

MODIFICATION INSTRUCTIONS
***Kodak X-Omat* MULTILOADER 300**
Service Code: 3058
Modification No. 29

***Kodak X-Omat* 270 RA PROCESSOR**
Service Code: 3059
Modification No. 19

***Kodak X-Omat* 180 LP PROCESSOR**
Service Code: 3227
Modification No. 7

Type 1 Selective

- Purpose:** To install an improved version of the WASH RACK, that has these benefits:
- **More uniform washing.** A redesigned water MANIFOLD improves the distribution of water across the ROLLERS.
 - **More corrosion resistant.** SCREWS now hold the SHAFTS of the ROLLERS in the WASH RACK, instead of E-RINGS. The SPRINGS on the WASH RACK are still made of a special, high-quality, stainless steel alloy.
 - **Improved film transport.** A new GUIDE SHOE and an additional IDLER ROLLER improve the transport of film from the WASH RACK into the DRYER RACK. Pinned ROLLERS keep the drive and driven ROLLERS correctly engaged.



HEALTH IMAGING

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Important

Use qualified service personnel to install this modification.



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

Service Effects: See Pages 11 - 15 for part numbers and configuration changes. Keep these pages with the Illustrated Parts List for the PROCESSOR for future reference.

Special Requirements: None

Serial Numbers:

| | |
|------------------|------------|
| 270 RA PROCESSOR | 101 - 2397 |
| MULTILOADER 300 | 101 - 1040 |
| 180 LP PROCESSOR | 101 - 1644 |

Special Tools:

TL-1466 ELECTRIC DRILL
1/8 in. DRILL BIT
CENTER PUNCH
HACK SAW or TIN SNIPS

Installation Time: Approximately 1 hour

Parts Status: Available in Service Parts Management

Parts Requirements: See the Parts List below

Table 1

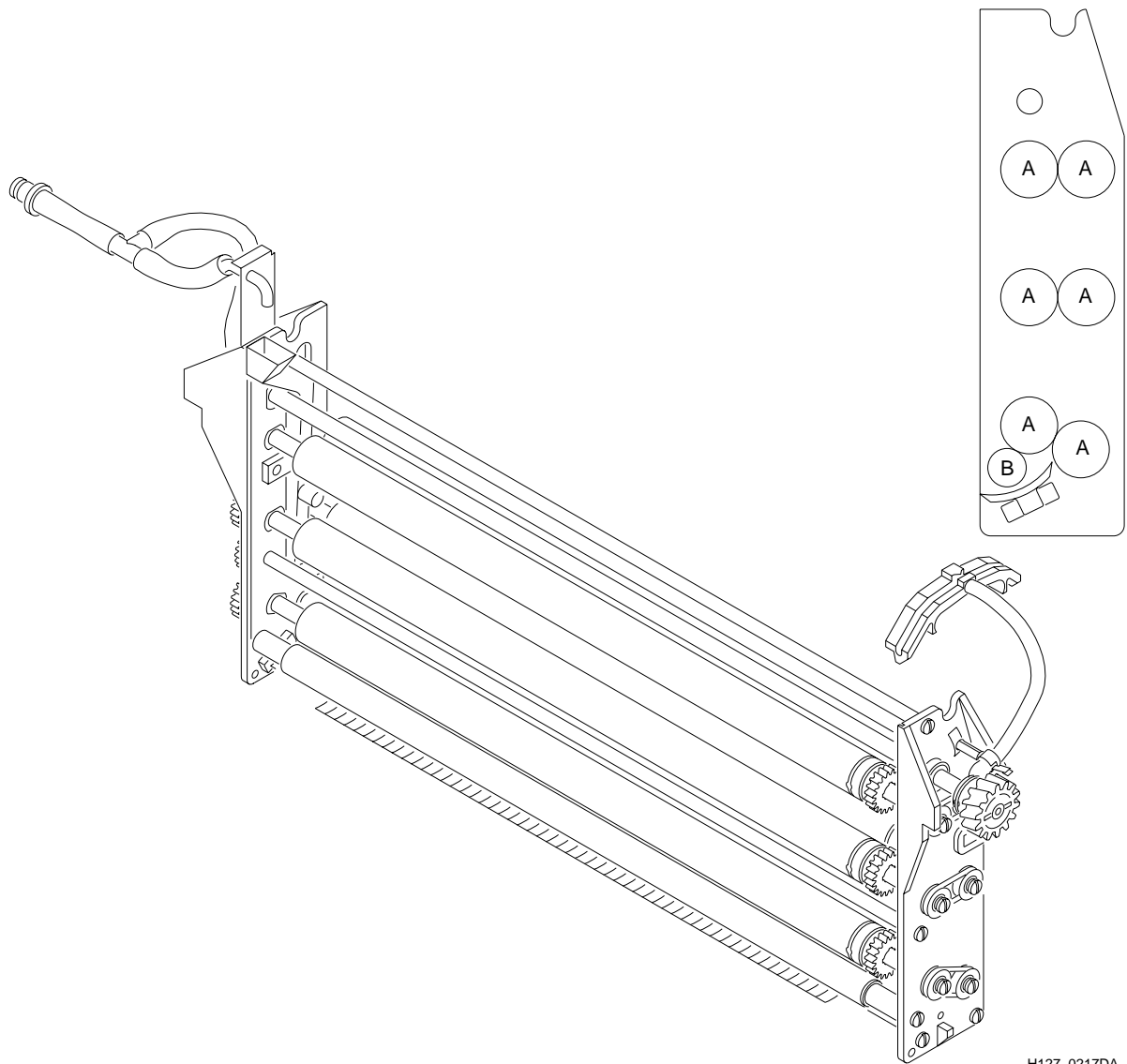
Modification Kit 8B6612 includes:

| Part No. | Description | Quantity |
|----------|------------------------------|----------|
| 5B6890 | WASH RACK ASSEMBLY | 1 |
| 5B6630 | DOLE VALVE ASSEMBLY -1/2 GPM | 1 |
| 1C7642 | COVER - TUBING ASSEMBLY | 1 |
| 1C7643 | FASTENER - BUTTON | 3 |
| 8B6658 | Mod Instructions | 1 |

Section 1: Installing the New WASH RACK

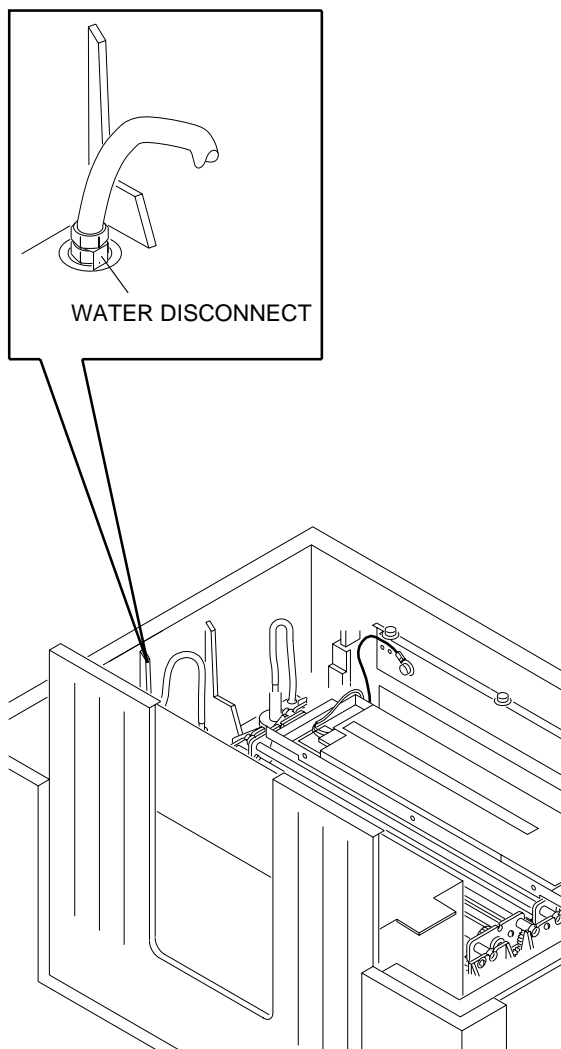
- [1] De-energize the PROCESSOR or MULTILOADER.
- [2] Move the main wall CIRCUIT BREAKER to “OFF”.
- [3] For the 180 LP and 270 RA PROCESSORS only:
 - Lift the TOP COVER.
 - Remove the WET SECTION COVER.
 - Remove the EVAPORATION COVERS.
- [4] For the MULTILOADER 300 only:
 - Extend the PROCESSOR from the MULTILOADER.
 - Remove the WET SECTION COVER.
 - Remove the EVAPORATION COVERS.

Figure 1 New WASH RACK

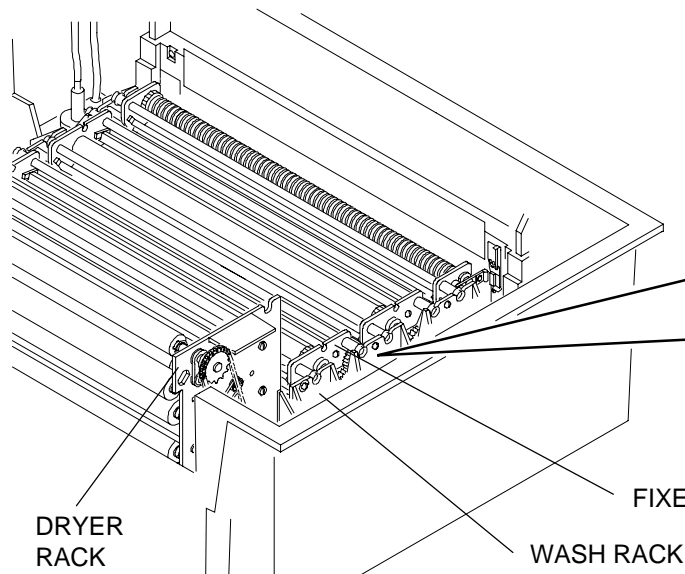


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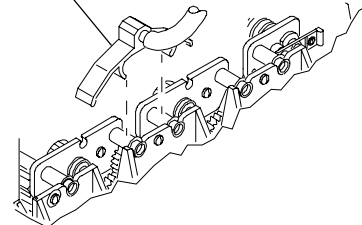
Figure 2 Removing the WASH RACK —
MULTILOADER 300 Shown



H118_0036CCA
H118_0036CA



YOKE



FIXER/WASH CROSSOVER

H104_0258BCA
H104_0258BA

[5] Disconnect:

- WATER DISCONNECT
- YOKE

[6] Remove the FIXER/WASH CROSSOVER from the PROCESSOR.

[7] Lift the WASH RACK from the PROCESSOR.

[8] Check the new RACK for squareness on a flat surface.

[9] Install in the PROCESSOR:

- new WASH RACK
- FIXER/WASH CROSSOVER

[10] Connect:

- YOKE
- WATER DISCONNECT

[11] Install the EVAPORATION COVERS.

[12] See Step 13 to determine if Sections 2 and 3 must be done.

[13] Check the MODIFICATION LABEL on the PROCESSOR. See Pages 7 - 9 for the location of the LABELS.

(a) If the Mod number below is not circled, do Sections 2, 3, and 4.

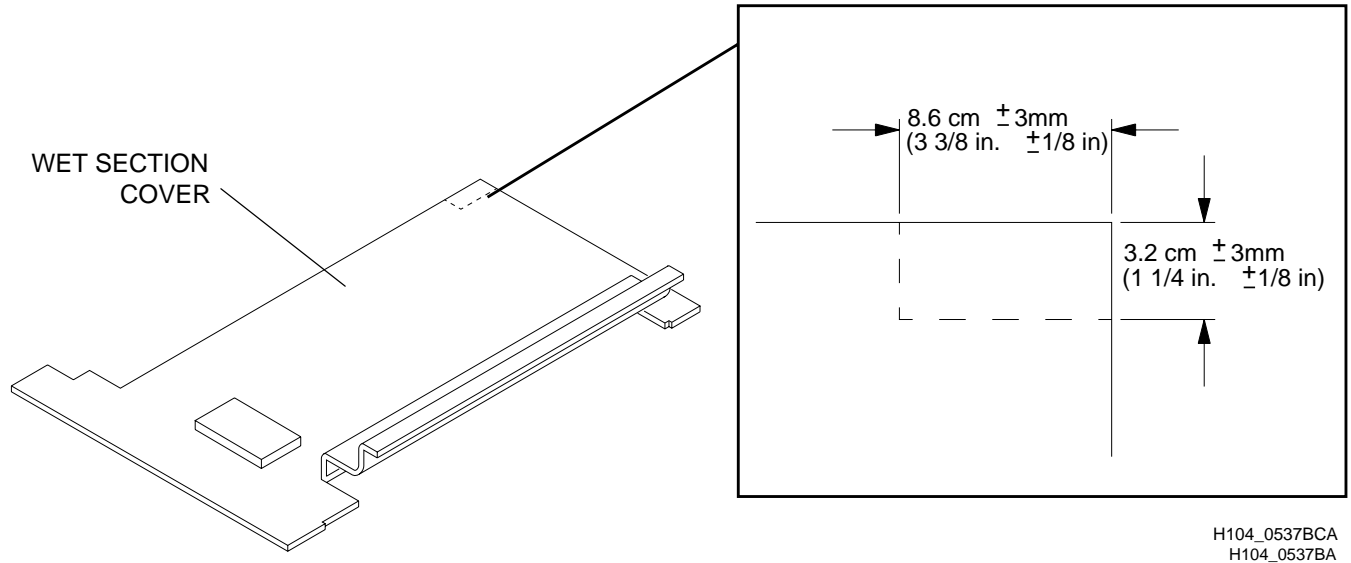
(b) If the Mod number below is is circled, do Sections 4 only. Advance to Page 7.

| Equipment | Mod No. |
|------------------|---------|
| MULTILOADER 300 | 25 |
| 270 RA PROCESSOR | 17 |
| 180 LP PROCESSOR | 4 |

Section 2: Installing the TUBING ASSEMBLY COVER

[1] See Step 13 on Page 4 to determine if Sections 2 and 3 must be done.

Figure 3 Cutting the WET SECTION COVER



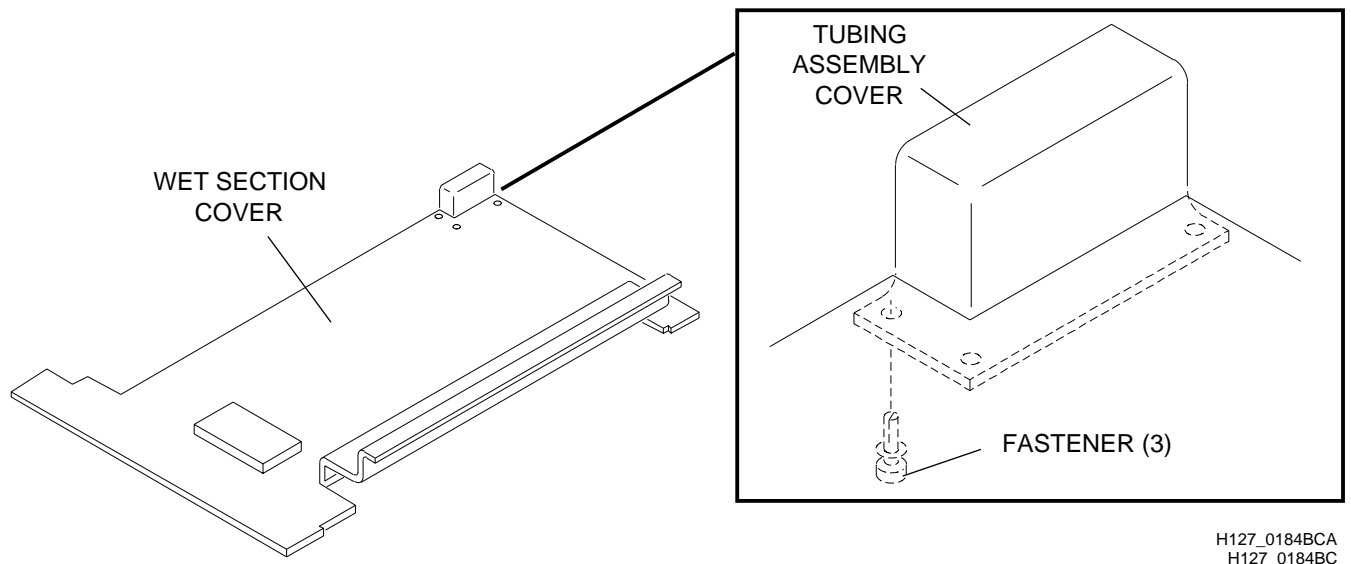
[2] Use the TIN SNIPS or the HACK SAW to cut the WET SECTION COVER as shown in Figure 3 above.

[3] Using the TUBING ASSEMBLY COVER as a template, do the following steps:

- (a) Align the TUBING ASSEMBLY COVER with the WET SECTION COVER as shown in Figure 4 below.
- (b) Check that the edge of the TUBING ASSEMBLY COVER is under the WET SECTION COVER. See Figure 4.
- (c) Use the CENTER PUNCH to mark the holes.
- (d) Use the 3.2 mm ($1/8$ in.) DRILL BIT and the ELECTRIC DRILL TL-1466 to drill the holes.

[4] Install the TUBING ASSEMBLY COVER by inserting the 3 FASTENERS up through the holes in the TUBING ASSEMBLY COVER and the bottom of the WET SECTION COVER.

Figure 4 Installing the TUBING ASSEMBLY COVER



Section 3: Installing the DOLE VALVE



Important

Because the new WASH RACK requires less water flow, you need to install the new ½ gallon/min DOLE VALVE provided in the Kit. The existing and new DOLE VALVES are not interchangeable. Do not use the existing DOLE VALVE with the new WASH RACK.

[1] For access to the existing DOLE VALVE:

- For a MULTILOADER 300, remove the NONDRIVE SIDE SAFETY COVER.
- For a 270 RA PROCESSOR, remove the NONDRIVE SIDE PANEL.
- For a 180 LP PROCESSOR, remove the DRIVE SIDE PANEL and move the ELECTRICAL BOX to the out position.

[2] From the WATER INLET HOSE, remove:

- 2 HOSE CLAMPS
- existing DOLE VALVE

[3] Install the new DOLE VALVE in the correct position with the arrows in the direction of the water flow. See Figures 5 and 6.

Figure 5 **Installing the New Dole Valve in a 270 RA PROCESSOR or a MULTILOADER 300**

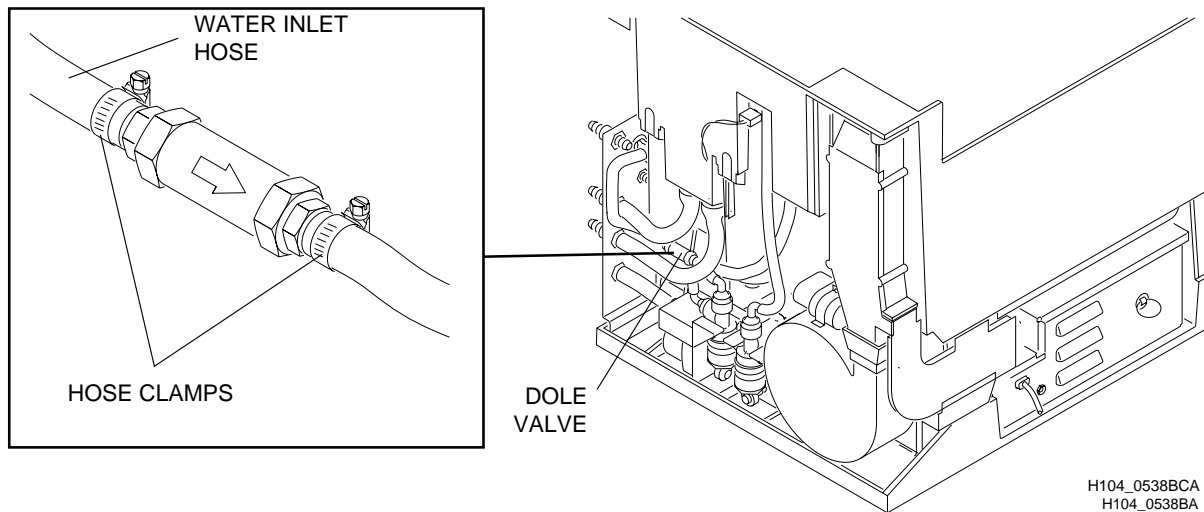
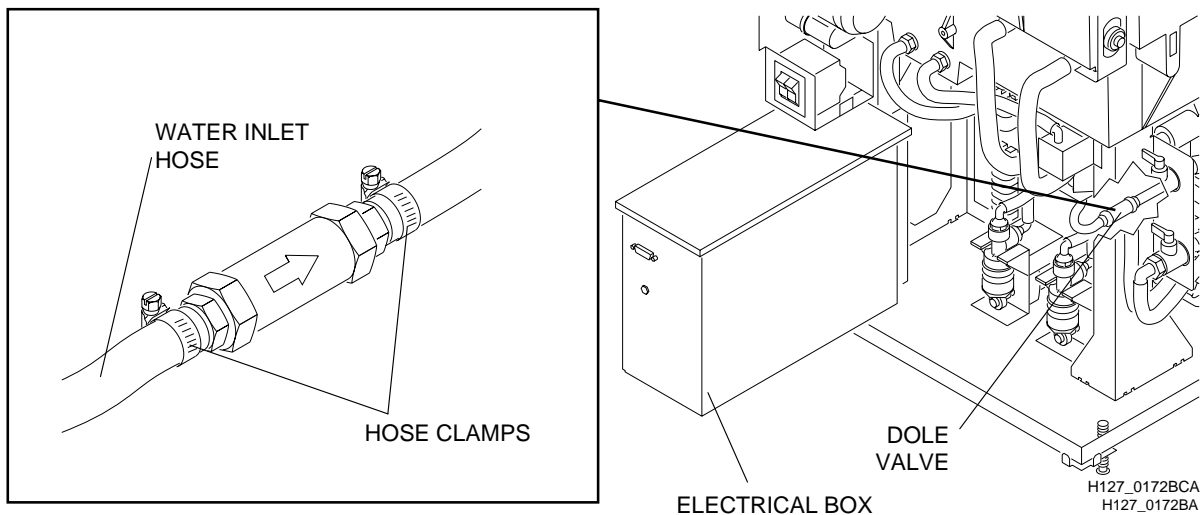


Figure 6 **Installing the New Dole Valve in a 180 LP PROCESSOR**



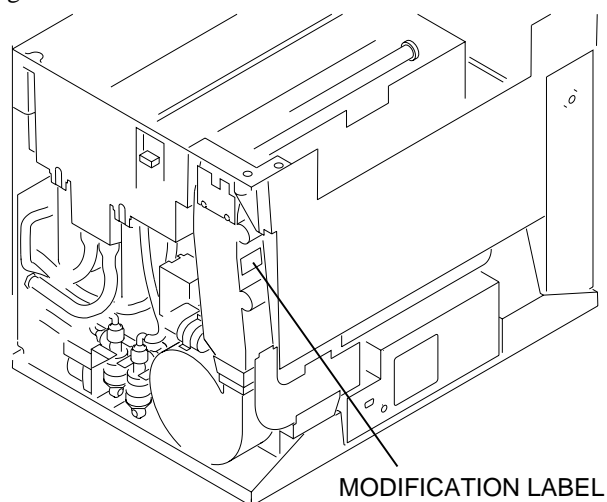
Section 4: Final Steps

[1] Insert Pages 11 - 15 from these Modification Instructions into the Binder for the PROCESSOR.

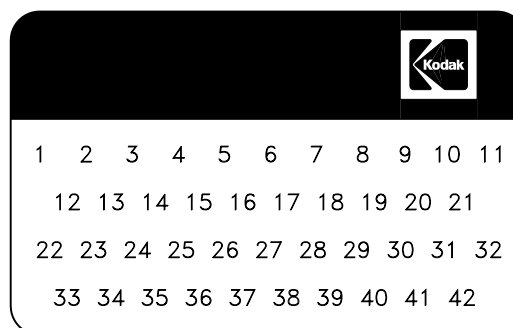
[2] For the 270 RA PROCESSOR only:

- (a) Remove the EXIT PANEL.
- (b) Circle the “19” on the MODIFICATION LABEL.
- (c) Move the main wall CIRCUIT BREAKER to “ON”.
- (d) Energize the PROCESSOR.
- (e) Check that the water flows out of the TUBING BRACKET into the center of the WATER MANIFOLD.
If not, bend the TUBING BRACKET.
- (f) Install:
 - WET SECTION COVER
 - DRIVE SIDE and EXIT PANELS
- (g) Close the TOP COVER.
- (h) Check for correct operation of the PROCESSOR.

Figure 7 **270 RA PROCESSORS**



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H104_0554AA



Circle the “19”.

[3] For the MULTILOADER 300 only:

- (a) Circle the “29” on the MODIFICATION LABEL.
 - On MULTILOADERS Serial No. 1369 and below, see Figure 8.
 - On MULTILOADERS Serial No. 1370 and above, the MOD LABEL is inside the MAGAZINE DOOR. See Figure 9.
- (b) Move the main wall CIRCUIT BREAKER to “ON”.
- (c) Energize the MULTILOADER.
- (d) Check that the water flows out of the TUBING BRACKET into the center of the WATER MANIFOLD. If not, bend the TUBING BRACKET.
- (e) Install the WET SECTION COVER.
- (f) Move the PROCESSOR into the MULTILOADER 300.
- (g) Check for correct operation of the PROCESSOR.

Figure 8 **MULTILOADERS 300 with Serial No. 1369 and Below**

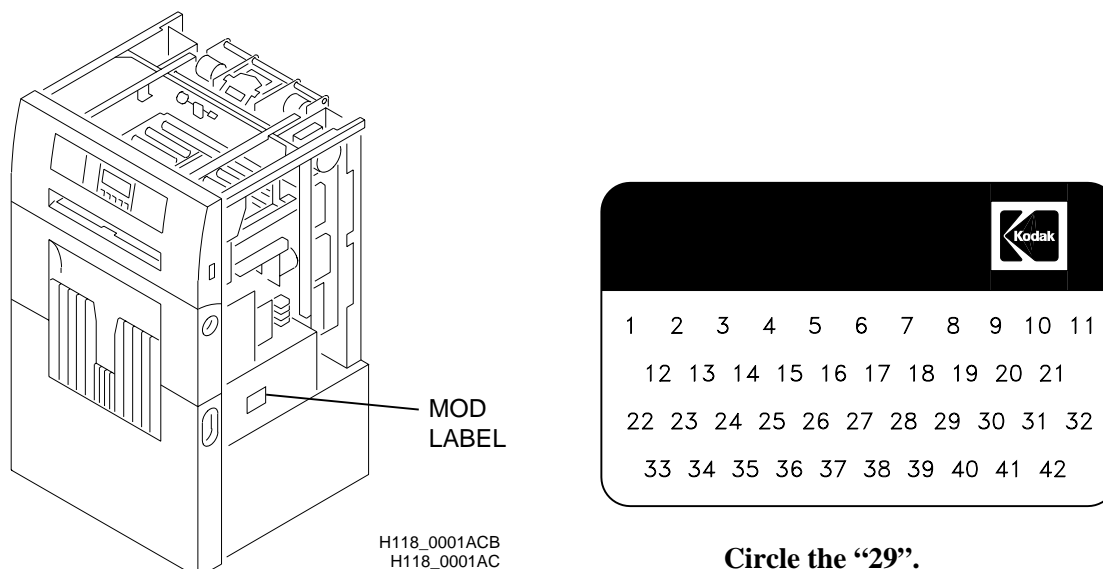
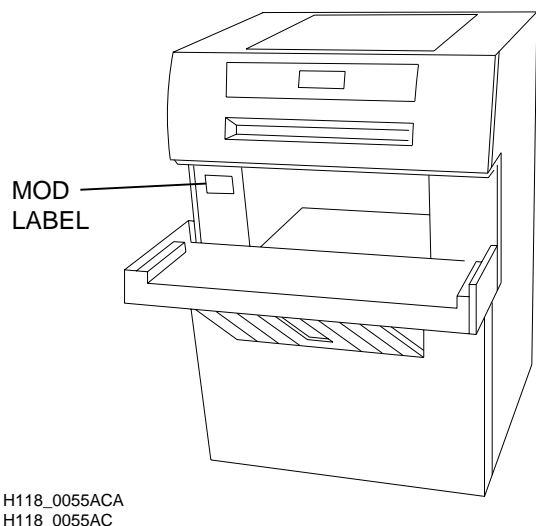


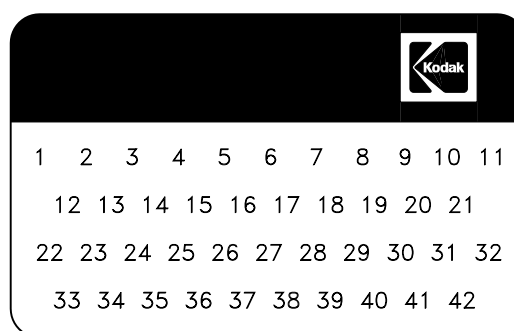
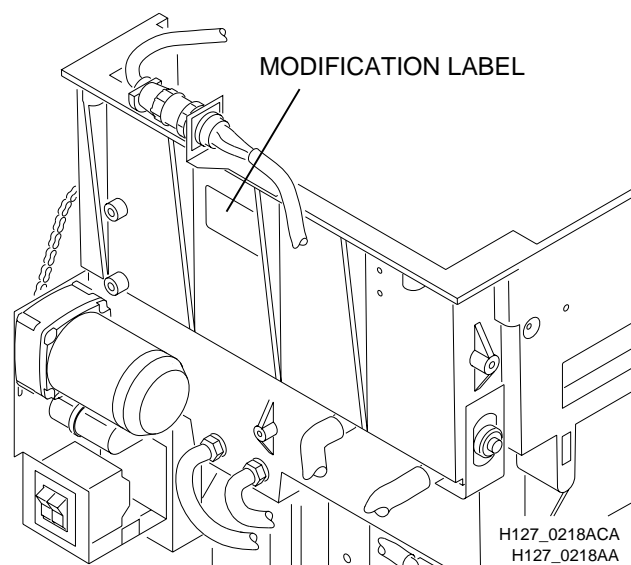
Figure 9 **MULTILOADERS 300 with Serial No. 1370 and Above**



[4] For the 180 LP PROCESSOR only:

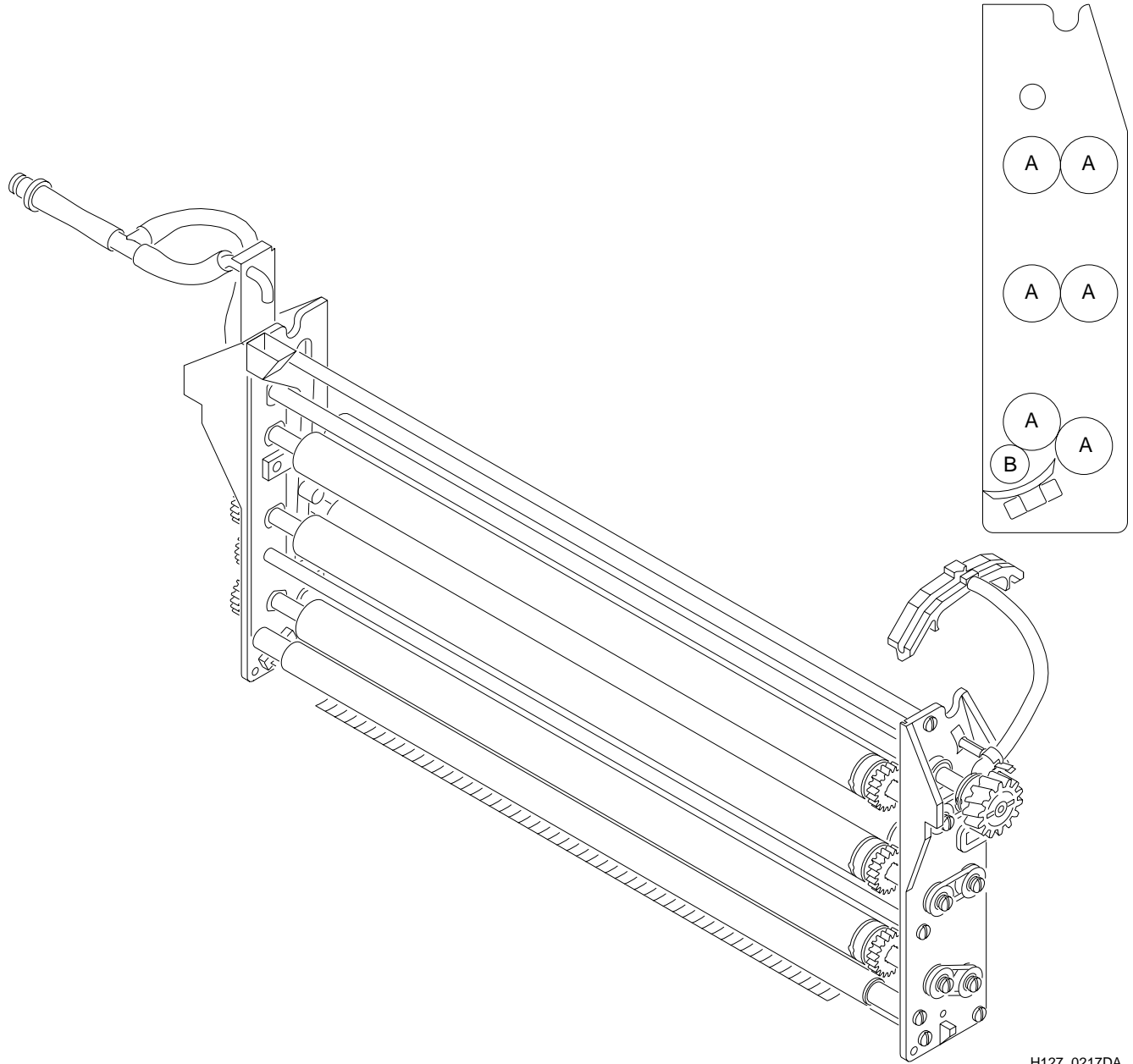
- (a) Remove the DRIVE SIDE PANEL.
- (b) Circle the “7” on the MODIFICATION LABEL.
- (c) Move the main wall CIRCUIT BREAKER to “ON”.
- (d) Energize the PROCESSOR.
- (e) Check that the water flows out of the TUBING BRACKET into the center of the WATER MANIFOLD.
If not, bend the TUBING BRACKET.
- (f) Install the DRIVE SIDE and NON-DRIVE SIDE PANELS.
- (g) Close the TOP COVER.
- (h) Check for correct operation of the PROCESSOR.

Figure 10 **180 LP PROCESSORS**



Circle the “7”.

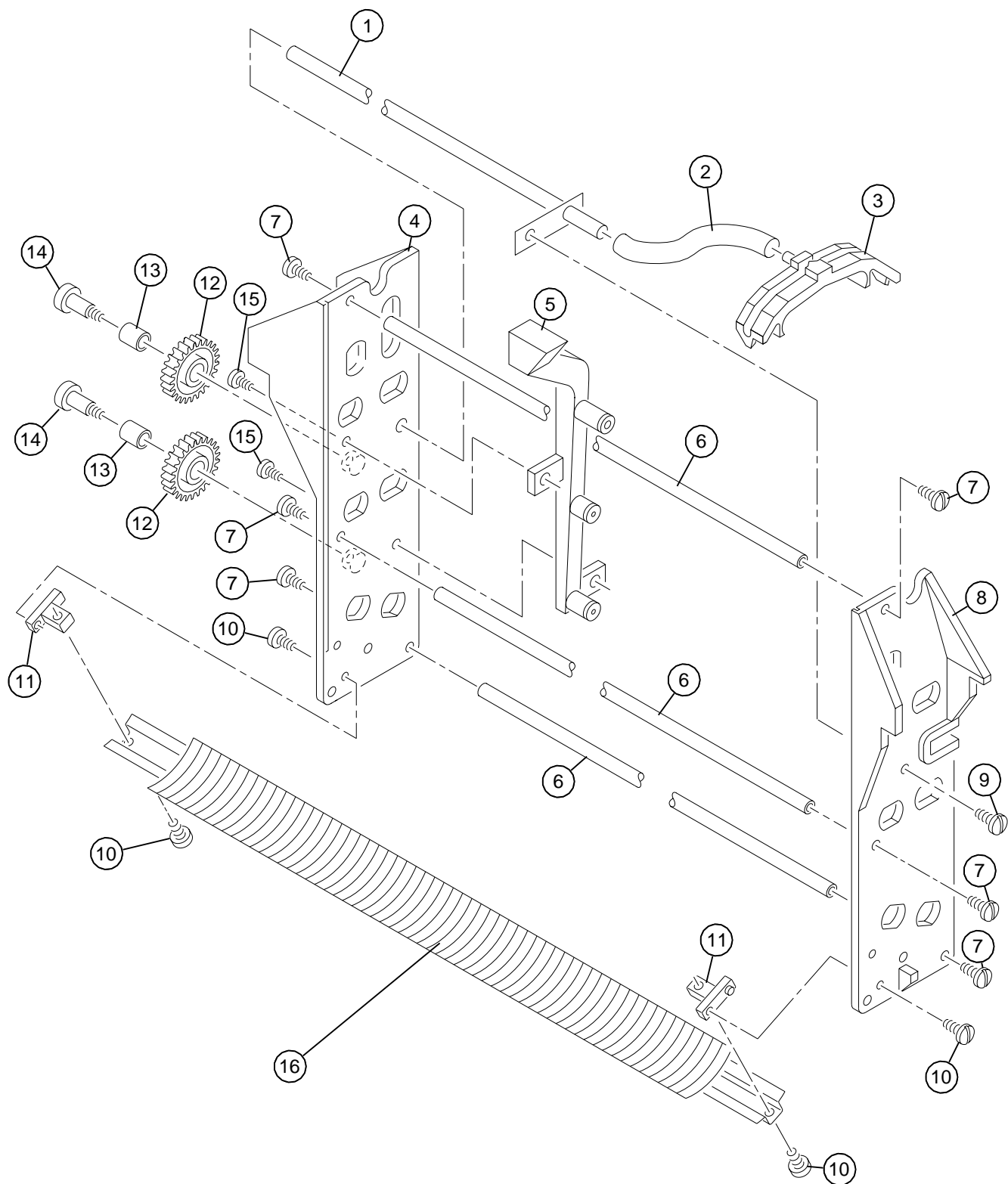
Section 5: Illustrated Parts List for Wash Rack 5B6890



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| Item | Part No. | Description |
|------|----------|--------------------|
| | 5B6890 | Wash Rack Assembly |
| A | 5B6590 | Roller Assembly |
| B | 8B6568 | Roller Assembly |

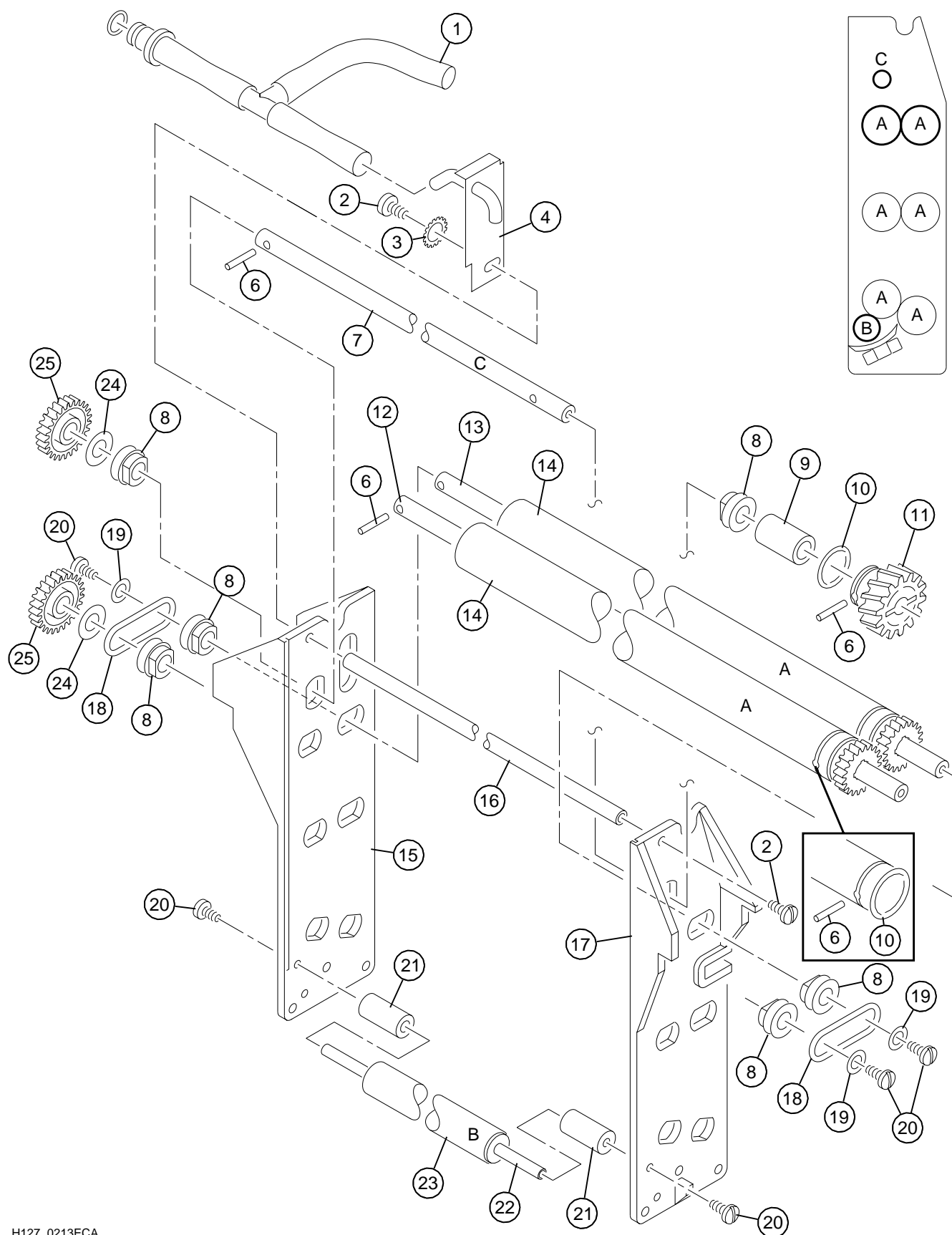
Wash Rack - Guide Shoe and Drive Gear



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H127_0212EA

| Item | Part No. | Description |
|------|----------|--|
| 1 | 1C4384 | Tube - Yoke Supply |
| 2 | 1C4385 | Hose - Yoke |
| 3 | 1C7399 | Yoke and Pin Assembly |
| 4 | 5B6594 | Side Plate - Wash Rack, Non-Drive Side |
| 5 | 5B6585 | Manifold - Water |
| 6 | 458219 | Tie Rod |
| 7 | 852807 | Screw |
| 8 | 5B6593 | Side Plate - Wash Rack, Drive Side |
| 9 | 852682 | Screw |
| 10 | 544267 | Screw |
| 11 | 474596 | Bracket - Guide Shoe |
| 12 | 779028 | Gear |
| 13 | 911725 | Bushing - Idler |
| 14 | 5B6808 | Screw - Shoulder |
| 15 | 852522 | Screw |
| 16 | 5B6565 | Guide Shoe |

Wash Rack - Miscellaneous Parts



H127_0213ECA
H127_0213EA

| Item | Part No. | Description | Notes |
|------|----------|--|----------------|
| 1 | 1C4398 | Tubing Assembly | |
| 2 | 852682 | Screw | |
| 3 | 539180 | Star Washer | |
| 4 | 5B6892 | Bracket - Tubing | |
| 5 | -- | -- | Item not used. |
| 6 | 502464 | Pin | |
| 7 | 1C7366 | Shaft | |
| 8 | 779119 | Bearing | |
| 9 | 5B6589 | Spacer | |
| 10 | 183851 | O-Ring | |
| 11 | 5B6591 | Gear | |
| 12 | 5B6588 | Shaft | |
| 13 | 5B6587 | Shaft | |
| 14 | 5B6590 | Roller Assembly | A |
| 15 | 5B6594 | Side Plate - Wash Rack, Non-Drive Side | |
| 16 | 458219 | Tie Rod | |
| 17 | 5B6593 | Side Plate - Wash Rack, Drive Side | |
| 18 | 1C7107 | Spring - Extension | |
| 19 | 852611 | Washer | |
| 20 | 490097 | Screw | |
| 21 | 953828 | Spacer | |
| 22 | 5B6817 | Shaft | |
| 23 | 8B6568 | Roller Assembly | B |
| 24 | 418775 | Thrust Washer | |
| 25 | 779028 | Gear | |

Publication History

| Print Date | Pub. No. | ECO No. | Affected Pages | File Name | Notes |
|------------|----------|----------|--|-----------------------|--------------------------------|
| 04AUG95 | 8B6658 | 2648-334 | All | ma3058_29.doc | New Modification Instructions. |
| 29JUN96 | 8B6658 | 2592-377 | Front Cover, 2, 4, 6, 11, 13, Back Cover | ma3058_29_29jun96.doc | 1/2 GPM Dole Valve |

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