

# **MODIFICATION INSTRUCTIONS** **for the**

***Kodak X-Omat* MULTILOADER 300**  
**Modification No. 37**

***Kodak X-Omat* 270 RA PROCESSOR**  
**Modification No. 22**

***Kodak X-Omat* 180 LP and 180 LPS PROCESSORS**  
**Modification No. 9**

**Service Codes: 3058, 3059, 3227, 3198**

**Type 1 Required**

**Purpose:** To increase the reliability of the PROCESSOR by replacing the ROLLERS in the FIXER/WASH CROSSOVER. The replacement phenolic ROLLER has a steel core, which significantly reduces swelling, binding, and possible film transport problems. The mating rubber ROLLER is being replaced because the new ROLLERS are not interchangeable with the existing ROLLERS, and therefore must be replaced as a set. New BEARINGS and E-RINGS are also supplied.

Included with this Mod is Operating Software, which is being supplied to upgrade PROCESSORS to the latest Software Version.



**Important**

Use qualified service personnel to install this modification.



**HEALTH IMAGING**

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**PLEASE NOTE** The information contained herein is based on the experience and knowledge relating to the subject matter gained by Eastman Kodak Company prior to publication.

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Possible damage from electrostatic discharge.

**Service Effects:** Update your manuals with the new Part Numbers, see the table on Page 7.

- Special Requirements**
- 180 LP PROCESSOR with a SORTER and 180 LPS PROCESSOR must have SORTER Mod 1 installed before attempting to download the 2.24 Software.
  - The *Kodak Ektascan* 2180 LASER PRINTER must have Software Version 2.16 or higher installed before the PROCESSOR 2.24 Operating Software can be installed.

<b>Serial Numbers:</b>	180 LP PROCESSOR .....	101 - 3640
	180 LPS PROCESSOR.....	101 - 13320
	270 RA PROCESSOR in a MULTILOADER 300 ....	101 - 1610
	270 RA PROCESSOR .....	101 - 2495

**Installation Time:** .5 hour

**Special Tools:** PORTABLE COMPUTER  
INTERFACE CABLE, TL-4391

**Parts Status:** Modification Kits are available through Service Parts Management.

**Parts Requirements:** See the Parts List on Page 3.

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## Parts List:

**Modification Kit No. 9B8447 includes the following parts:**

Part No.	Description	Quantity
9B8662	Roller, Driven (phenolic) [A]	1
470085	Roller, Drive (black rubber) [B]	1
779119	Bearing, white	4
651107	E-Ring	5
1C7618	Download Disk, 270 RA, Version 2.57 Operating Software	1
5B6623	Download Disk, 180 LP and 180 LPS, Version 2.24 Operating Software	1
9B8929	Modification Instructions	1

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## Checking the Current Operating Software

For the *Kodak X-Omat 270 RA PROCESSOR* and the *Kodak X-Omat 270 RA PROCESSOR* in a *Kodak X-Omat MULTILOADER 300*:

1. Check which Version of Operating Software is installed in the PROCESSOR. See the PROCESSOR or MULTILOADER 300 display, or use the PORTABLE COMPUTER.
  - If the PROCESSOR already has Operating Software Version 2.57, advance to “Installing the New ROLLERS, BEARINGS, and E-RINGS” on Page 5.
  - If the PROCESSOR has an earlier Version of Operating Software, advance to “Installing the Operating Software” on Page 4.

### Note

If the PROCESSOR has Version 3.0 Operating Software, no change is necessary. Advance to “Installing the New ROLLERS, BEARINGS, and E-RINGS” on Page 5.

For the *Kodak X-Omat 180 LP PROCESSOR* without a SORTER:

1. Check which Version of Operating Software is installed in the PROCESSOR. See the display on the LASER PRINTER, or use the PORTABLE COMPUTER.
  - If the PROCESSOR already has Operating Software, Version 2.24, advance to “Installing The New ROLLERS, BEARINGS, and E-RINGS” on Page 5.
  - If the PROCESSOR has an earlier Version of Operating Software, advance to “Installing the Operating Software” on Page 4.

For the *Kodak X-Omat 180 LP PROCESSOR* with a SORTER, and all *Kodak X-Omat 180 LPS PROCESSORS*:

1. Check the SORTER Modification Label, which is located on the back (as you face the PRINTER) edge of the hinged section of the SORTER, and do one of the following:
  - If Mod 1 is installed, check which Version of Operating Software is installed, see the display on the LASER PRINTER, or use the PORTABLE COMPUTER. If the PROCESSOR has Version 2.24 Operating Software, go to the section “Installing the New ROLLERS, BEARINGS, and E-RINGS” on Page 5.
  - If Mod 1 is installed, and Version 2.24 Operating Software is not installed, advance to “Installing the Operating Software” on Page 4.
  - If Mod 1 is not installed, do not install the 2.24 Operating Software. Go to the Section “Installing the New ROLLERS, BEARINGS, and E-RINGS” on Page 5, and finish this Mod. Order SORTER Mod No. 1, Part Number 1C7525, and install it at a later date. (Mod No. 1 comes with Version 2.24 Operating Software and BOOTSTRAP, Version 2.52.)

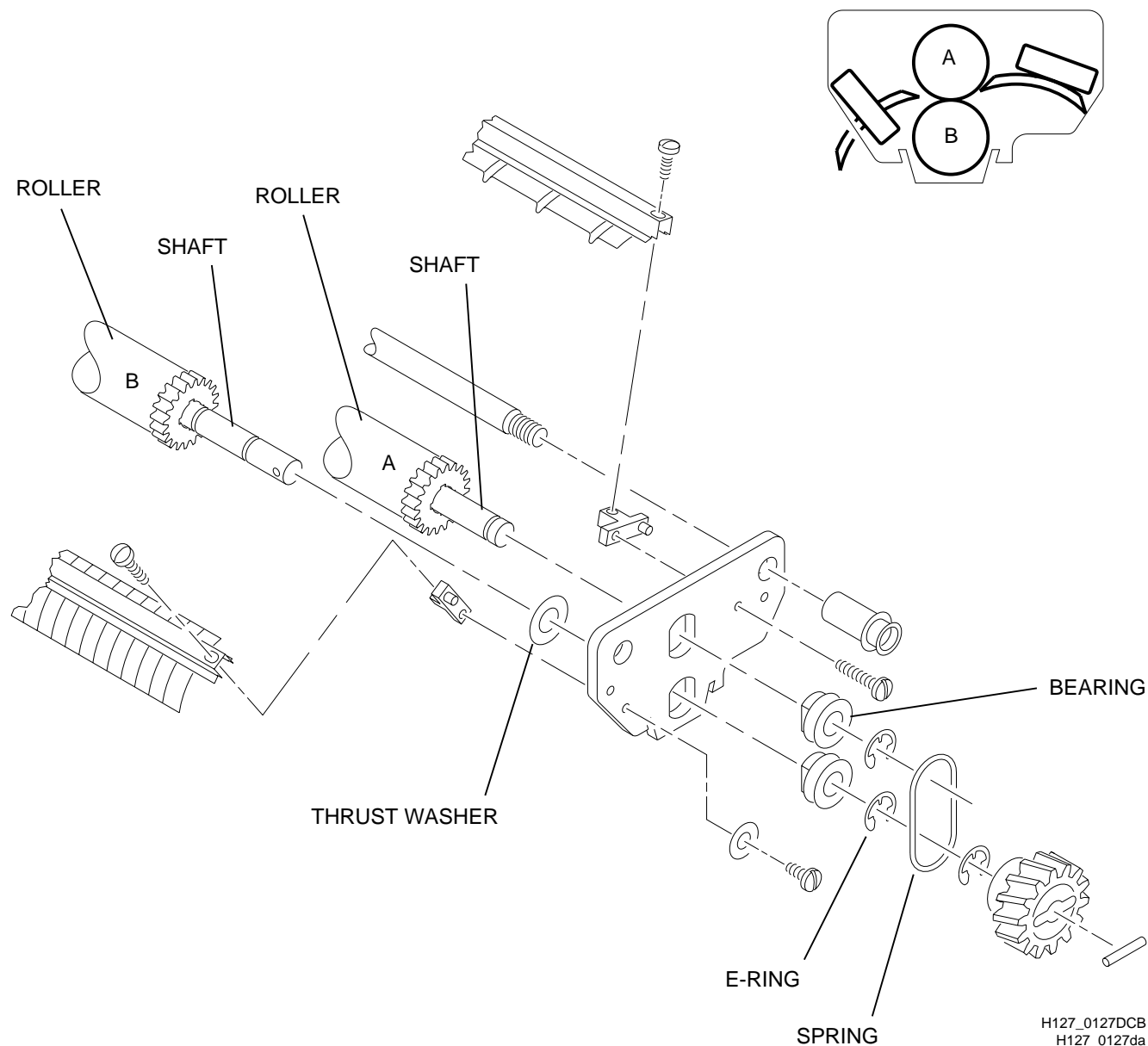
## Installing the Operating Software

- Instructions for installing the Operating Software are included in the Operating Software package.
- Install the appropriate Operating Software for the PROCESSOR as follows:

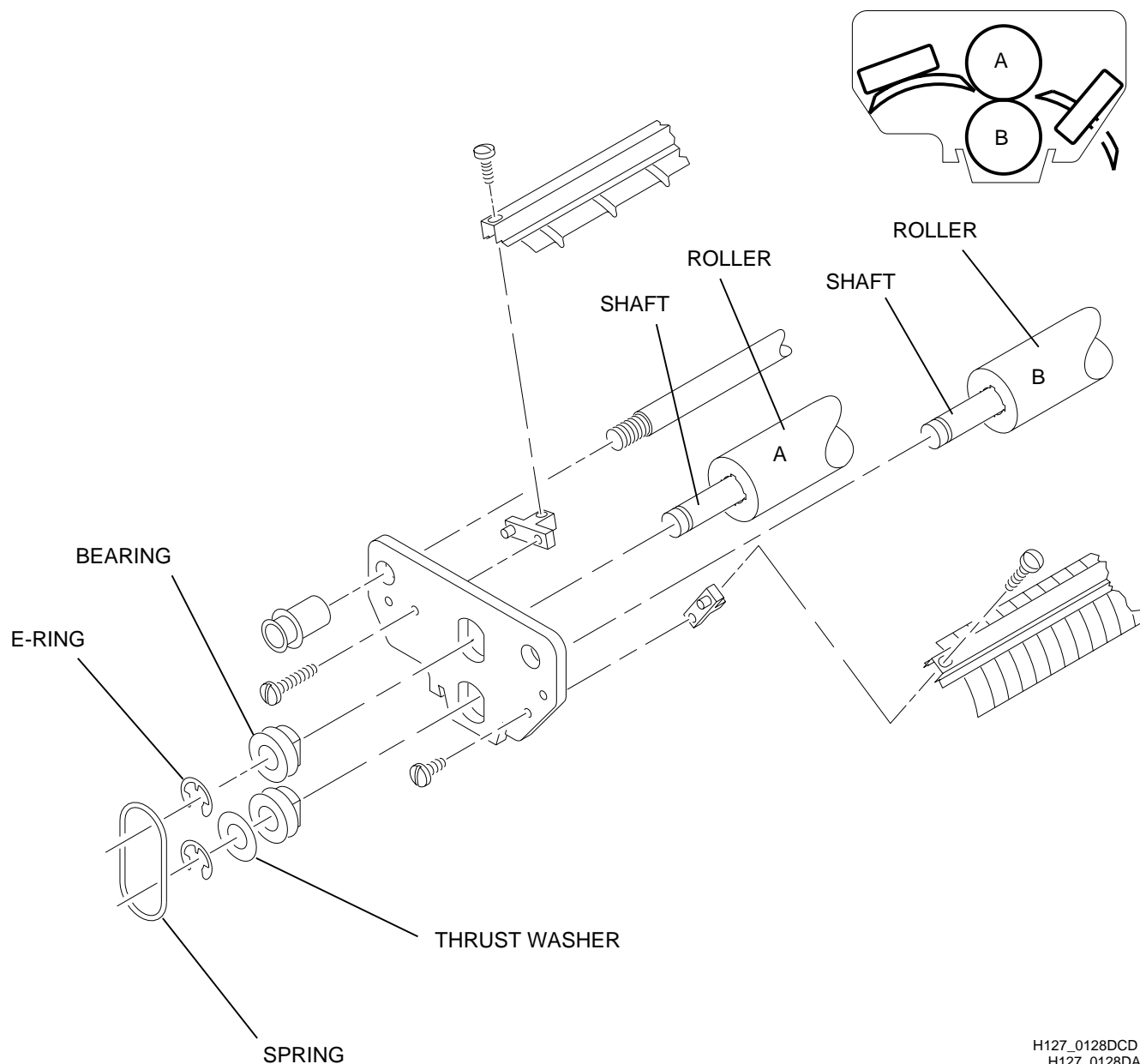
PROCESSOR	Operating Software Version	Part No.
<i>Kodak X-Omat 270</i> PROCESSOR	2.57	1C7618
<i>Kodak X-Omat 270 RA</i> PROCESSOR in a <i>Kodak X-Omat</i> MULTILOADER 300	2.57	1C7618
<i>Kodak X-Omat 180 LP</i> PROCESSOR - The BOOTSTRAP PROM must be Version 2.52, Part Number 5B6607 (not included with this Mod). - The <i>Kodak Ektascan 2180</i> LASER PRINTER must have Software Version 2.16 or higher installed.	2.24	5B6623
<i>Kodak X-Omat 180 LPS</i> PROCESSOR & 180 LP PROCESSOR with a SORTER - The SORTER must have SORTER Mod 1. Check the Mod Label on the SORTER. - The BOOTSTRAP PROM must be Version 2.52, Part Number 5B6607 (not included with this Mod). - The <i>Kodak Ektascan 2180</i> LASER PRINTER must have Software Version 2.16 or higher installed.	2.24	5B6623

## Installing the New ROLLERS, BEARINGS, and E-RINGS

### FIXER/WASH CROSSOVER - Drive Side



**FIXER/WASH CROSSOVER - Non-Drive Side**



H127\_0128DCD  
H127\_0128DA

Refer to the illustrations and install the new parts as follows:

1. Remove the FIXER/WASH CROSSOVER from the PROCESSOR
2. Remove the TROUGH, and save.
3. Remove the existing ROLLERS, BEARINGS, and E-RINGS, and discard. Save the SPRINGS, SHAFTS, and THRUST WASHERS.
4. Install the new ROLLERS, BEARINGS, and E-RINGS from the Mod Kit, using the SPRINGS, SHAFTS, and THRUST WASHERS saved in the previous step. Make sure that the THRUST WASHERS and other parts are assembled in the order shown.
5. Install the TROUGH.
6. Check the squareness of the RACK on a smooth, flat surface.
7. Install the FIXER/WASH CROSSOVER in the PROCESSOR.

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## Updating the Parts List

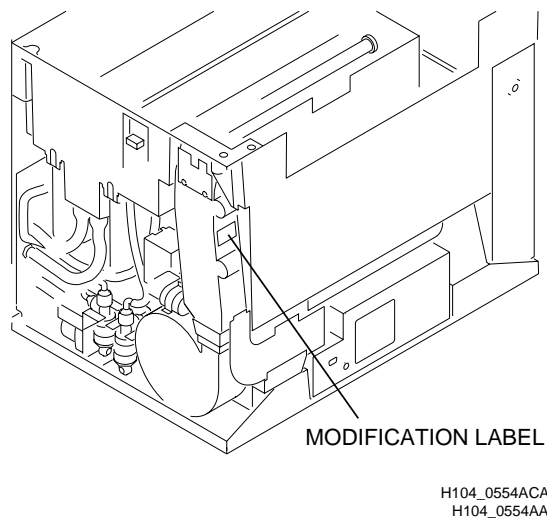
1. Change the Part Numbers for the ROLLERS and the ASSEMBLY in the Parts List for the figures, and also in the Numerical and Alphabetical Lists:

Description	Old Part No.	New Part No.
Roller, Drive (black, rubber) [B]	594237	470085
Roller, Driven (phenolic) [A]	911660	9B8662
Fixer/Wash Crossover Assembly	918945	9B8445

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## Final Steps

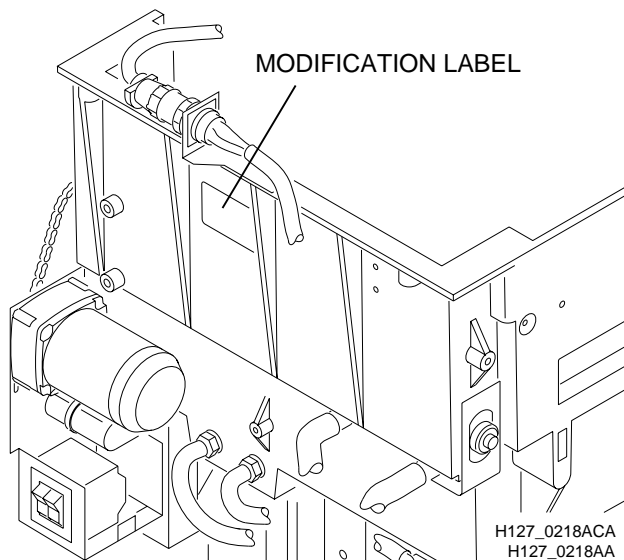
Figure 1 **270 RA PROCESSORS**



- [1] Circle the appropriate Mod Number on the MODIFICATION LABEL. Use permanent ink.

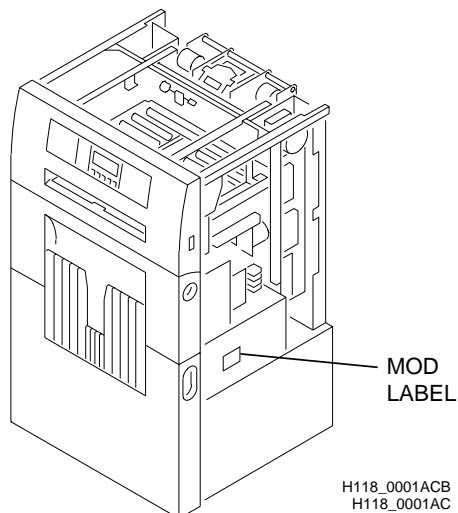
- (a) For the 270 RA PROCESSOR, circle number 22.

Figure 2 **180 LP or 180 LPS PROCESSORS**



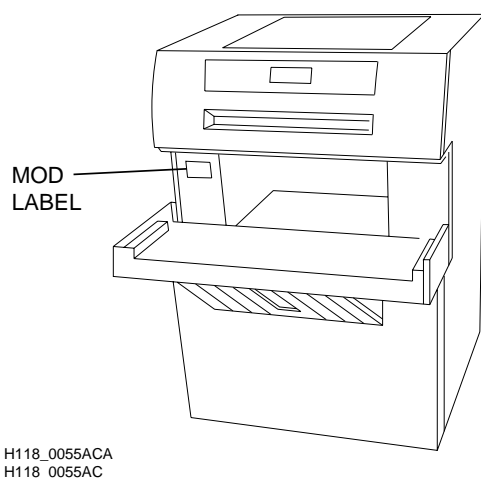
- (b) For the 180 LP or 180 LPS PROCESSOR, circle number 9.

Figure 3 **MULTILOADERS 300 with Serial No. 1369 and Below**



(c) For the MULTILOADER 300, circle number 37.

Figure 4 **MULTILOADERS 300 with Serial No. 1370 and Above**



**[2] For all PROCESSORS:**

- (a) Assemble the PROCESSOR.
- (b) Check for correct operation of the PROCESSOR.

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