

MODIFICATION INSTRUCTIONS

for the

***Kodak X-Omat* MULTILOADER 300, Mod No. 31**

***Kodak X-Omat* 270 RA PROCESSOR, Mod No. 20**

***Kodak X-Omat* 480 RA PROCESSOR, Mod No. 2**

Service Codes: 3058, 3059, and 3228

Type 1 Required

Purpose: To check for or provide correct grounding of the REPLENISHMENT PUMPS.



Important

Use qualified service personnel to install this modification.

Service Effects:	None
Special Requirements:	None
Serial Numbers:	Multiloader 300: 1079 - 1110 (Serial Number is for the Processor) 270 RA Processor: 2448 - 2495 480 RA Processor: 3069 - 3165
Installation Time:	approximately 1 hour
Special Tools:	paint removal tool, such as a grinder, awl, or sandpaper black TOUCH-UP PAINT, such as TL-2216 4 CLAMPS TL-2170 MAGNETIC POWER WARNING SIGN TL-1926
Parts Status:	None
Parts Requirements:	None



HEALTH IMAGING DIVISION

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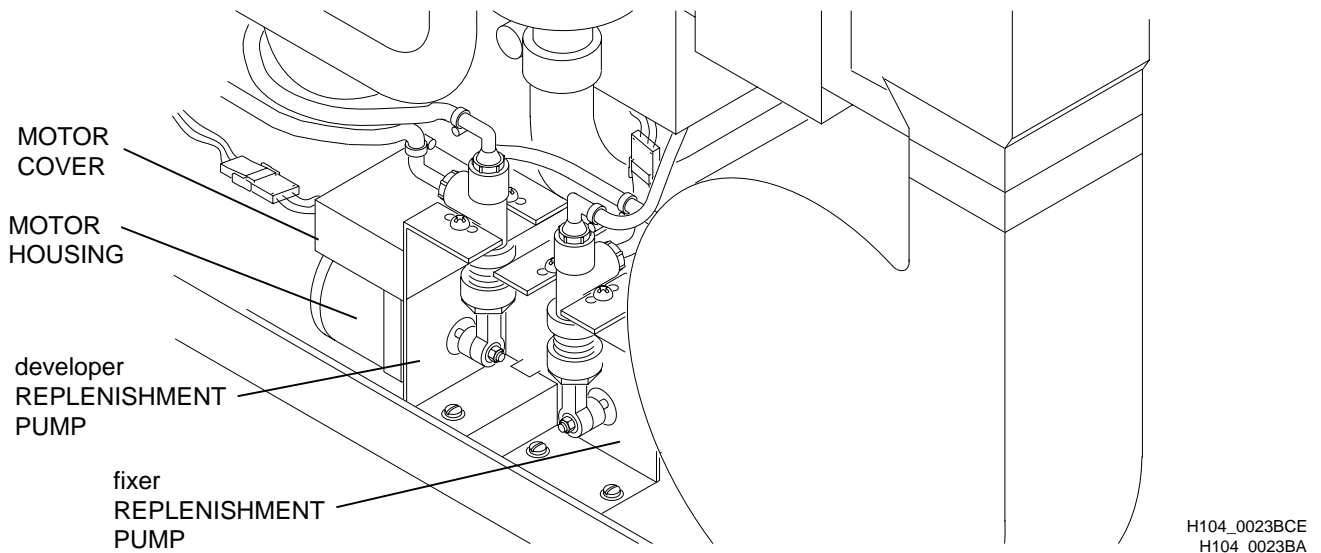
This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

For the 270 RA PROCESSOR and the MULTILOADER 300:

Note

Instructions for the 480 RA PROCESSOR start on Page 8.

Figure 1 **Observing the Paint on Both REPLENISHMENT PUMPS**

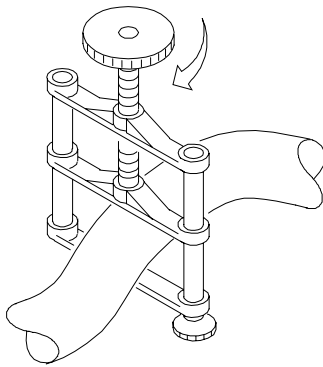


Warning

Dangerous voltage.

- [1] De-energize the PROCESSOR or MULTILOADER.
 - (a) Move the MAIN CIRCUIT BREAKER CB1 on the 270 RA PROCESSOR or CB2 on the MULTILOADER to the “OFF” position.
 - (b) Move the wall CIRCUIT BREAKER to the “OFF” position.
 - (c) Lock the wall CIRCUIT BREAKER and attach a MAGNETIC POWER WARNING SIGN TL-1926 to warn others not to energize the equipment while you are performing service.
- [2] Lift the TOP COVER of the 270 PROCESSOR or extend the PROCESSOR from the MULTILOADER.
- [3] Remove the NON-DRIVE SIDE PANEL from the 270 PROCESSOR, or the NON-DRIVE SIDE SAFETY COVER from the PROCESSOR in the MULTILOADER.
- [4] Observe both REPLENISHMENT PUMPS.
 - If both the MOTOR COVER and the MOTOR HOUSING are unpainted metal, advance to Step 11 or 12 on Page 6.
 - If either the MOTOR COVER or the MOTOR HOUSING are painted black, continue with Step 5 on Page 4.

Figure 2 CLAMP TL-2170



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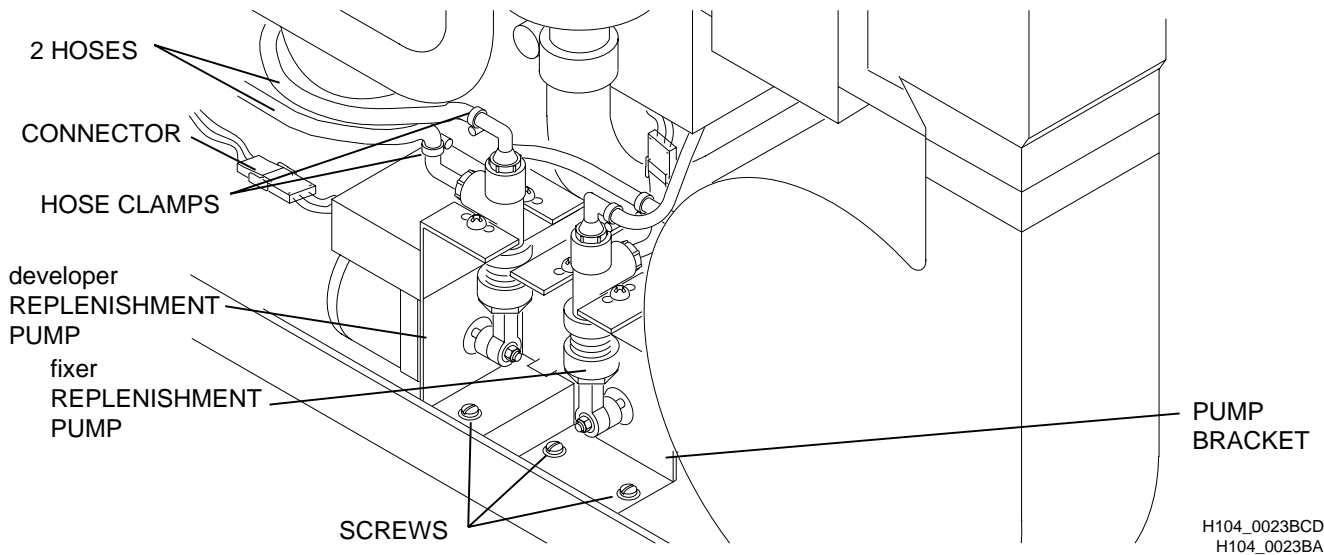
Important

Do this procedure for each REPLENISHMENT PUMP, one at a time.

[5] Remove the REPLENISHMENT PUMP.

- (a) Install and tighten 2 CLAMPS TL-2170 on the 2 HOSES for one of the REPLENISHMENT PUMPS.
- (b) Loosen the 2 HOSE CLAMPS and remove the 2 HOSES from the REPLENISHMENT PUMP.
- (c) Remove the 1 or 2 SCREWS from the PUMP BASE PLATE.
- (d) Disconnect the CONNECTOR from the PUMP, and remove the PUMP from the PROCESSOR.

Figure 3 Removing the REPLENISHMENT PUMP



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[6] If the MOTOR COVER is unpainted metal, advance to Step 7 on Page 5. If the MOTOR COVER is painted black, do the following steps:

- (a) See Figure 4 on Page 5 and remove:
 - 2 top SCREWS and the MOTOR COVER from the PUMP BRACKET
 - GROUND SCREW, NUT, and STAR WASHER that hold the GROUND WIRE LUG to the inside of the MOTOR COVER
 - on the inside of the MOTOR COVER, the paint that is around the hole for the GROUND SCREW
- (b) Install the GROUND SCREW, the GROUND WIRE LUG, the STAR WASHER, and the NUT. See Figure 4 for the correct sequence of parts.
- (c) Apply TOUCH-UP PAINT, such as TL-2216, to the metal where you removed the paint and on the installed GROUND SCREW, the GROUND WIRE LUG, the STAR WASHER, and the NUT.

- (d) Remove all the paint from the 2 TABS on the MOTOR COVER, that will have contact with the PUMP BRACKET. Do not apply paint to the TABS.
 - (e) Install the MOTOR COVER.
- [7] If the MOTOR HOUSING is unpainted metal, advance to Step 8. If the MOTOR HOUSING is painted black, do the following steps:
- (a) Remove one of the bottom MOTOR MOUNTING SCREWS that hold the MOTOR HOUSING to the GEARBOX.
 - (b) Remove the paint from the MOTOR HOUSING under the MOTOR MOUNTING SCREW.
 - (c) Install the MOTOR MOUNTING SCREW. See Figure 4.
 - (d) Apply TOUCH-UP PAINT, such as TL-2216, to the metal where you removed the paint and to the installed MOTOR MOUNTING SCREW.
- [8] Install the HOSE CLAMPS, and remove the CLAMPS TL-2170.
- [9] Install the REPLENISHMENT PUMP in the PROCESSOR, and connect the CONNECTOR.
- [10] Do the procedure with the other REPLENISHMENT PUMP. Then do Step 11 or 12 on Page 6.

Figure 4 **Improving the Ground for the REPLENISHMENT PUMPS**

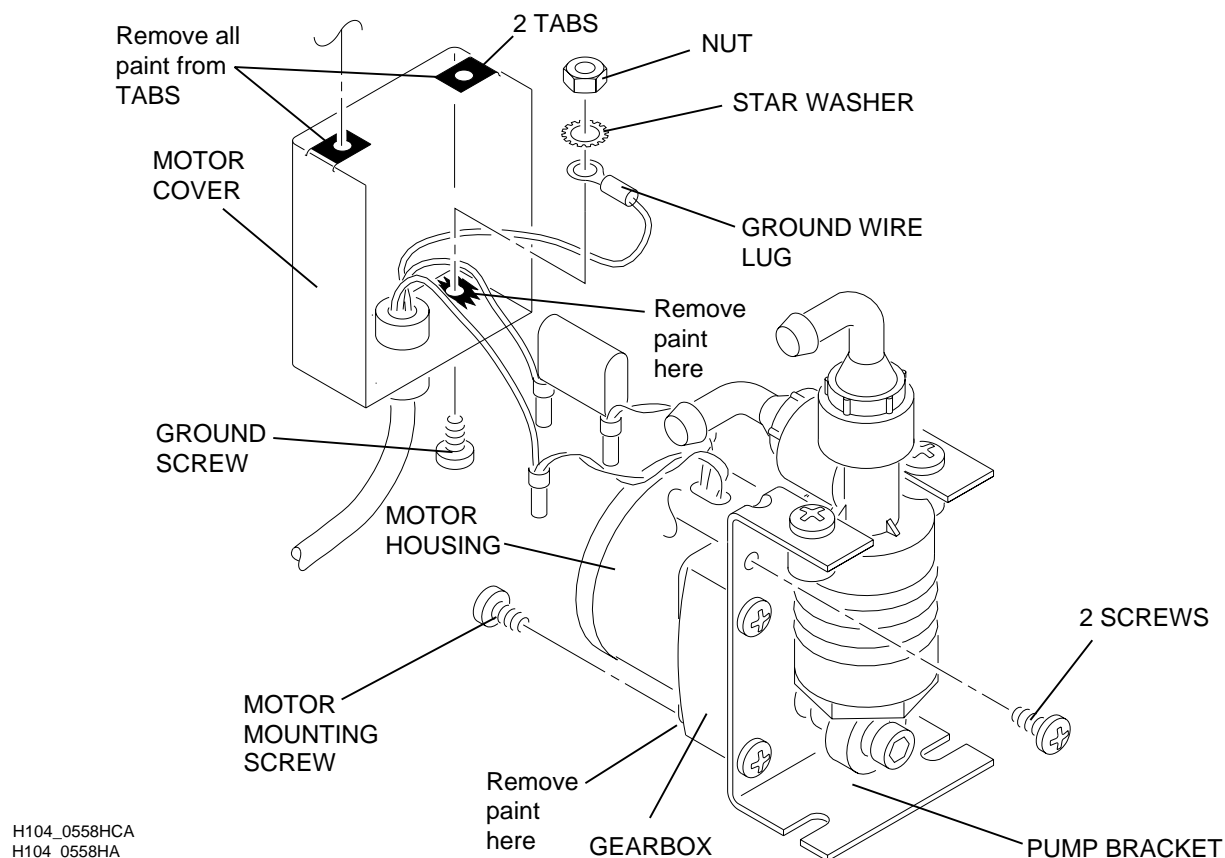
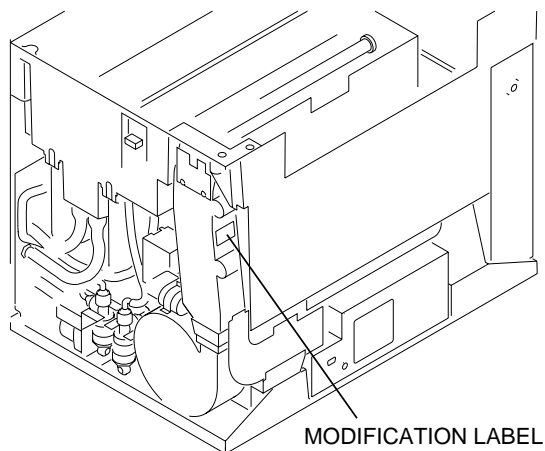



Figure 5 **270 RA PROCESSORS**



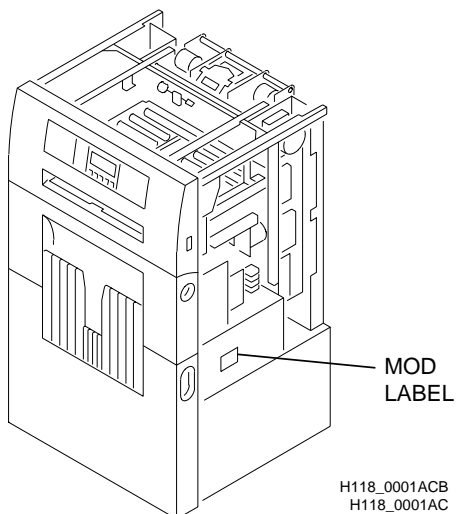
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[11] Circle the “20” on the MODIFICATION LABEL for the 270 RA PROCESSOR.

										
1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	
22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	

Circle the “20” for the 270 RA PROCESSOR.

Figure 6 **MULTILOADERS 300 with (Processor) Serial No. 1369 and Below**

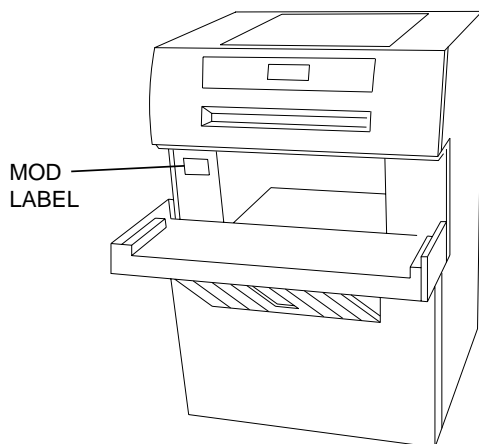


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[12] Circle the “31” on the MODIFICATION LABEL.

- On MULTILOADERS Serial No. 1369 and below, see Figure 6.
- On MULTILOADERS Serial No. 1370 and above, the MOD LABEL is inside the MAGAZINE DOOR. See Figure 7.

Figure 7 **MULTILOADERS 300 with (Processor) Serial No. 1370 and Above**



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1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	
22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	

Circle the “31” for the MULTILOADER 300.

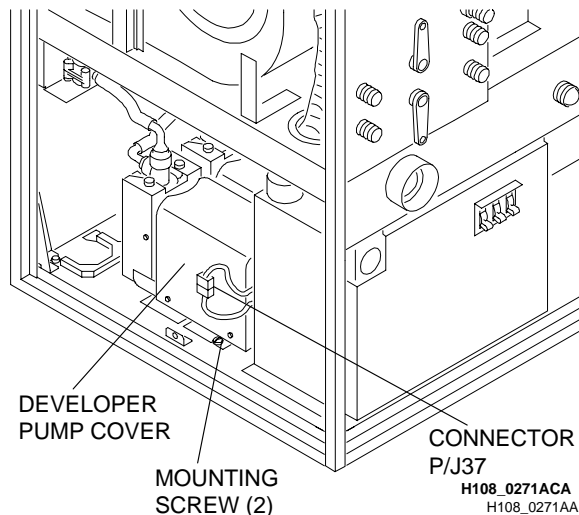
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- [13] Install the NON-DRIVE SIDE PANEL or SAFETY COVER.
- [14] Close the TOP COVER or move the PROCESSOR into the MULTILOADER.
- [15] Energize the PROCESSOR.
- (a) Remove the MAGNETIC POWER WARNING SIGN from the wall CIRCUIT BREAKER.
 - (b) Move the wall CIRCUIT BREAKER to the “ON” position.
 - (c) Move the MAIN CIRCUIT BREAKER CB1 on the 270 RA PROCESSOR or CB2 on the MULTILOADER to the “ON” position.
- [16] Check for correct operation and leakage.
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For the 480 RA PROCESSOR:

Note

Instructions for the 270 RA PROCESSOR and the MULTILOADER 300 start on Page 3.

Figure 8 **Removing the REPLENISHMENT PUMP**

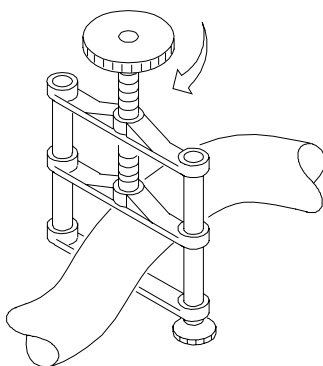


Warning

Dangerous voltage.

- [1] De-energize the PROCESSOR or MULTILOADER.
 - (a) Move the MAIN CIRCUIT BREAKER CB1 on the PROCESSOR to the “OFF” position.
 - (b) Move the wall CIRCUIT BREAKER to the “OFF” position.
 - (c) Lock the wall CIRCUIT BREAKER and attach a MAGNETIC POWER WARNING SIGN TL-1926 to warn others not to energize the equipment while you are performing service.
- [2] Remove:
 - DRIVE SIDE ACCESS PANEL
 - DRYER PANEL
 - RECEIVING END ACCESS PANEL
- [3] Observe both REPLENISHMENT PUMPS.
 - If both PUMPS are unpainted metal, advance to Step 13 on Page 9.
 - If either PUMP is painted black, continue with Step 4.

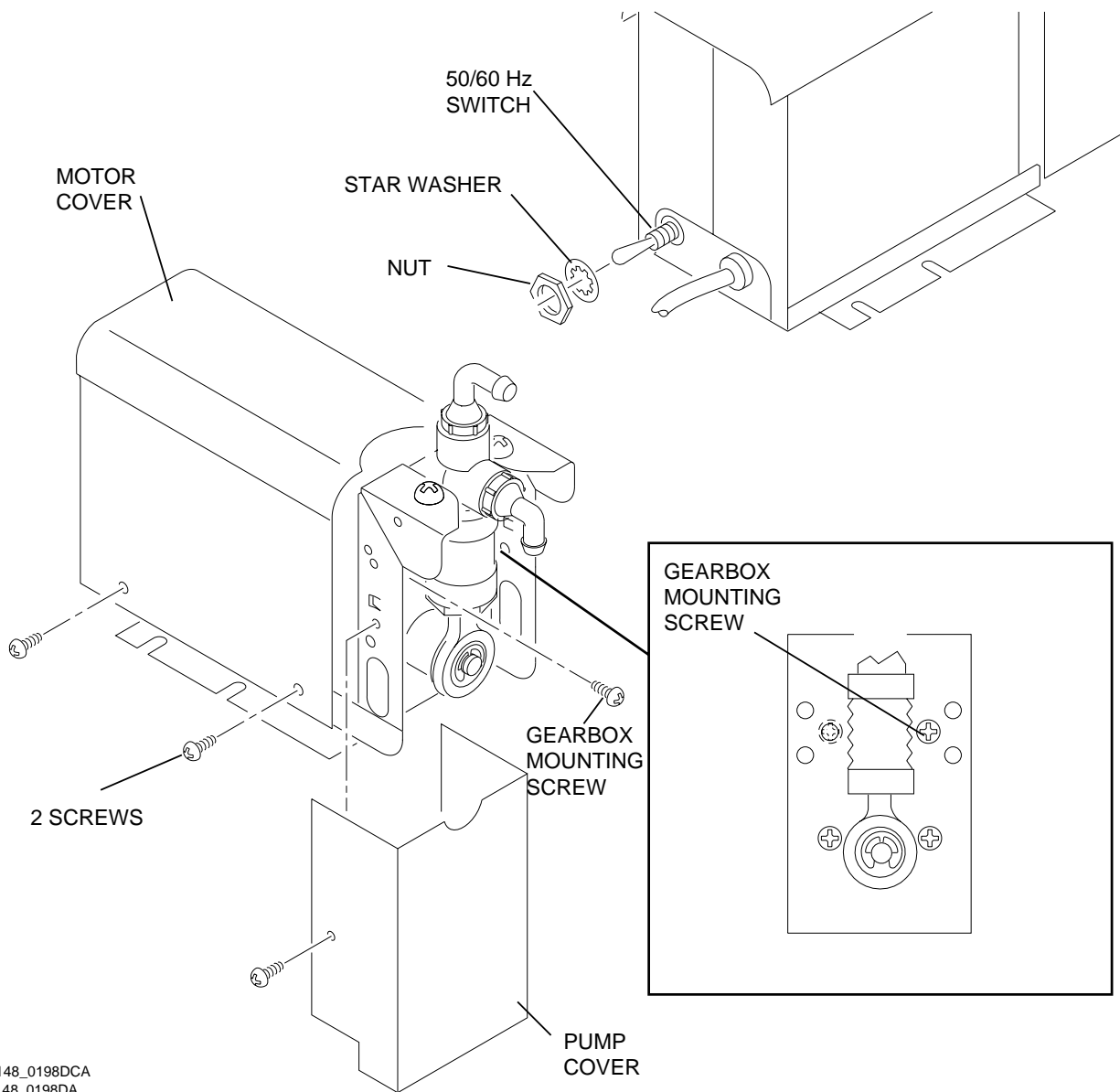
Figure 9 CLAMP TL-2170



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- [4] Remove the developer REPLENISHMENT PUMP. See Figures 8 and 9.
 - (a) Install and tighten 2 CLAMPS TL-2170 on the 2 HOSES for the REPLENISHMENT PUMP.
 - (b) Loosen the 2 HOSE CLAMPS and remove the 2 HOSES from the REPLENISHMENT PUMP.
 - (c) Remove the 2 MOUNTING SCREWS.
 - (d) Disconnect the CONNECTOR from the PUMP, and remove the PUMP from the PROCESSOR.
- [5] Do Step 4 again to remove the fixer REPLENISHMENT PUMP.

Figure 10 Improving the Ground for the REPLENISHMENT PUMPS



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[6] Remove from both PUMPS:

- PUMP COVERS and the MOTOR COVERS
- NUT and STAR WASHER from the 50/60 Hz SWITCH
- one of the GEARBOX MOUNTING SCREWS

[7] Remove the paint from:

- around the 2 holes for SCREWS on the outside of each of the MOTOR COVERS
- around the hole for the GEARBOX MOUNTING SCREW
- around the outside of the hole for the 50/60 Hz SWITCH

[8] Install the 50/60 Hz SWITCH, and check that it is in the correct position for 50 or 60 Hz.

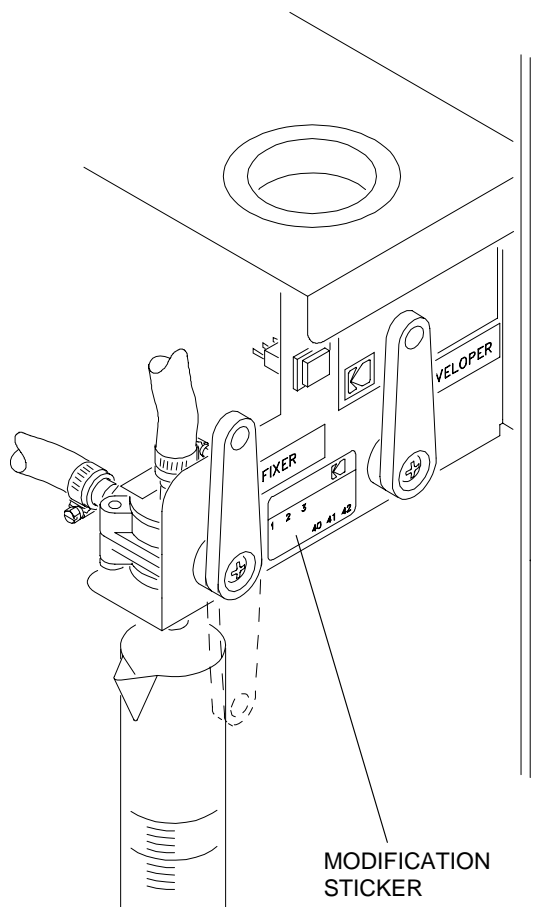
[9] Install the GEARBOX MOUNTING SCREW.

[10] Install the PUMP COVERS and the MOTOR COVERS.

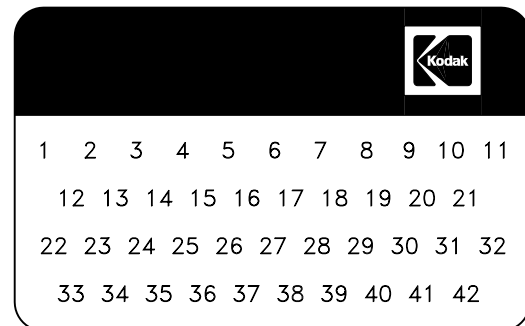
[11] Apply the TOUCH-UP PAINT, such as TL-2216, to all the metal where you removed the paint and on the installed SCREWS.

[12] Install the REPLENISHMENT PUMPS in the PROCESSOR.

Figure 11 **480 RA PROCESSOR**



[13] Circle the “2” on the MODIFICATION STICKER.



Circle the “2” for the 480 RA PROCESOR.

[14] Install the PANELS.

[15] Energize the PROCESSOR.

- (a) Remove the MAGNETIC POWER WARNING SIGN from the wall CIRCUIT BREAKER.
- (b) Move the wall CIRCUIT BREAKER to the “ON” position.
- (c) Move the MAIN CIRCUIT BREAKER CB1 on the PROCESSOR to the “ON” position.

[16] Check for correct operation and leakage.

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H108_0045CA

Publication History

Print Date	Pub. No.	ECO No.	Affected Pages	File Name	Notes
MAR96	8B7480	2592-361	All	ma3058_31_01mar96.doc	New Modification Instructions

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