or 03 for ELOP SIM simulation.

Util

➢ Press the soft button below **Util** to perform various functions related to the exposure media, and to get information on the media and the detectors. The **Util** menu and the **Util** soft functions appear.

Util Menu

```
> Cut and Collect            !
  Advance  ..
  Media Info ..
  Res. Int. Setting          !
  Other                      >
  Service Utilities          !
  Terminate an application   !
```

> - This sign [on the left] is a cursor. It points to the active entry.
! - This sign indicates that selecting this entry directly activates the related function, and exits to the main screen.
> - This sign [on the right] indicates that - selecting this entry displays a menu of entries. (in windows)
.. - This sign indicates that selecting this entry displays a window of fields.
^ - This sign indicates a toggle field.
[ ] - These enclose the default value for the field.

Do one of the following:

- Press the soft button below **Done** to select the entry to which the cursor points.

- Press the soft button below **Scroll** to move the cursor to the entry below the active entry.

- Press the soft button below **Cancel** to exit to the previous screen.

  Note: Selecting Service Utilities activates Service Utilities mode. (For further details, see *Chapter 4, Calibration and Service Utilities* on page 71).

Util Soft Functions

```
Esc        Space        Scroll        Enter
```

Cancel - Press the soft button below **Cancel** to return to the previous screen.

Toggle - Press the soft button below **Toggle** to switch between the values available for the toggle field in which the cursor is located (for example, the **Vendor** field in the Media Info window).

Note: While a menu is displayed, this soft button is identical to **Scroll**.

Scroll - Press the soft button below **Scroll** to move the cursor to one (1) menu entry (or window field) below the active one.

Note: Since no button moves the cursor upward, the scrolling is cyclic (that is, pressing the **Scroll** button when the last entry/field is active moves the cursor to the first entry/field).

Done - Press the soft button below **Done** to select the active entry when a menu is displayed (and display the related menu/window), or to confirm the current values when a window is displayed (and exit to the previous window).

Util menu entries

Cut and Collect ! - Select this entry to cut the film, and perform a regular film unloading cycle (after which the film unloading drawer opens).

Advance . . - Select this entry to move the film forward (for example, to create a gap between the margin of the exposure and the edge of the film).

Note: If you are using an inline processor, select this entry to send the film to be processed. The Advance window appears. Toggle the film length field to 100 mm, 200 mm, 300 mm, 400 mm, 500 mm, or 600 mm. If you are using an inline processor, toggle this field to 300 mm, 400 mm, or 500 mm.

Media Info . . - Select this entry to update the parameters of the media after loading a new roll of film. For details, see *Updating the Media Info table* above.

Res. Int. Setting ! - Select this entry to calibrate the intensity for each plotting resolution. (For details, see *Chapter 4, Calibration and Service Utilities* on page 71).

Terminate an application ! - To turn off application in an orderly manner, select this option, then press the **ON/OFF** button, above the panel.

Other   > -
Select this entry to replace the media before it reaches its end and to
perform actions that are normally performed automatically, some of
which you need when clearing stuck media (see *Chapter 5, Media Related
Troubleshooting* on page 87).

```
>  Change Media                   !
   Open Load Drawer               !
   Open Unload Drawer             !
   Detectors Status               !
   Start Up                       !
   Film Rewind                    !
   Film Cut & Rewind              !
```

Change Media ! - Select this entry to replace the media before it reaches its
end.

In case the unloading/accumulating cassette contains media, Cut and
Collect is performed automatically. The imagesetter then pulls the media
(that is in the drum) back into the loading cassette (empty drum), and
opens the film loading and film unloading drawers.

➢ Pull the film beyond the edge of the cassette until you feel resistance,
  and trim it (see *Chapter 2, Handling Cassettes and Media, Trimming the
  Film* on page 47).

Open Load Drawer ! - Select this entry to manually open the film loading
drawer. The System Prompts:

```
Drawer will be open.        [Done/Cancel]
```

➢ Press the soft button below **Done** to open the drawer, or the one below
  Cancel to abort the request.

Note: When relevant (for example, during Expose), the system prompts:
`Process is not available.`

Open Unload Drawer ! - Select this entry to manually open the Film
Unloading drawer. The system prompts:

```
Drawer will be open.        [Done/Cancel]
```

➢ Press the soft button below **Done** to open the drawer, or the one below **Cancel** to abort the request.

Note: When relevant (for example, during Expose), the system prompts: `Process is not available.`

Detectors Status . . - Select this entry to display a window that lists the names of the detectors, and indicates which are active (Yes) and which are inactive (No). The Detectors Status window appears.

Drum Input		Output Cassette	
Input Cas. Mounted	Yes	Film in Out. Cas. mouth	No
Loading Drw. Closed	Yes	Out. Cas. Axis Ready	Yes
Film at Film In	Yes	Out. Cas. Mounted	Yes
Drum Output		Unloading Drw. Closed	Yes
Film at Film Out	No	**General**	
Cutter at Right	No	Output to Cassette	Yes
Cutter at Left	Yes		
InLine		Punch Installed	No
Output to Processor	No		
Conveyor is Empty	No	Carriage at Home	Yes
Processor is Ready	No	Carriage at End	No

➢ To exit to the previous screen, press the soft button that is first on the left.

Start Up ! - Select this entry to load the imagesetter's software, starting from StartUp stage #7 (that is, the hardware boards are not reloaded). For additional information on Start Up see *Chapter 1, Introduction to the Imagesetter, Starting Up* on page 20.

Film Rewind - Use this option when Change Media mode is not successful or film is stuck on the drum.

➢ Open load drawer, then select this option. The motors rewind the film to the load cassette.

Film Cut & Rewind - Use this option when Change Media mode is not successful or film is stuck while retracted into the unloading cassette.

➢ Open the load drawer, then select this option. The cutter cuts the film, the film is pulled into the unload casette and the remainder of the film is retracted back into the load cassette.

Unloading Film

When the unloading/accumulating cassette collects approx. 21 meters of film, the control panel prompts:
`C: [W] Acc. Cas full (# m).`

Note: The # stands for the length of film that may be exposed before the imagesetter performs CUT.

When the unloading/accumulating cassette is full (it accumulated 23 m of film), the film is cut, and the unloading drawer opens automatically.

➢ To cut the film and open the drawer following the end of a specific exposure, select **Cut & Collect** on the control panel, or via the Host.

Note: Selecting **Change Media** or **Open Unload Drawer** on the control panel, also opens the unloading drawer.

Removing the Accumulating Cassette from its Drawer

To remove the cassette:

1. Pull the film unloading drawer to open it to its full extent.
2. Hold the unloading/accumulating cassette by the inset handle at its top center.
3. Lift the unloading/accumulating cassette out of its drawer.

Lifting the unloading/accumulating cassette out of its drawer

Processing the Film

To process Film:

1. Take the unloading/accumulating cassette to the darkroom film processor.

2. Check that a flap of film is sticking out of the cassette (if it does not, see *Chapter 5, Media Related Troubleshooting*).

Unloading/accumulating cassette (before flipping around) with film sticking out

3. Flip the cassette around so that the film flap sticks out of the bottom of the cassette and away from you.

4. Rest the cassette on the film processor entry bed.

5. To release the film, press on both sides of the film gate until it closes with a click.

6. Use your fingers to slowly advance the film toward the processor take-up roller, until the processor begins feeding the film automatically.

7. After feeding the entire length of film place the cassette in the imagesetter (as explained above).

3

Aligning to Punch

General

This chapter explains how to align images to any point on the imageable area on film (that is, not just according to the punch holes).

This may be required in the following cases:

- To center an exposed image between the punch holes on a film which is intended for plate preparation on Step and Repeat machines.
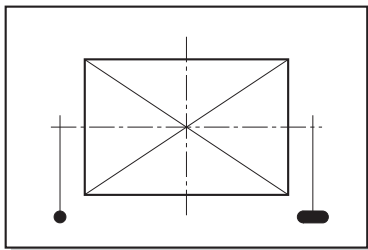
- To achieve precise image-to-punch alignment when using tiled flats for plate making.
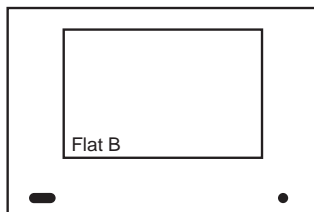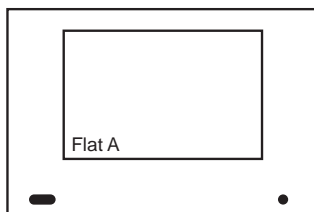
Using the **Align to Punch** option
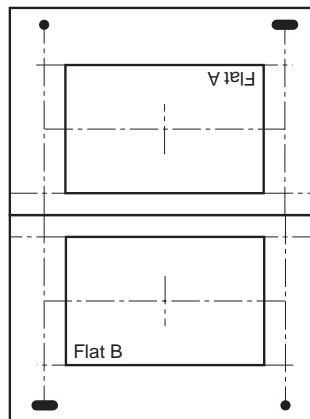
Results in
Proper Alignment on Plate Machine

Note: Since the two (2) tiles above combine to make one (1) plate, it is crucial that they are precisely aligned to the punched holes, and placed at a specific distance (from the top, opposite the punched holes of the film).

Alignment Point on the Imagesetter

During installation, the service engineer defines up to four (4) punch systems (according to your requirements). A punch system is a set of parameters.

The following parameters are specified by the punch system:

- The type of punch used (up to 9 side punches or 1 head punch)
- The number of holes (1 to 8 for the head punch and/or 1 for the side punch)
- The shapes, dimensions, and distances of the punches.

In addition, the service engineer specifies the coordinates of a pivot for each punch system. This point is used as the alignment point on the imagesetter.

Each punch system is assigned a unique name.

Alignment Point on the Image

In the exposure dialog, one (1) of the following nine (9) image alignment points is specified.
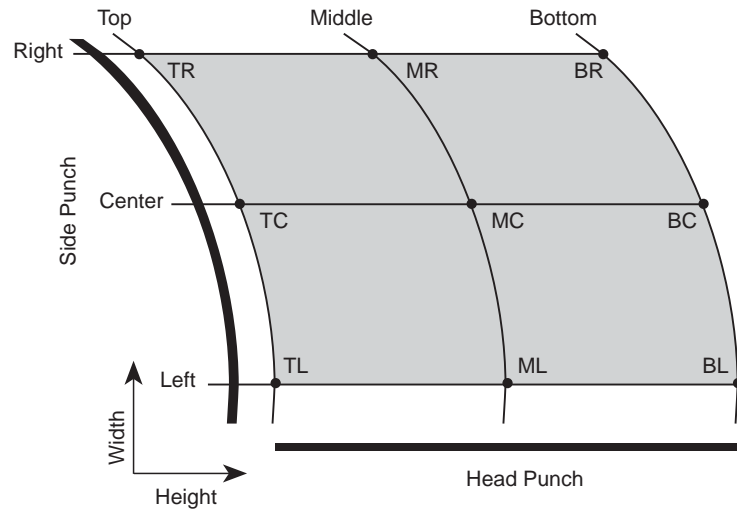
TL -	Top Left	ML -	Middle Left	BL -	Bottom Left
TC -	Top Center	MC -	Middle Center	BC -	Bottom Center
TR -	Top Right	MR -	Middle Right	BR -	Bottom Right

Note: Middle refers to the vertical dimension height; Center refers to the horizontal dimension width.

Automatic (optimal) Alignment

The optimal position on the imageable area is automatically calculated by the system according to the location of the pivot punch. This is the default value in the Exposure dialog.

For Example:

TL aligned with pivot #1

TC aligned with pivot #2

ML aligned with pivot #3
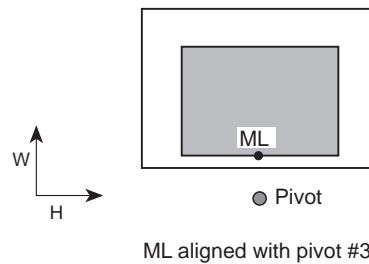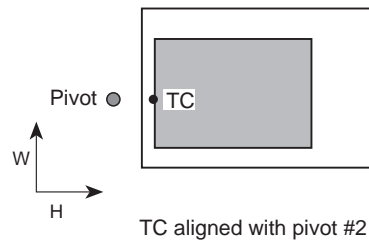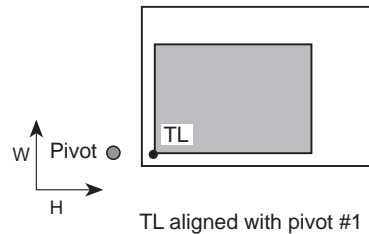
Note: The height and width directions in the figure above represent the dimensions of the imagesetter (not of the host screen).

Custom Alignment

If you wish to change the default alignment point on the image, you may toggle to another value.

Note: In certain cases, some of the image may be trimmed, and a relevant message appears before exposure.

4

Calibration and Service Utilities

General

This chapter explains how to set a laser intensity value for each plotting resolution via the control panel. In addition, the functions available in Service Utilities mode are listed.

Resolution Intensity Calibration

To guarantee high-quality exposures, a unique laser intensity is required for each plotting resolution (60, 80, 100, 120, 140, and 160 points/millimeter).

If the laser intensity is too low, the exposure is too light and quality is lost (that is, black areas are not uniform, and thin lines and small text may disappear).

If the laser intensity is too high, thin lines may become too thick and small text may be covered. In addition, the life of the laser is also shortened.

Each type of film requires a unique laser intensity. Each film manufacturer has slightly different specifications for various types of film. If you switch to a new type of film, you must expose several strips of film and check the density to ensure that the exposure is still of the same high quality. You must check which laser intensity on the imagesetter yields your desired exposure results.

Calibrating Laser Intensity

Use newly processed films as the basis for creating a set of default imagesetter Res/Int tables.

Note: Laser intensity must be calibrated for each film type and plotting resolution used in order to guarantee consistent high-quality exposure.

To create the test exposure, proceed as follows:

1. Ensure that the imagesetter control panel displays the STANDBY message.

2. In Service Utilities mode, select **Expose: Test Intensity**.

3. Fill in the fields in the window which appears.

   Note: If you are performing this procedure for the first time, use a high Intensity Step at first, and gradually reduce it until you find the optimal step.

4. Press **Done** when you have completed filling the window. The imagesetter starts exposing the current set of intensity strips.

5. Repeat this procedure to expose a set of strips for each relevant resolution: 60, 80, 100, 120, 140, and 160.

Perform the following for each set of strips:

1. Measure the density of the exposed strips on a light table.

2. Look for the density you require (above 4.0) and write down the intensity which appears next to this strip on the film.

   Note: If you cannot find a strip with the desired density on the film set, adjust the overall laser intensity and recreate the strips.

3. To set the new laser intensity value to be used for the current plotting resolution, select **Util: Res. Int. Setting** on the control panel. The Service Utilities mode is activated.

4. Select a number (between 1-6) to access the desired Res/Int table. The selected Res/Int table for the current setting is displayed.

```
                   --1--
Material^          Film       [Film]
Vendor             None       [None]
Media Thickness    4 mil      [4 mil]


Resolution             Laser Intensity
60          [60]       2200    [10000]
80          [60]       1650    [10000]
100         [60]       1300    [10000]
120         [60]       1000    [10000]
140         [60]       850     [10000]
```

Sample Res/Int window (table #1)

5. Toggle the Material, Vendor, and Media Thickness fields as required, and enter the intensity value you wrote down for each plotting resolution.

6. Press **Done** when you complete filling in the window.

For details on the use of soft functions on this screen, see *Chapter 4, Service Utilities Mode* on page 75.

Service Utilities Mode

To activate Service Utilities Mode:

1. Select **Service Utilities** from the **Util** menu, the system activates Service Utilities mode.

Note: Alternatively, access Remote Mode on the host workstation.

The following screen appears.

Film	Expose	Setup	Machine	Options	Exit
Shift		⇩		⇨		Done
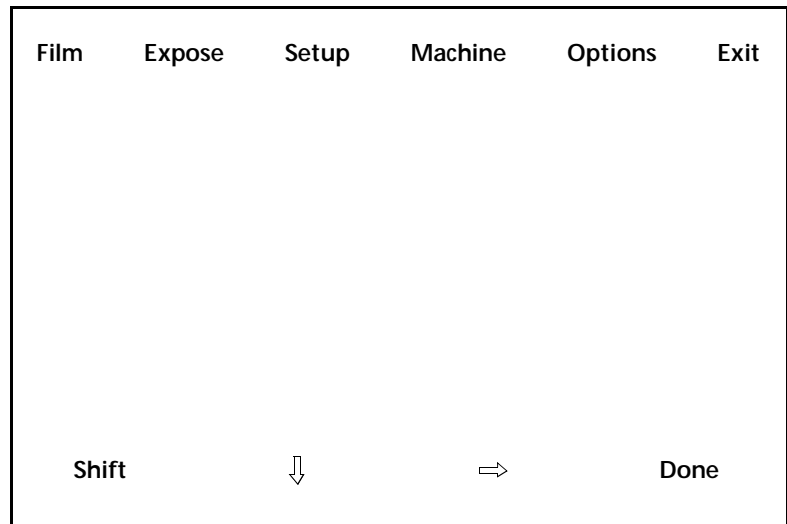
Service Utilities Main screen

2. Press the ⇩ and/or ⇨ buttons to access the desired function, and press **Done** to select it.
    or:
    press ⇨ until you access Exit and select **Done** to exit Service Utilities mode.

Note: The menu headings (**Film**, **Expose**, **Setup**, **Machine**, and **Options**) are described in the corresponding sections further on.

Service Utilities Main Screen SOFT FUNCTIONS

```
┌─────────────────────────────────────────────────┐
│  Shift          ⇓            ⇒          Done      │
└─────────────────────────────────────────────────┘
```

Shift - Use this button to toggle the status of the ⇓ , ⇒ , and **Done** buttons.

➢ Hold down SHIFT to toggle the ⇓ button to ⇑
   or:
   hold down SHIFT to toggle the ⇒ button to ⇐
   or:
   hold down SHIFT to toggle the **Done** button to **Esc.**

⇓   [switches to ⇑ while SHIFT is held down]

➢ press ⇓ to move the cursor down, and highlight the menu entry below the current.

   Note: After you hold down SHIFT, the ⇓ button switches to ⇑ .

➢ Press ⇑ to move the cursor up, and highlight the menu entry above the current.

⇒   [switches to ⇐ while Shift is held down]

➢ Press ⇒ while all menus are closed to move the cursor to the menu heading to the right of the current.

➢ Press ⇒ while a menu is displayed to move the cursor to the menu heading to the right of the current, and display its menu.

   Note: After you hold down Shift, the ⇒ button switches to ⇐ .

➢ Press ⇐ while all menus are closed to move the cursor to the menu heading to the left of the current.

➢ Press ⇐ while a menu is displayed to move the cursor to the menu heading to the left of the current, and display its menu.

Done   [switches to **Esc** while SHIFT is held down]

➢ Press **Done** to select a menu heading or a menu entry.

Note: After you hold down SHIFT, the **Done** button switches to **Esc**.

➢ Press ESC to remove the currently displayed menu, and exit to the menu above, or to the Service Utilities main screen.

Service Utilities Mode Menus

After you select a menu heading on the Service Utilities main screen, a menu of entries appears (for example, after you select Film, the Film menu appears).

```
┌─────────────────────────────┐
│ First Load         !        │
│ Advance ..                  │
│                             │
│ Cut and Collect    !        │
│ Empty Drum         !        │
│ Cut                !        │
│                             │
│ Attach             !        │
│                             │
│ Media Info ..               │
│ Motor Graph        !        │
└─────────────────────────────┘
```

Sample menu (Film)

! - This sign indicates that selecting this entry directly activates the related function.
. . - This sign indicates that selecting this entry displays a window of fields.
> - This sign indicates that selecting this entry displays an additional menu of entries.

Service Utilities Mode - Windows

After you select a menu entry which is followed by . ., a window of fields appears (for example, after you select Expose: Res./Int. Setting: 1.. the Res/Int Setting window appears).

```
                      --1--
Material^              Film       [Film]
Vendor                 None       [None]
Media Thickness        4 mil      [4 mil]


Resolution            Laser Intensity
60          [60]       2200       [10000]
80          [60]       1650       [10000]
100         [60]       1300       [10000]
120         [60]       1000       [10000]
140         [60]       850        [10000]
```

Sample window (Res/Int Setting window)

^ - This sign indicates a toggle field.
[ ] - These enclose the default value for the field.

Service Utilities windows Soft Functions

Shift	Next-Field	Next-Value	Done

Shift - Use this button to toggle the status of the **Next-Field** and **Next-Value** buttons.

➢ Hold down SHIFT to toggle the **Next-Field** button to **Prev-Field**, or,
hold down SHIFT to toggle the **Next-Value** button to **Prev-Value**.

Next-Field   [switches to Prev-Field while Shift is held down]

➢ Press this key to move the cursor to the next field. After you hold down SHIFT, **Next-Field** switches to **Prev-Field**.

➢ Press this key to move the cursor to the previous field.

Next-Value   [switches to **Prev-Value** while SHIFT is held down]

A toggle field is indicated by a ^ sign which follows the field name. It switches between several pre-defined values.

➢ Press **Next-Value** while the cursor is located in a toggle field to cycle to the next value. After you hold down SHIFT, **Next-Value** switches to **Prev-Value**.

➢ Press **Prev-Value** while the cursor is located in a toggle field to cycle to the previous value.

Done   [switches to Esc while Shift is held down]

➢ Press this button to confirm the values in the window. After you hold down SHIFT, **Done** switches to **Esc**.

➢ Press ESC to exit a window without saving your changes.

Note: If you modified a value in a window field, pressing Esc resets the last field you modified to its previous value. Press Esc again to exit the window.

Service Utilities Mode Functions

Note: The functions which are not explained are intended for service purposes only.

Film

```
First Load        !
Advance ..

Cut and Collect   !
Empty Drum        !
Cut               !

Attach            !

Media Info ..
Motor Graph       !
```

Film menu

First Load ! - Select this entry to move the center of the carriage to the center of the film, and feed film from the loading cassette into the drum (up to the film out detector).

Advance . . - Select this entry to move the film forward (for example, to create a gap between the margin of the exposure and the edge of the film).

Note: If you are using an inline processor, select this entry to send the film to be processed. The Advance window appears. Toggle the Film Length field to 100 mm, 200 mm, 300 mm, 400 mm, 500 mm, or 600 mm. If you are using an inline processor, toggle this field to 300 mm, 400 mm, or 500 mm.

Cut and Collect! - Select this entry to cut the film, and perform a regular film unloading cycle (after which the film unloading drawer opens).

Empty Drum ! - Select this entry to pull the film (that is in the drum) back into the loading cassette, and open the film loading and film unloading drawers.

Cut ! - Select this entry to cut the film.

Attach ! - Select this entry to fasten the film (already in the drum) to the entire surface of the drum.

Media Info .. - Select this entry to update the parameters of the currently loaded film. (For additional details, see *Chapter 2, Updating the Media Info Table* on page 51).

Motors Graph ! - For service engineers only.

Expose

```
Res. Int. Setting        >


Test Intensity..
Internal Pattern..

```
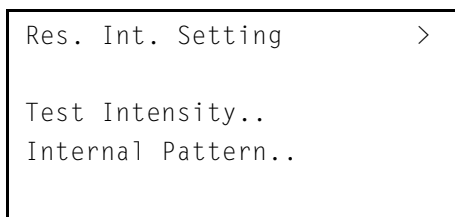
Expose menu

Res. Int. Setting > - Select this entry to calibrate the laser intensity values for each plotting resolution. (For further details, see *Chapter 4, Resolution Intensity Calibration on page 72*).

Test Intensity .. - Select this entry to Create test exposure strips to examine the imagesetter's output. (For further details, see *Chapter 4, Resolution Intensity Calibration on page 72*).

Internal Pattern .. - Select this entry to expose test film with the imagesetter internal pattern generator. These films are used to check imagesetter plotting accuracy prior to routine operation.

Setup

```
Service              >   Plotter Setting..
                         Dimension Setting..
                         Motors Setting..
                         Grid Setting          >   Low Speed Grid Setting
                                                   Hi Speed Grid Setting

                         Punch Setting..
                         Tail Punch Setting..
Factory              >   Plotter Description
                         Stepper Parameters
                         Expose Size Setting
Default Setup        !
Save Setup to FD     !
Restore Setup from   !
Fd
Load Grid from FD    >   Low Speed Grid Table
                         Hi Speed Grid Table
```

Setup menu and submenus

Machine

```
Spinner                  >
Laser                    >
Carriage                 >
Motors                   >
Punches                  >
Solenoid                 >


Detectors Status         !
```

Machine menu

Note: Intended for service engineers only.

Spinner

```
Set Speed ..
Stop Spinner              !
```

Spinner submenu

Laser

```
Set Calibrate Values..
Perform Calibrate         !
Deactivate Laser Beam     !
Laser OFF                 !
Focus Calibration         !

Create NDF Graph          !
Create Laser Graph        !
```

Laser submenu

Carriage

```
Calibrate Home Position   !
Move to End position      !
Move to..
```

Carriage submenu

Motors

```
Active Motors..
Release Motors            !
```

Motors submenu

Release Motors ! - Select this entry to turn off only the motors of the imagesetter (unlike switching off the master power breaker that disconnects power from the entire machine).

Punches

```
Punch Process..
Punch Status            !
Load Blower             >
Tail Punch              >
```

Punches submenu

Solenoids

```
Open Loading Drawer     !
Open Unloading Drawer   !
```

Solenoids submenu

Detectors Status ! - Select this entry to display a window that lists the names of the detectors, and indicates which are active (**Yes**) and which are inactive (**No**). The Detectors Status window appears.

```
        Drum Input                       Output Cassette
Input Cas. Mounted    Yes      Film in Out. Cas. mouth  No
Loading Drw. Closed   Yes      Out. Cas. Axis Ready     Yes
Film at Film In       Yes      Out. Cas. Mounted        Yes
        Drum Output                    Unloading Drw. Closed    Yes
Film at Film Out      No                    InLine
Cutter at Right       No       Output to Processor      No
Cutter at Left        Yes      Conveyor is Empty        No
          General                Processor is Ready       No
Output to Cassette    Yes
Interlock Active      Yes
Punch Installed       No
Carriage at Home      No
Carriage at End       No
```

Detectors status window

Options

```
Error Status            !
Board Configuration     !
Panel Setup             !
Load All Boards         !
Start Up                !
Diagnostics Setup       !
Diagnostics             !
```

Options menu

Note: Intended for service engineers only.

5

Media Related Troubleshooting

General
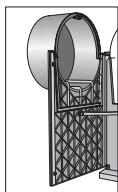
This chapter explains how to solve problems related to the exposure media, and especially how to clear film that is stuck in the imagesetter.

The control panel functionality is described in *Handling Cassettes and Media* on page 39.

The Service Utilities mode of the control panel is described in *Calibration and Service Utilities* on page 71.

Film Guide Doors

The film guide doors are located behind the service doors. By default, the film guide upper door is locked (until you open it); the film guide lower door is unfastened (at all times).
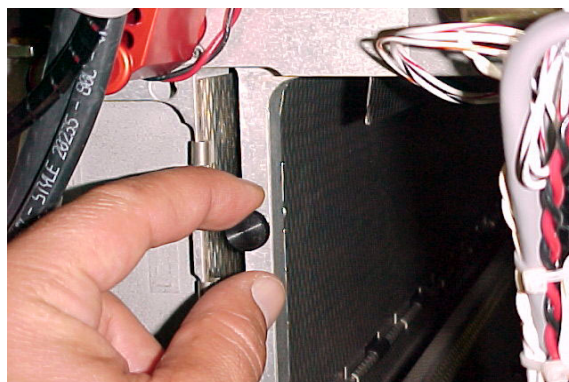
Film guide doors in default state

Opening Film Guide Doors

During the procedures described below, you need to open the film guide doors to check where media is stuck and/or to clear it.

Please see the *Safety Precautions* on page 1, for details on laser and other safety precautions before proceeding.

➢ Open the left and right service doors. (For instructions of how to open service doors, see *Opening Service Doors* on page 18*).*

Film Guide Upper door

➢ To open the upper door, release black screws (on both sides of machine).
To close the upper door, replace the door to it's upright position with one hand and tighten back black screw to secure door (on both sides of machine).

Note: Make sure the door is fastened firmly on both sides. The system does not detect when the film guide upper door is open; therefore, make sure to close this door before closing the left service door.

Film Guide Lower door

➢ When required, lift the Lower door towards the front side of the imagesetter. To close, lower the door back.

Note: The system does not detect when the film guide lower door is open; therefore, make sure to close this door before closing the left service door.

System Messages

The messages explained below are grouped by the stage at which they are displayed on the control panel.

The following stages are listed:

- First Load
- Advance
- Punching
- Cut & Collect
- End of film
- After removing the unloading/acc. cassette
- Inline Processor (if used).

Note: The wording of the messages appearing on the display may be slightly different from the messages specified in this document.

First Load

After you close the film loading drawer, and the system performs the first load procedure, one of the following messages may appear on the control panel:

- **[E]** No LDM enc. pulses
- **[E]** No film at entry
- **[F]** First Load error
- **[W]** Film end (see *End of Film* on page 98).

[E] No LDM enc. pulses

This message indicates that the system did not detect any film movement.

[E] No film at entry

This message indicates that the system did not detect film entry into the drum at all.

Note: In such cases, the Film Loading drawer usually opens automatically.

1. Make sure there is film in the loading cassette.

2. Pull an additional two (2) inches of film out of the loading cassette, and use the supplied Film trimmer to cut the edge of the film properly.

[F] First Load error

This message indicates that the film did not reach the film out detector.

1. On the control panel, access Service Utilities mode, and select **Empty Drum**. The film rolls back into the loading cassette (or into the film loading drawer), and the film loading drawer opens.

2. Pull approximately 32 inches of film out of the loading cassette until you feel resistance, and use the supplied Film trimmer to cut the edge of the film properly.

Advance - 1st Stage

While the film is advancing towards (or being grasped by) the unloading/ acc. cassette, one of the following messages may appear on the control panel:

- **[E]** No LDM enc. pulses
- **[E]** No TKM enc. pulses
- **[F]** No film at exit
- **[F]** Attach film crash
- **[F]** Missed Grasp pos
- **[F]** Film stuck in guide
- **[F]** Capture film crash
- **[F]** Film crash
- **[W]** Film end (see *End of Film* on page 98).

Note: In case the film is jammed by the carriage, and no message appears, see the *Film Jammed by Carriage* section.

[E] No LDM enc. pulses

[E] No TKM enc. pulses

These messages indicate that the system did not detect any film movement.

[F] No film at exit

[F] Attach film crash

These messages indicate that the film did not reach the Film Out detector.

1. On the control panel, access Service Utilities mode, and select **Empty Drum**. The film rolls back into the loading cassette (or into the Film Loading drawer), and the film loading drawer opens.

2. Pull the part of film that is wrinkled out of the loading cassette, until it is stretched.

3. Use the supplied film trimmer to cut the edge of the film properly.

[F] Missed Grasp pos

This message indicates that the unloading/acc. cassette is not ready to grasp the film.

1. Select **Util: Other: Open Unload Drawer** on the control panel.

2. Remove the unloading/acc. cassette from its drawer.

3. Replace the unloading/acc. cassette back into its drawer and close the drawer.

[F] Film stuck in guide

This message indicates that the film is stuck somewhere in the film path between the unloading rollers and the unloading/acc. cassette.

[F] Capture film crash

This message indicates that the film was not grasped by the unloading/acc. cassette.

1. Open the left service door.

Note: If the film is jammed in the cutter area, open the film guide lower door, and attempt to stretch the film so it is straight in the cutter area. Pull the film gently for it to remain attached to the drum.

2. Close the film guide doors, close the left service door, and select **Cut** in Service Utilities mode on the control panel.

3. Open the left service door and the film guide lower door; pull the film out through the left side of the imagesetter; close all doors.

[F] Film crash

This message indicates that the film crashed in the drum while advancing.

➤ On the control panel, access Service Utilities mode, and select **Empty Drum**. The film rolls back into the loading cassette (or into the film loading drawer), and the film loading drawer opens.

Advance - 2nd Stage

During unloading of film into the unloading/acc. cassette, one of the following messages may appear on the control panel:

- **[F]** Film is not grasped
- **[E]** ACC Buffer too large
- **[F]** Attach film crash
- **[E]** No LDM enc. pulses
- **[E]** No TKM enc. pulses
- **[F]** Film crash
- **[W]** Film end (see *End of Film* on page 98).

Note: In case the film is jammed by the carriage, and no message appears, see *Film Jammed by Carriage* on page 96.

[F] Film is not grasped

This message indicates that the film was **not** grasped (or **not** stretched) by the unloading/acc. cassette.

[E] ACC Buffer too large

This message indicates that film accumulated between the unloading rollers and the unloading/acc. cassette.

1. Select **Util: Advance** on the control panel.

2. Select **100 mm**, and press **Done**.

Note: If this fails, select **Util: Other: Open Unload Drawer** on the control panel. The film unloading drawer opens.

3. Remove the acc. cassette, and open the left service door.

4. Pull the film out through the empty film unloading drawer and stretch the film so it is straight in the cutter area.

Note: Pull the film gently so it remains attached to the drum.

5. Close the left service door.

6. Select **Cut** in Service Utilities mode on the control panel.

7. Pull the film out through the empty film unloading drawer and dispose of the film.

[F] Attach film crash

This message indicates that the film crashed in the drum while attaching.

[E] No LDM enc. pulses

[E] No TKM enc. pulses

These messages indicate that the system did not detect any film movement.

➢ On the control panel, access Service Utilities mode, and select **Empty Drum**.
The film rolls back into the loading cassette (or into the film loading drawer), and the film loading drawer opens.
The film is cut & collected into the unloading/acc. cassette, and the film unloading drawer opens.

[F] Film crash

This message indicates that the film crashed in the drum while advancing.

➢ On the control panel, access Service Utilities mode, and select **Empty Drum**.
The film rolls back into the loading cassette (or into the film loading drawer), and the film loading drawer opens.
The film is cut & collected into the unloading/acc. cassette and the film unloading drawer opens.

Film Jammed by Carriage

To clear jammed film:

1. Open the right and left service doors.

2. If the film is jammed by the carriage, turn the carriage damper wheel until the film is released, as follows:

   a. If the film was jammed by the carriage while it moved to home position, turn the wheel counter-clockwise to move the carriage away from you.

   b. If the film was jammed by the carriage while it moved to end position, turn the wheel clockwise to move the carriage towards you.

3. Attempt to straighten the film so it is as smooth and as fastened to the drum surface as possible.

4. Close the service doors.

5. On the control panel, access Service Utilities mode, and select **Empty Drum**.
   The film rolls back into the loading cassette (or into the film loading drawer), and the film loading drawer opens.
   The film is cut & collected into the unloading/acc. cassette and the film unloading drawer opens.

Punching

After the film is punched, the following messages may appear on the control panel:

- **[F]** Punch current limit

- **[F]** Punch not returns.

[F] Punch current limit

This message indicates that the punch system is stuck.

[F] Punch not returns

This message indicates that the punch is unable to return to home position.

➢ On the control panel, access Service Utilities mode, and select **Machine: Punches: Run.**

Note: This function activates all the punches and should solve the problem.

Cut & Collect (Cut & Unload)

While the film is cut and unloaded into the unloading/acc. cassette, the following message may appear on the control panel:

[F] Unld detector fault

This message indicates that not all of the film was collected into the unloading/acc. cassette.

1. Select **Util: Other: Open Unload Drawer** on the control panel. The film unloading drawer opens.

2. Remove the unloading/acc. cassette, and cut the excessive part of film.

Note: Make sure to leave an edge of film sticking out of the cassette.

3. Process the film.

End of Film

When the roll of film is finished, the following message appears on the control panel:

[W] Film End

> **During First Load or during Advance - 1st Stage** - The piece of film that is already in the drum/carriage automatically rolls back into the loading cassette (or into the film loading drawer), and the Film loading drawer opens.

➢ Remove the film from the loading cassette/film loading drawer and dispose of it.

> **During Advance-2nd Stage** - Since the film is already grasped by the unloading/acc. cassette, the system automatically unloads the rest of the film into the unloading/acc. cassette, and opens the Film unloading drawer.

➢ Remove the unloading/acc. cassette and process the film.

After Removing the Unloading/Accumulating Cassette

After removing the unloading/acc. cassette, the edge of the film may fall into the cassette (it no longer sticks out of the cassette).

Perform the following in a dark room:

1. Lift each of the clasps located on the cover of the unloading/acc. cassette, and turn it counter-clockwise to unscrew.

2. Pull the cover upward and remove it.

3. Grasp the film and pull some of it out.

4. Process the film and replace the cover of the unloading/acc. cassette.

Inline Processor

If an Inline processor is used, the following additional messages may appear on the control panel:

- **[E]** Film not reach conv
- **[W]** No film on conveyor
- **[F]** Asked too long film
- **[F]** Film stuck on conv
- **[F]** Film stuck at proc.

[E] Film not reach conv

[W] No film on conveyor

> These messages indicate that, following loading, the film did not access the conveyor.

1. On the control panel, select **Util: Other: Change Media**.
   The film rolls back into the loading cassette (or into the film loading drawer), and the film loading drawer opens.

2. Pull approximately 32 inches of film out of the loading cassette until you feel resistance, and use the supplied film trimmer to cut the edge of the film properly.

[F]   Asked too long film

> This message indicates that, performing Advance (using the value entered in the film Length field) will cause the length of film in the conveyor to exceed the allowed limit.

➢ Decrease the value in **Util: Advance: Film Length** field.

> **Note:** If the message reappears, select **Util: Cut and Collect**.

[F] Film stuck on conv

This message indicates that the film was **not** removed from the conveyor (that is, it was **not** fed into the processor).

➢ On the control panel, select **Util: Cut and Collect**.

Note: If the message reappears, remove the film from the conveyor by hand.

[F] Film stuck at proc

This message indicates that the processor was busy for an exceeded period of time (for example, some of the film was not fed into the processor).

➢ If film resides at the processor's entrance, remove it by hand. If not, see the processor's manual.

For more information, see the *Dolev 4press v/v^2 Troubleshooting Guide*,399Z50022C.

Index

Loading Cassette/b, 42
Loading Drawer, 15
Loading drawer, 41, 46, 47, 49, 51,
  59
Loading DrawerSee also Drawer
    Film Loading, 15
Loading DrawerSee also Film Loading
    Drawer, 15
LOCATION
    messages, 34

M

Machine menu
    service utilities menu, 82
Main screen
    Control Panel, 25, 33
Mains, 6
Master Power Breaker, 17, 20, 22, 23
Material
    media info, 52
    Res/Int table, 74
Media Info
    Control Panel, 51
    film menu, 81
    Util menu, 58
Media Info Table, 50, 51
Media Info table, 40
Media Info window, 52, 54
Media Position
    media info, 53
Media Thickness
    media info, 52
    Res/Int table, 74
Media Width
    media info, 52
Message
    Location, 34
Message text, 34, 35
Messages, 26
    basic, 33
    severity, 34
messages, 33, 54
    error, 90
Micro Version, 26, 27
Missed Grasp pos, 93
motors, 23
Motors Graph
    film menu, 81

N

Next-Field button
    service utilities window, 78
Next-Value button
    service utilities window, 78, 79
No film at entry, 91
No film at exit, 92
No film on conveyor, 99
No LDM enc. pulses, 90, 92, 95
No TKM enc. pulses, 92, 95
NOT READY, 28
    message, 21, 26, 40
note symbol, xiii

O

Ò button
    service utilities mode, 76
Ôbutton
    service utilities mode, 76
OK
    Icon, 27
On/Off Switch, 16, 24
On/Off switch, 21, 22, 23
Open Load Drawer
    other menu, 59
Open Unload Drawer, 61
    Other menu, 60
    stuck film, 93, 94, 97
Optical Fibers, 9
optical path, 8
Options menu
    service utilities, 85
Other
    Util menu, 59
Output optical connector, 9

P

Params
    Control Panel, 55
    Soft button, 33
Params screen
    Control Panel, 55
    fields, 56
PC, 27
pivot, 67
plate, 66
Power, 22

power, 20, 23
Power Cord, 17
Power Supply Cord, 4
Precaution Labels, 10
precaution labels, 10
Precautions, 2
Prev-Field button
    service utilities window, 78
Prev-Value button
    service utilities window, 78, 79
Processor, 14
processor, 5
Progress Indicator, 26
Progress indicator, 54
Punch, 14
    Cassettes Status icon, 31
    media info, 53
Punch current limit, 97
Punch not returns, 97
Punch Systems, 67
Punches
    Run
        Stuck film, 97
    stuck film, 90, 97
punches
    left flange, 43

R

radiation, 8
Rear side
    labels, 12
Rear view, 17
reference symbol, xiii
Release Motors, 23
    motors menu, 83
Remote Mode, 75
removing the Unloading/Acc. Cassette
    stuck film, 90
Removing the Unloading/
  Accumulating Cassette
    stuck film, 98
Res Int Table
    params screen, 56
Res. Int. Setting
    expose menu, 81
    Util menu, 58
    util menu, 73
Res/Int Setting window, 78

W