# LCIT RT5010
## (Machine Code: B834)

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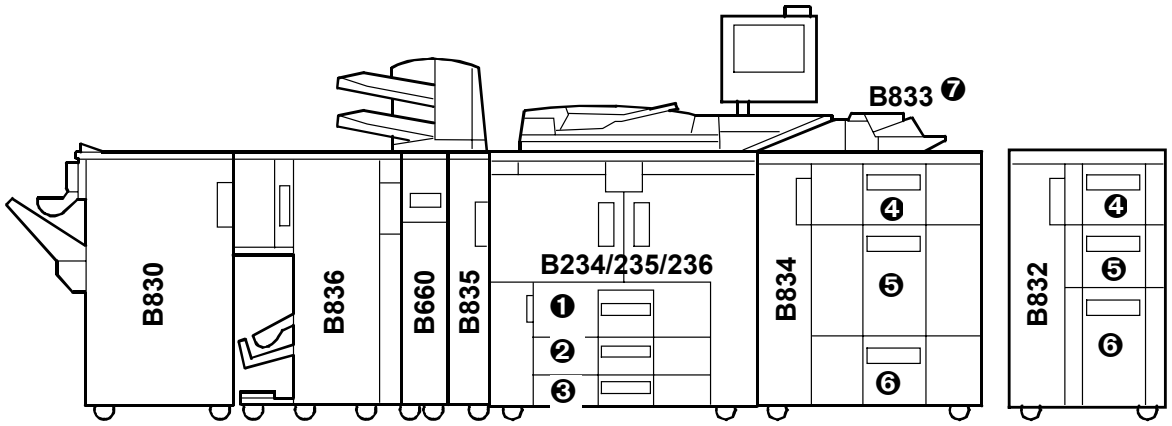
## Tray Naming




B834R901.WMF

| | | |
|---|---|---|
| ❶ | Copier (B234/B235/B236) | 1st Tray |
| ❷ | | 2nd Tray |
| ❸ | | 3rd Tray |
| ❹ | LCT (B832 or B834) | 4th Tray |
| ❺ | | 5th Tray |
| ❻ | | 6th Tray |
| ❼ | Bypass Tray (B833) | 7th Tray |

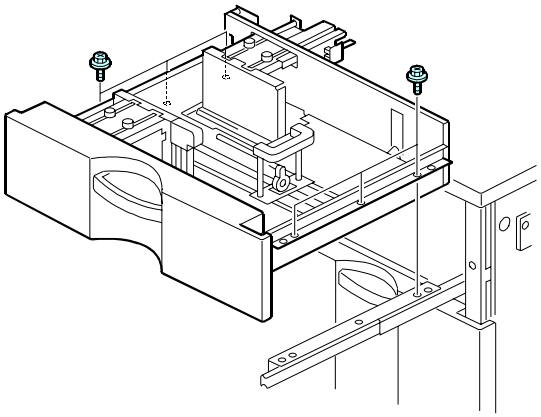
# 1. REPLACEMENT AND ADJUSTMENT

## 1.1 REMOVING TRAYS

**⚠CAUTION**

- **Tray 5 weighs 27 kg (60 lb.) empty. Trays 4 and 6 weigh 20 kg (44 lb.) each empty.**
- **To prevent damage to the tray and personal injury, never attempt to lift a tray alone or without attaching the carrying handles, especially if a tray is loaded with paper.**
- **Two people on each side of the tray should lift the carrying handles together to lift and move the tray.**
- **Never remove the tray if the LCT has not been docked to the copier. Removing the tray while the LCT is standing alone can unbalance the LCT and cause it to fall over.**

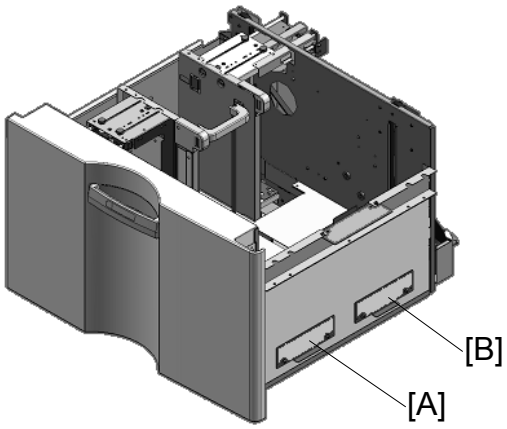
**Important**: Only one set of carrying handles is attached to the side of Tray 5. Follow the procedure below to attach and use these handles to move Tray 4, 5, or 6.



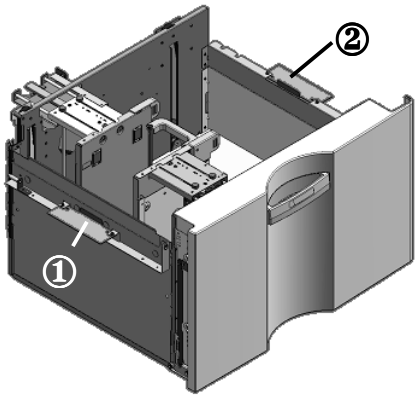
B834R108.WMF

1. Pull the tray [A] out of the LCT until it stops.
2. Remove the screws from the right rail [B] (☞ x3)
3. Remove the screws from the left rail [D] (☞ x3)
   **NOTE:** You do not need to remove screw for the stopper pin bracket at the back of the left rail.

Peripherals



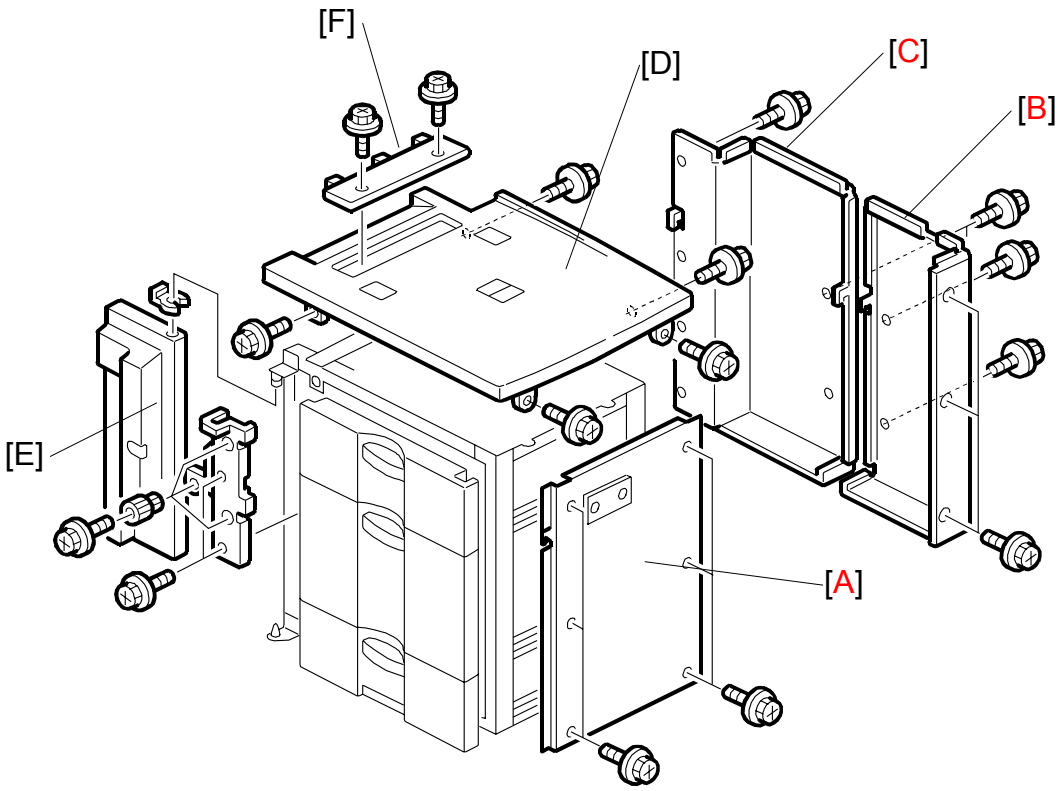

B834R201.BMP




B834R202.BMP

4. Remove carrying handles [A] and [B] from the right side of the tray (☞ x 2 ea.)
5. Use the same screws to attach the carrying handles at ❶ and ❷.
6. With one person on each side of the tray, lift it carefully and remove it from the rails.

# 1.2 FRONT DOOR AND COVERS




B834R101.WMF

**Important:**

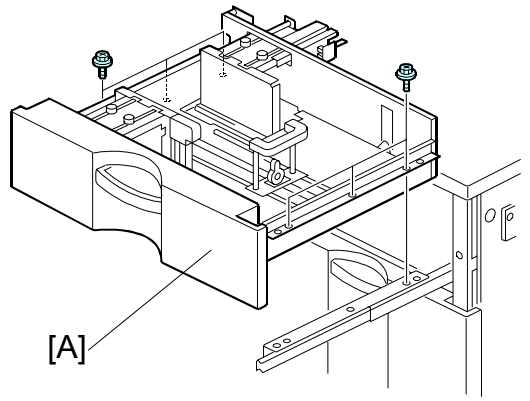
- The frame is held together by 8 blue screws.
- To avoid weakening or warping the shape of the frame, never remove these blue screws.

**NOTE**: The upper inner cover must be removed before the top cover.

- Remove:

[A]: Right cover (☞ x 6).
[B]: Right rear cover (☞ x 6).
[C]: Left rear cover (☞ x 6)
[D]: Top cover (☞ x 5).
[E]: Front door (⌓ x 1).
**NOTE:** While lifting the top cover, remove the snap ring and front door.
[F]: Paper slot cover (☞ x 2).

# 1.3 INNER COVER, PAPER FEED UNIT

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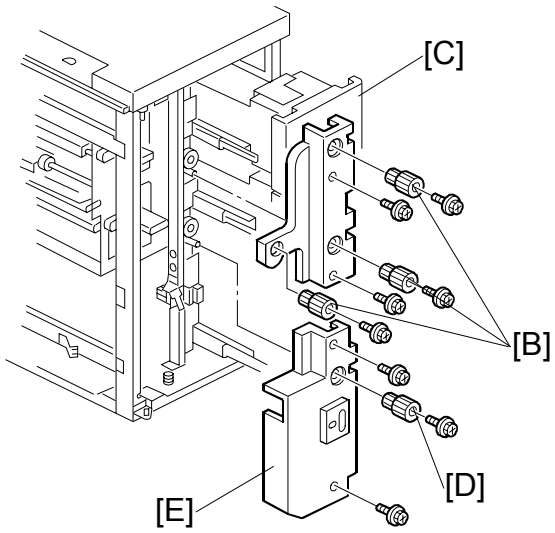
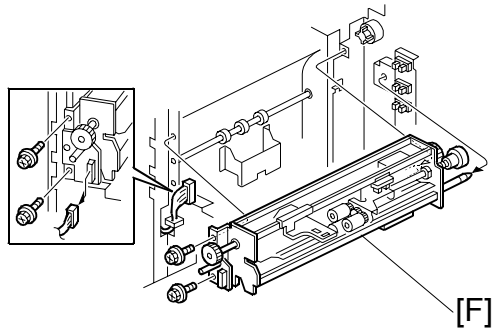



B834R902.WMF



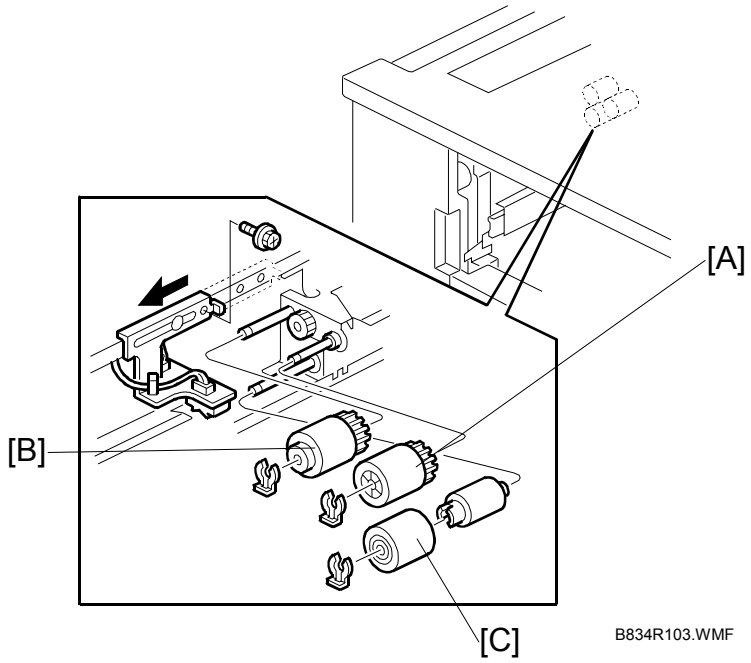

B834R903.WMF

- Open the front door.
- Remove right cover (☛1.2)
- Pull out tray [A]

Remove:

[A] Tray (☛1.1)
[B] Knobs (x3) (x 1ea.)
[C] Upper inner cover ( x2)
[D] Knob ( x1)
[E] Lower inner cover ( x1)
[F] Paper feed unit ( x1, x2)

# 1.4 PAPER FEED ROLLER




Remove:

- Remove the right cover (☛1.2)
- Remove the paper trays. (☛1.1)

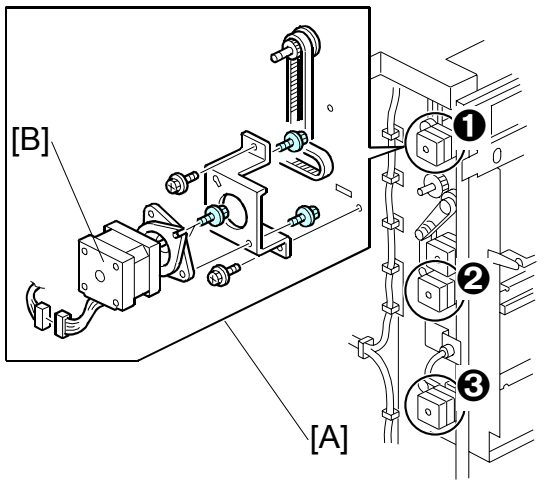
[A] Pick-up roller (⟲ x 1).
[B] Feed roller (⟲ x 1).
[C] Separation roller (⟲ x 1).

**NOTE:** 1) The LCT pick-up and separation rollers are the same as pick-up and separation rollers of the main machine. These rollers are interchangeable.
2) The feed rollers of the LCT and main machine are different because they are designed to rotate in opposite directions. The feed rollers of the LCT and main machine are not interchangeable.
3) Never touch the surface of the rollers with bare hands.

- Clear the PM counters for the new rollers (see Section "2. Preventive Maintenance).

# 1.5 LCT MOTORS

## 1.5.1 TRANSPORT MOTORS, LCT EXIT MOTOR

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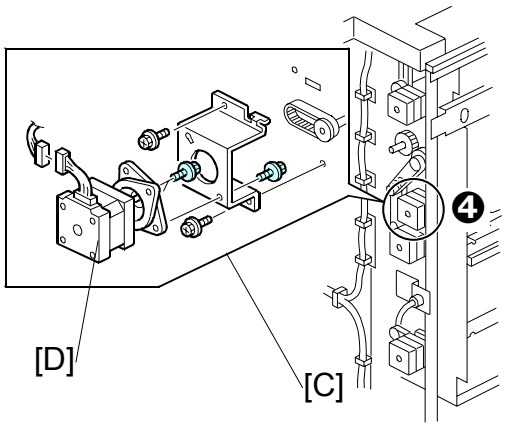



B834R109A.WMF

### *4th, 5th, and 6th Transport Motors* ❶, ❷, ❸

Remove:

- Left rear cover (☛1.2)

[A] Motor unit (☞ x1, Timing belt x1, 🔩 x2)
[B] Motor (🔩 x2)

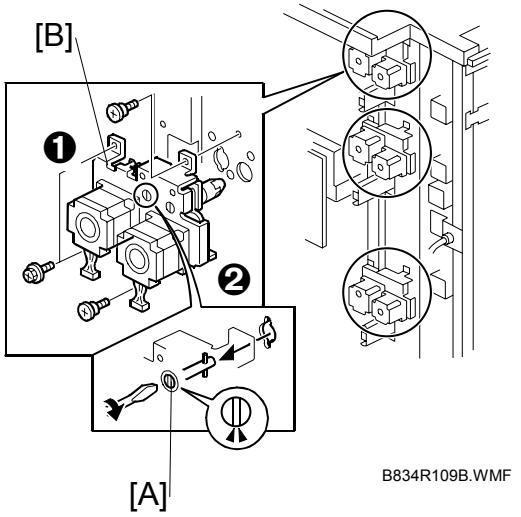
### *LCT Exit Motor* ❹

Remove:

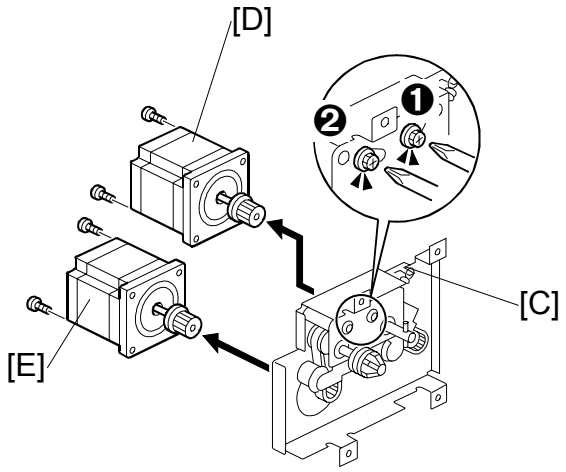
- Left rear cover (☛1.2)

[C] Motor unit (☞ x1, Timing belt x1, 🔩 x3)
[D] Motor (🔩 x2)

## 1.5.2 FEED MOTORS/GRIP MOTORS




B834R109B.WMF




B834R109C.WMF

Each paper feed unit has a pick-up feed motor ❶ and a grip motor ❷. The removal procedure is the same for each feed tray.

1. Remove the left rear cover (☛1.2)
2. Use a small screwdriver to turn the shaft [A] so the pin can slip out of the keyhole.

Remove:

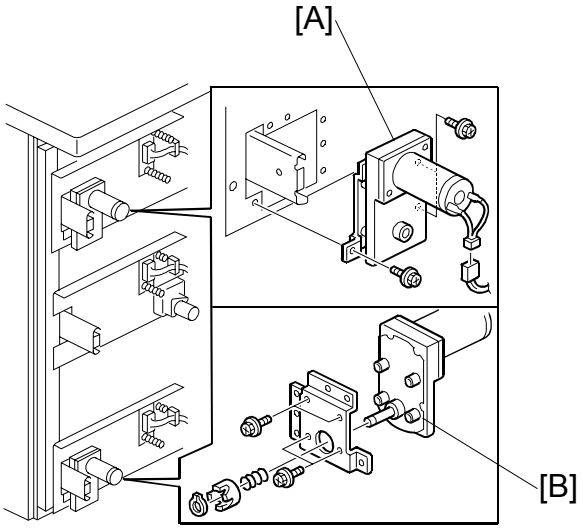
[B] Motor unit (x4, x2, x2)
[C] Springs (x2). First, loosen the screws (x2) ❶, ❷.
[D] Paper feed motor (x2, Timing belt x1)
[E] Grip motor (x2, Timing belt x1)

**Reinstallation**

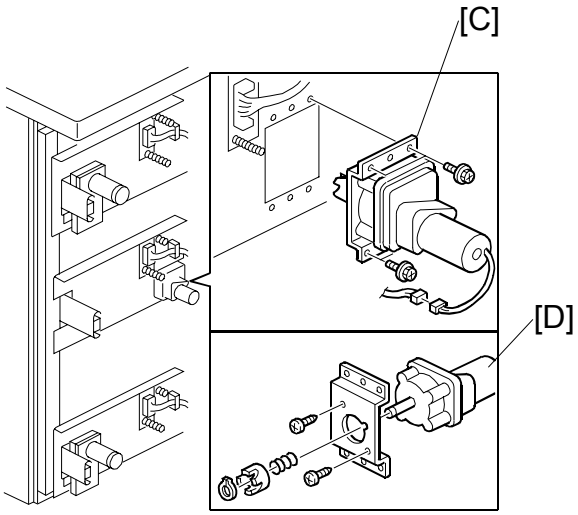
- Attach the tension spring, then tighten the screws ❸ to tighten the belts.

Peripherals

## 1.5.3 LIFT MOTORS




B834R109D.WMF




B834R109E.WMF

### *4th, 6th Lift Motors*

The procedure for removing the 4th and 6th lift motors is the same.

Remove:

- Rear cover. (☛1.2)

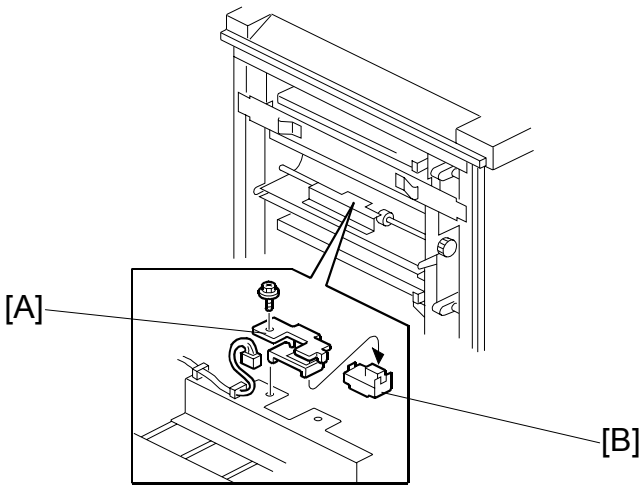
[A]: Motor unit (☞ x2, 🖐 x1).
[B]: 4th (or 6th) lift motor (☞ x4, Clip x1, Coupling x1, Spring x1)

### *5th Lift Motor*

- Rear cover. (☛1.2)

[C]: Motor unit ☞ x4, 🖐 x1)
[D]: 5th lift motor (☞ x2, Clip x1, Coupling x1, Spring x1)

# 1.6 LCT EXIT SENSOR




B834R105.WMF

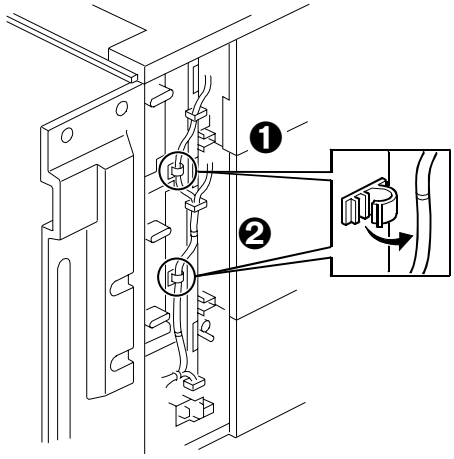
- Disconnect the LCT from the copier.

[A] Exit sensor unit( x 1, x 1).

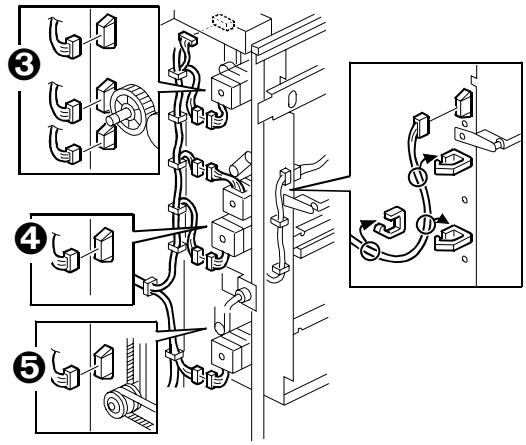
[B] Exit sensor

# 1.7 PAPER PATH SENSORS

## 1.7.1 REMOVING THE VERTICAL FEED UNIT



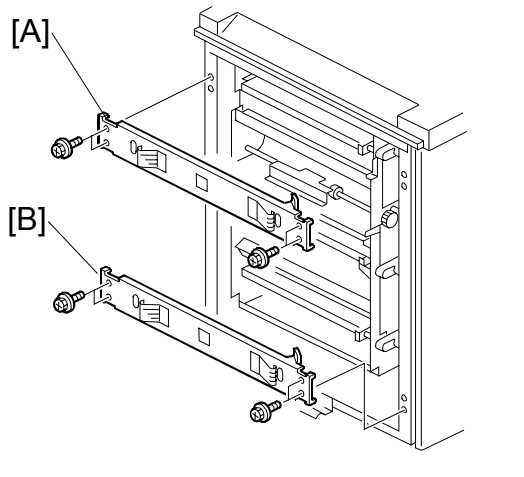

B834R105A.WMF



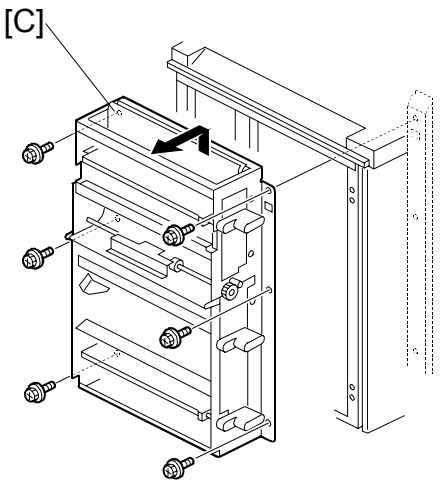

B834R105B.WMF

- Open the front door.
- Remove:
  - Upper inner cover (☛1.3)
  - Lower inner cover (☛1.3)
  - Left rear cover (☛1.2)

1. Disconnect the harness clamps ❶ and ❷ (☭ x2).
2. Disconnect the motor harnesses ❸, ❹, ❺ (☭ x3, ☭ x11).



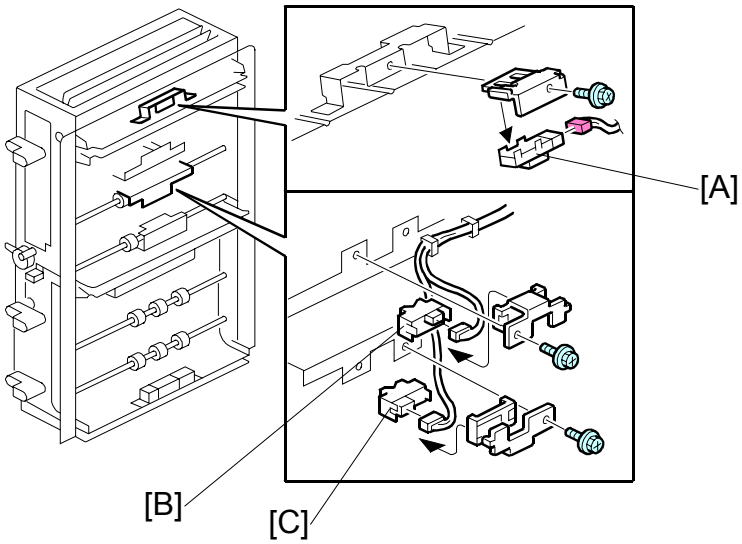

B834R105C.WMF




B834R105D.WMF

3. Remove:
   [A]: Upper stay (☞ x2)
   [B]: Lower stay (☞ x2)
   [C]: Vertical feed unit (☞ x6)

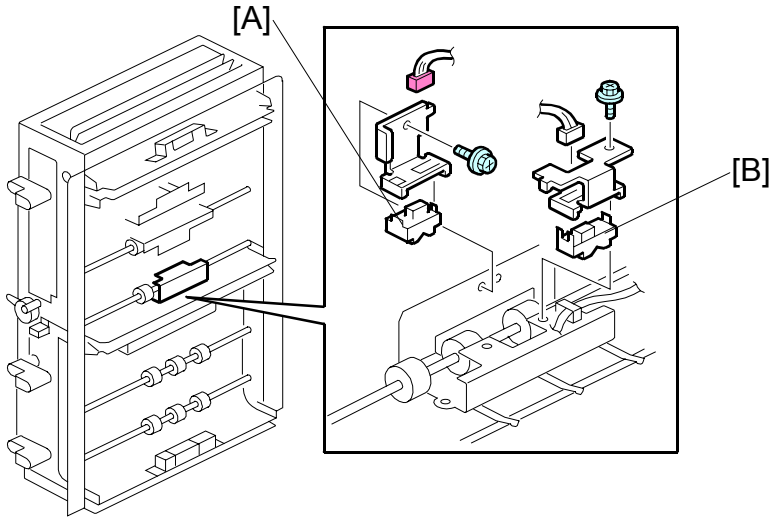
## 1.7.2 4TH TRANSPORT, 4TH RELAY UPPER, LOWER SENSORS




B834R105E.WMF

1. Remove the vertical feed unit. (☛1.7.1)
2. Remove:
   [A]: 4th Transport sensor (x1, x1)
   [B]: 4th Relay sensor – upper (x1, x1)
   [C]: 4th Relay sensor – lower (x1, x1)

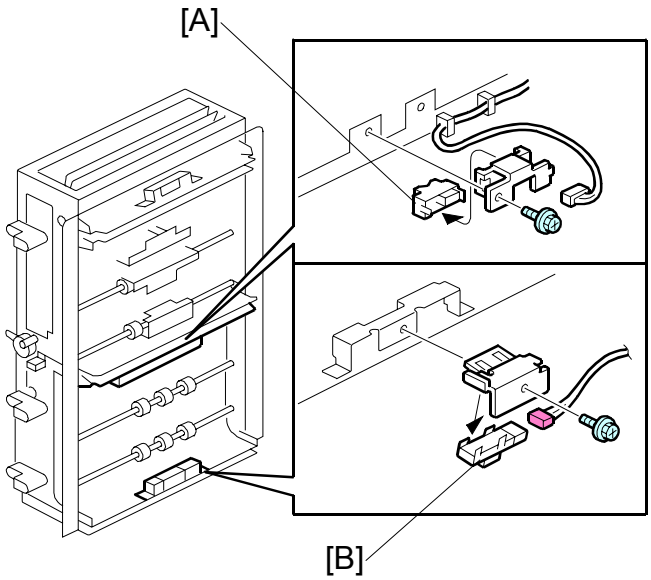
## 1.7.3 5TH RELAY SENSOR, 5TH TRANSPORT SENSOR




B834R105F.WMF

1. Remove the vertical feed unit. (☛1.7.1)
2. Remove:
   [A] 5th Relay sensor (☞ x1, ☞ x1)
   [B] 5th Transport sensor (☞ x1, ☞ x1)

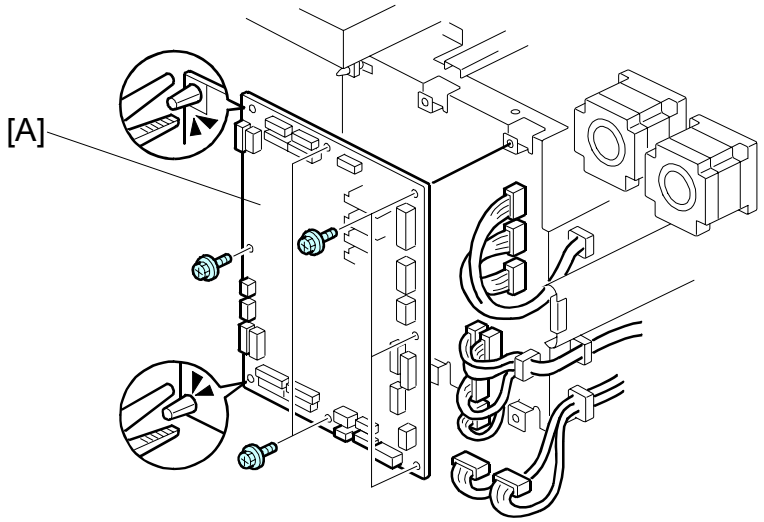
## 1.7.4 6TH RELAY SENSOR, 6TH TRANSPORT SENSOR




B834R105G.WMF

- Remove the vertical feed unit. (☛1.7.1)
  [A] 6th Relay sensor (x1, x1)
  [B] 6th Transport sensor (x1, x1)

# 1.8 MAIN CONTROL BOARD

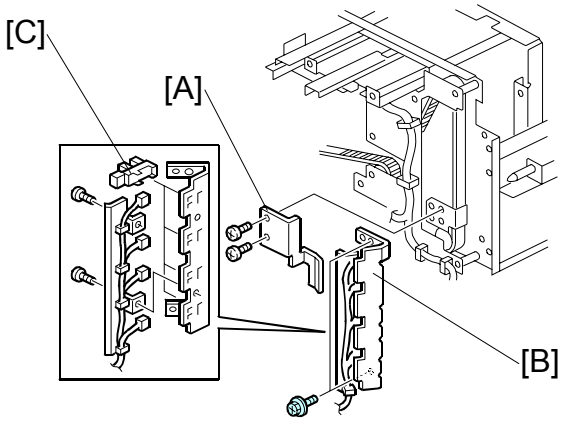



B834R105H.WMF

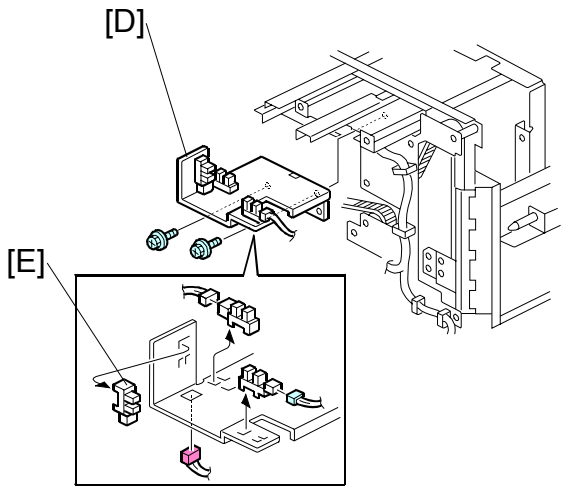
- Remove the rear covers. (☛1.2)

[A] Main control board (🖉 x6, Standoffs x2, 🖑 x All).

# 1.9 PAPER HEIGHT, PAPER WIDTH SENSORS




B834R106.WMF




B834R106A.WMF

**Paper Height Sensors**

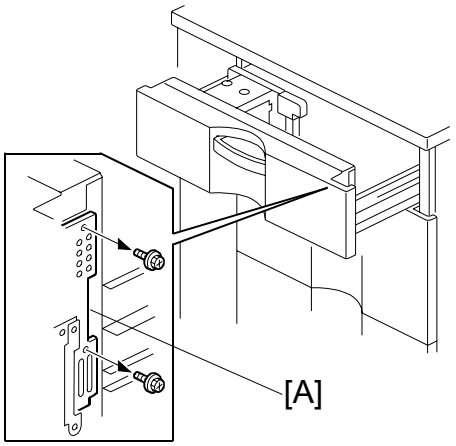
Remove:

- Rear left cover. (☛1.2)
  - [A] Paper height sensor unit (x 2, x 4).
  - [B] Clamp bracket (x 2)
  - [C] Paper height sensors (x4) (Hooks x 2 each)

**Paper Width Sensors**

- Rear left cover. (☛1.2)
  - [D] Paper width sensor unit (x2, x3)
  - [E] Paper width sensors (x3) (Hooks x2 each)

# 1.10 SIDE REGISTRATION ADJUSTMENT

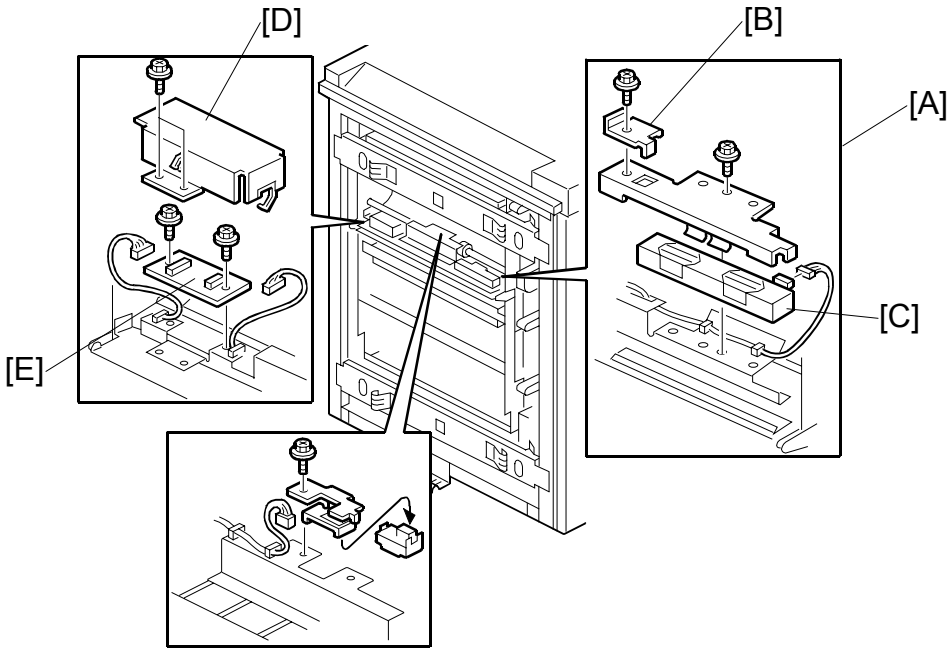



B834R112.WMF

Normally the side registration of the image can be adjusted with SP1002 004~006 (Side-to-Side Registration – Tray 4, 5, 6). When the punch hole positions are not aligned from a particular feed station, adjust the side registration by changing the tray cover position for the tray, as described below. Then adjust the side registration of the image with the SP1002.

1. Pull out the tray.
2. Change the screw positions [A] at both the right and left sides as shown.
   **NOTE:** Adjustment range: 0 ± 2.0 mm adjustment step: 1.0 mm/step

# 1.11 IMAGE POSITION BOARD AND SENSOR




B834R113.WMF

**Image Position Sensor**

- Disconnect the LCT from the copier.

[A] Image position sensor unit (☞ x2, ☞ x1)
[B] Stopper (☞ x1)
[C] Image position sensor

- After replacing the image position sensor do the procedure for image position sensor adjustment. (☛1.12)

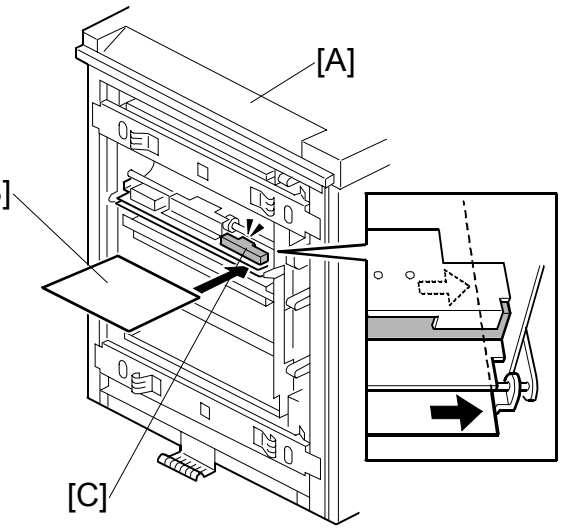
**Image Position Sensor Board**

- Disconnect the LCT from the copier.

[D] Cover (☞ x2, ☞ x2)
[E] Image position sensor board (☞ x2, ☞ x2, ☞ x2)

# 1.12 ADJUSTING IMAGE POSITION SENSOR STRENGTH AND SIDE-TO-SIDE REGISTRATION

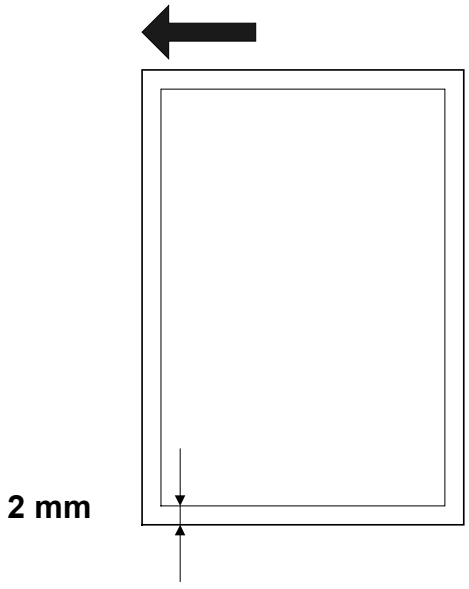
1. Turn off the main power switch.
2. Disconnect the LCT from the mainframe.
3. With the LCT [A] separated from the mainframe, reconnect the LCT cable to the mainframe.
4. Turn on the main power switch.
5. Insert one sheet of plain white paper [B] in the paper path.
6. Make sure that the paper covers the entire area below the image position sensor (CIS) [C].
7. Enter the SP mode and do **SP1910 002** (CIS Image Position Adjustment: LED Strength - LCT). This calibrates the amount of light to be emitted from the CIS.




B834R904.WMF

8. Do S**P1909 002** (CIS Image Position Adjustment: PWM After Adjustment - LCT).
   - If the displayed value is between 20 (14h) and 40 (28h), the CIS is calibrated successfully. (The display is in hexadecimal code.)
   - If the value is outside this range, do **SP 1910 002** and **1909 002** again. If the value does not come between 20 and 40, the CIS may be defective.
9. Exit the SP mode.
10. Reinstall the LCT to the side of the copier.
11. Push [User Tools]> [Adjust Settings for Operators].
12. Do **SP1911** for Trays 4, 5, 6, 7 and set the value for each tray to "0" (OFF).
13. Exit from SP 1911 and return to the SP mode menu.

14. Adjust the image positions in the main scan direction.
    - Do **SP2902 003**, select Pattern **27**, then print the trimming pattern.
    - Do **SP1002** and adjust the image position in the main scan direction for Trays 4, 5, 6, and 7.
    - Print the trimming pattern from each tray of the LCT and from the bypass tray (if installed).
    - To do this, touch "Copy Window" in the SP display, select a tray, then push [Start].
    - The distance of the test pattern line from the paper edge for each tray must be 2 mm. If it is not 2 mm, adjust with **SP1002 004** to **007**, depending on which tray is not within the specified 2 mm.
15. Do **SP1912 002** (CIS Image Position Adjustment: Normal Paper). This sets the CIS for operation with standard copy paper.
16. Exit the SP mode.
17. Push [User Tools]> [Adjust Settings for Operators].
18. Once again, do **SP1911** (CIS Image Position Adjustment: Feed Setting) and reset the values for Trays 4, 5, 6, and 7 to "1" (ON).

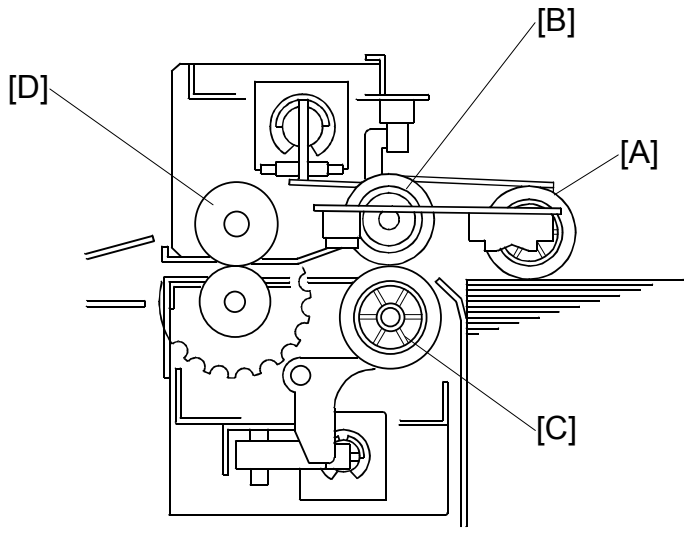



B834R905.WMF

# 2. DETAILED DESCRIPTIONS

## 2.1 PAPER FEED

### 2.1.1 PAPER FEED ROLLERS




B834D930.WMF

This LCT has three paper tray feed stations:

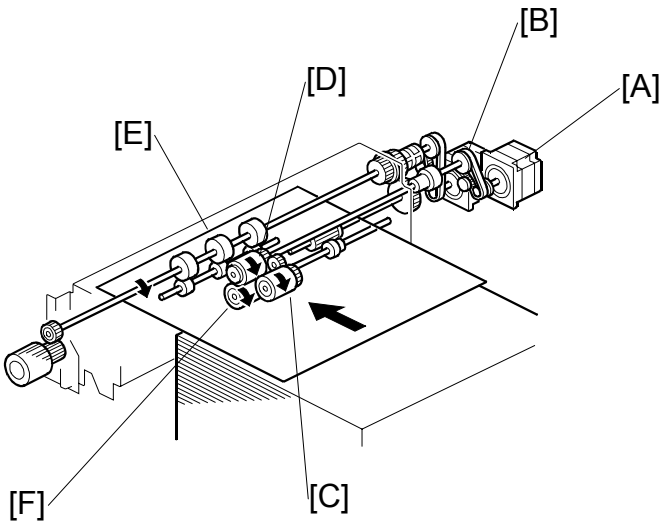
The 4th and 6th tray each hold 1,000 sheets of paper. The 5th tray holds 2,000 sheets of paper. Total: 4,000 sheets

Each tray contains four rollers:

[A] Pick-up roller
[B] Paper feed roller
[C] Separation roller
[D] Grip roller

**NOTE:** The pick-up roller, paper feed roller, and separation roller are a standard FRR paper feed system.

## 2.1.2 PAPER FEED MOTORS




B834D931.WMF

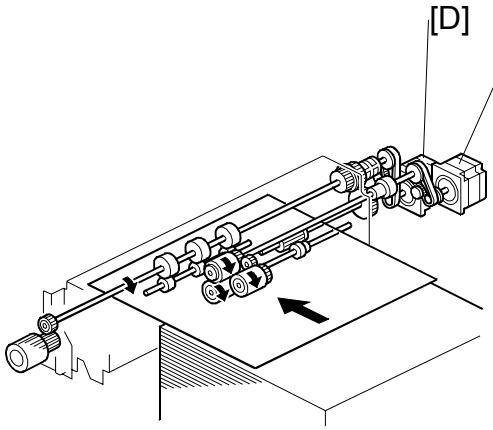
Two stepper motors control the paper feed drive:

[A] Paper feed motor
[B] Grip motor

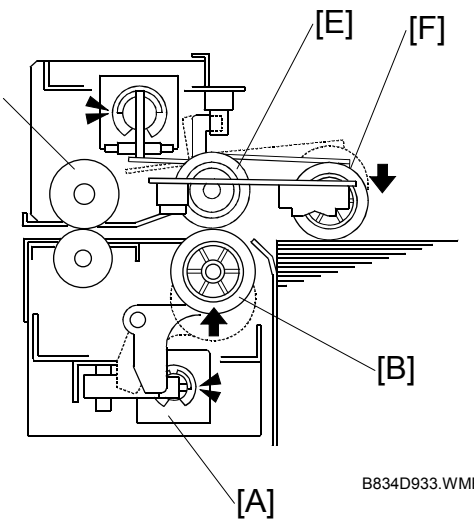
The paper feed motor drives the pick-up roller [C] and the paper feed roller [D].

The grip motor drives the grip roller [E] that feeds the paper out of the tray, and the separation roller [F].

## 2.1.3 PAPER SEPARATION




B834D932.WMF




B834D933.WMF

When a paper feed station is not selected:

- Separation roller solenoid [A] is de-activated
- Separation roller [B] turns freely.

When the paper feed station is selected for a job:

- Paper feed motor [C] and grip motor [D] turn on.

When the feed motor [C] turns on, it drives the feed roller [E]. It also drives the pick-up roller [F] because the pick-up roller is linked to the feed roller by an idle gear.

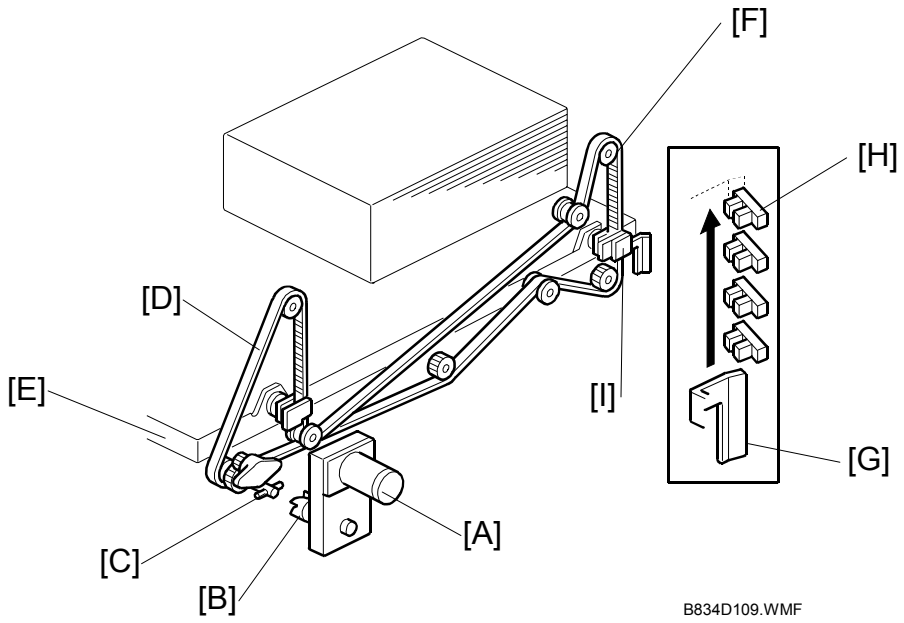
When the separation solenoid [A] turns on, the separation roller [B] contacts the paper feed roller [E] and turns with the feed roller, unless more than one sheet of paper is fed. The three trays of the LCT unit use the standard FRR mechanism.

When the paper feed motor turns on, the pick-up solenoid turns on and the pick-up roller [F] lowers until it contacts the top sheet of the paper stack and then sends it to the paper feed and separation rollers.

When the paper feed sensor detects the leading edge of the paper, the paper feed motor switches off, the pick-up roller lifts, and the grip rollers [G] feed the paper out of the tray.

# 2.2 PAPER DETECTION/LIFT

## 2.2.1 MECHANISM




### Detection

When the tray set in the machine, the tray is detected by the drawer connector on the back side of the tray.

### Lift

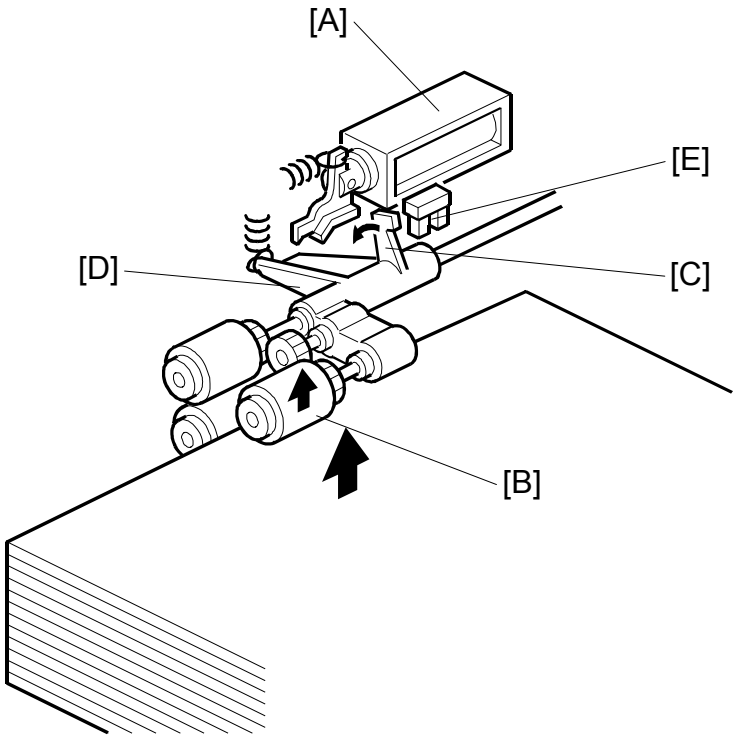
When the machine detects that the paper tray is set in the machine:

- The tray lift motor [A] rotates forward
- Coupling gear [B] on the tray lift motor engages pin [C] of the lift drive shaft.
- The tray drive belts [D], connected to the tray bottom plate [E], are driven by the tray lift motor via the lift drive shaft and tray lift pulleys [F].
- When the lift motor rotates forward, the tray bottom plate [E] rises. The tray rises until the top of the paper stack pushes up the pick-up roller and the lift sensor in the feed unit is de-activated.
- When the actuator [G] on the rear end of the bottom plate activates the paper height sensors [H], the remaining paper capacity is detected.

When the tray is pulled out:

- Coupling gear [B] separates from pin [C] and the tray bottom plate goes down.
- A damper [I] slows the descent of the bottom plate. For the B834, all three trays have this damper.

## 2.2.2 LIFT SENSOR

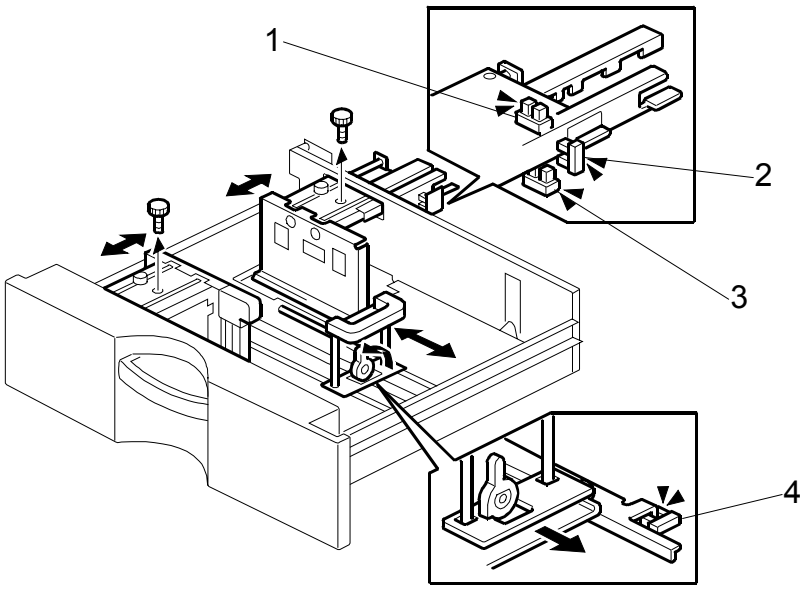



B834D934.WMF

When the lift motor turns on, the pick-up solenoid [A] activates to lower the pick-up roller [B]. When the top sheet of paper reaches the proper paper feed level, the paper pushes up the pick-up roller and the actuator [C] on the pick-up roller supporter [D] de-activates the lift sensor [E] to stop the lift motor.

After several paper feeds, the paper level gradually lowers, then the lift sensor is activated and the lift motor turns on again until the lift sensor is de-activated again.

# 2.3 PAPER SIZE DETECTION




B834D111.WMF

1. 4th Paper Width Sensor 3
2. 4th Paper Width Sensor 2
3. 4th Paper Width Sensor 1
4. 4th Paper Length Sensor

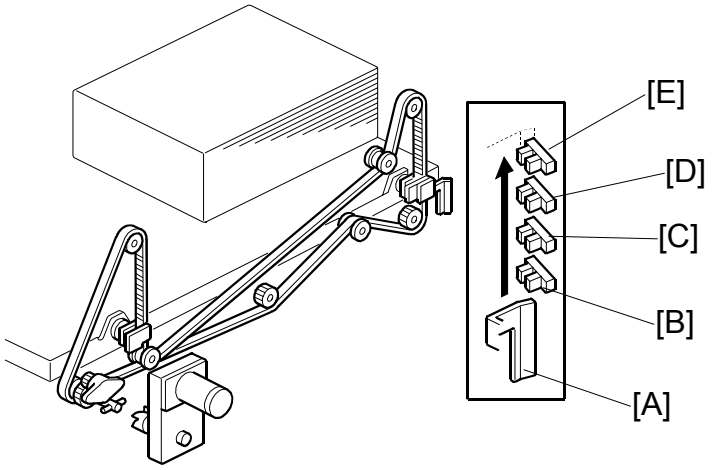
The 4th, 5th, and 6th trays have three paper width sensors and one paper length sensor. The illustration above shows how these sensors are arranged in the 4th tray.

This table describes how the three width sensors and one length sensor are used to determine the paper size in the 4th, 5th, and 6th paper trays.

| Paper Size | | Width Sensors | | | Length Sensor | Area | |
|---|---|---|---|---|---|---|---|
| | | W1 | W2 | W3 | L1 | NA | EU |
| Large Size | 12"×18" | L | L | L | H | YES | YES |
| | 13"×19" | | | | | NO | NO |
| | 320×450 mm | | | | | NO | NO |
| A3 SEF | 297×420 mm | L | L | H | H | YES | YES |
| A4 LEF | 297×210 mm | L | L | H | L | YES | YES |
| DLT SEF | 11"×17" | L | H | L | H | YES | YES |
| LT LEF | 11"×8½" | L | H | L | L | YES | YES |
| B4 SEF | 257×364 mm | L | H | H | H | YES | YES |
| B5 LEF | 257×182 mm | L | H | H | L | YES | YES |
| A4 SEF | 210×297 mm | H | L | L | H | NO | YES |
| LT SEF | 8½"×11" | H | L | L | H | YES | NO |
| A5 LEF | 210×148 mm | H | L | L | L | NO | YES |
| HLT LEF | 8½"×5½" | H | L | L | L | YES | NO |
| B5 SEF | 182×257 mm | H | L | H | H | NO | NO |
| F SEF | 8"×13" | H | L | H | H | YES | YES |
| A5 SEF | 148×210 mm | H | H | L | L | YES | YES |
| HLT SEF | 5½"×8½" | H | H | H | L | YES | YES |

YES: Detected automatically
NO: Not detected automatically. Requires size setting change with the "Tray Paper Setting" key on the copier operation panel to detect the desired paper size.
H: Sensor OFF
L: Sensor ON

# 2.4 REMAINING PAPER DETECTION




B834D109.WMF

[A] Paper Height Sensor Actuator
[B] 4th Paper Height Sensor 4
[C] 4th Paper Height Sensor 3
[D] 4th Paper Height Sensor 2
[E] 4th Paper Height Sensor 1 (Near End)

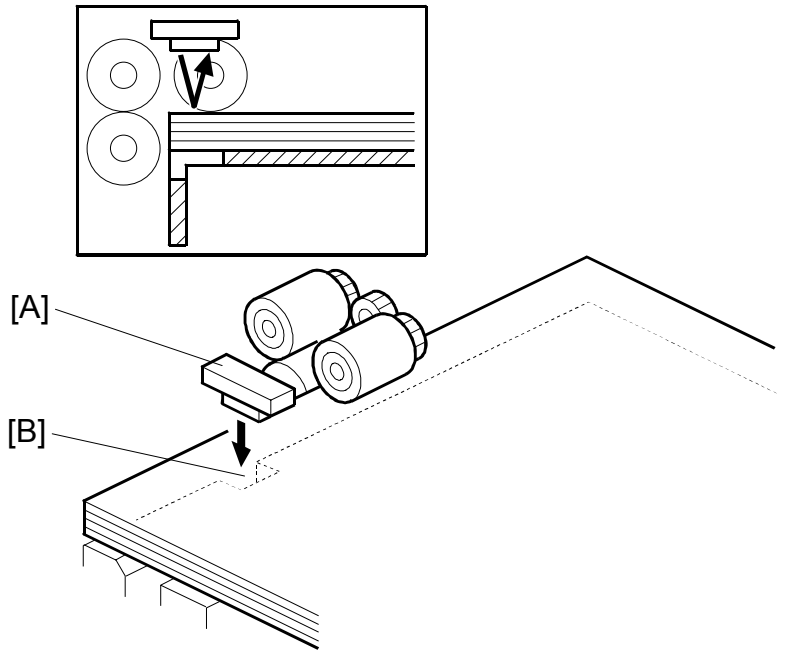
Each tray has four paper height sensors. The illustration above shows the paper height sensors in the 4th tray. This arrangement is duplicated in the 5th and 6th trays.

The amount of paper remaining in the tray is detected by the three paper height photo-interrupter sensors on the left rail as the bottom plate rises. Five states, determined by the position of the actuator [A] are possible.

1. With the actuator [A] below paper height sensor 4 [B], no sensor is actuated and the display indicates 100%.
2. When the actuator passes paper height sensor 4 [B] , the display indicates 70% of the paper supply remaining.
3. When the actuator passes paper height sensor 3 [C], the display indicates 30% of the paper supply remaining.
4. When the actuator passes paper height sensor 2 [D], the display indicates 10% of the paper supply remaining.
   **NOTE:** When the actuator enters the gap of the near end sensor [E], the machine signals near end.

Finally, when the last sheet feeds, the paper end sensor signals that the tray is empty.

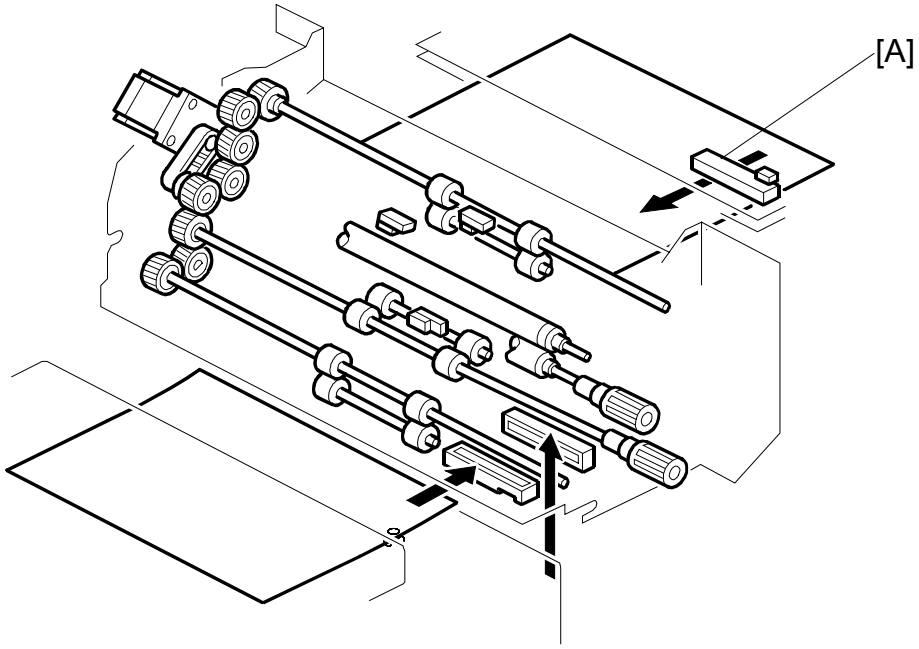
## 2.5 PAPER END DETECTION




B834D935.WMF

The paper end sensor [A] detects the top sheet of the paper in the tray by monitoring the reflected light. When the paper tray runs out of paper, the paper end sensor does not receive the reflected light due to the cutout [B]. Then, the tray lift motor rotates backwards 2 seconds to drop the tray bottom plate.

# 2.6 IMAGE POSITION CORRECTION




B834D936.WMF

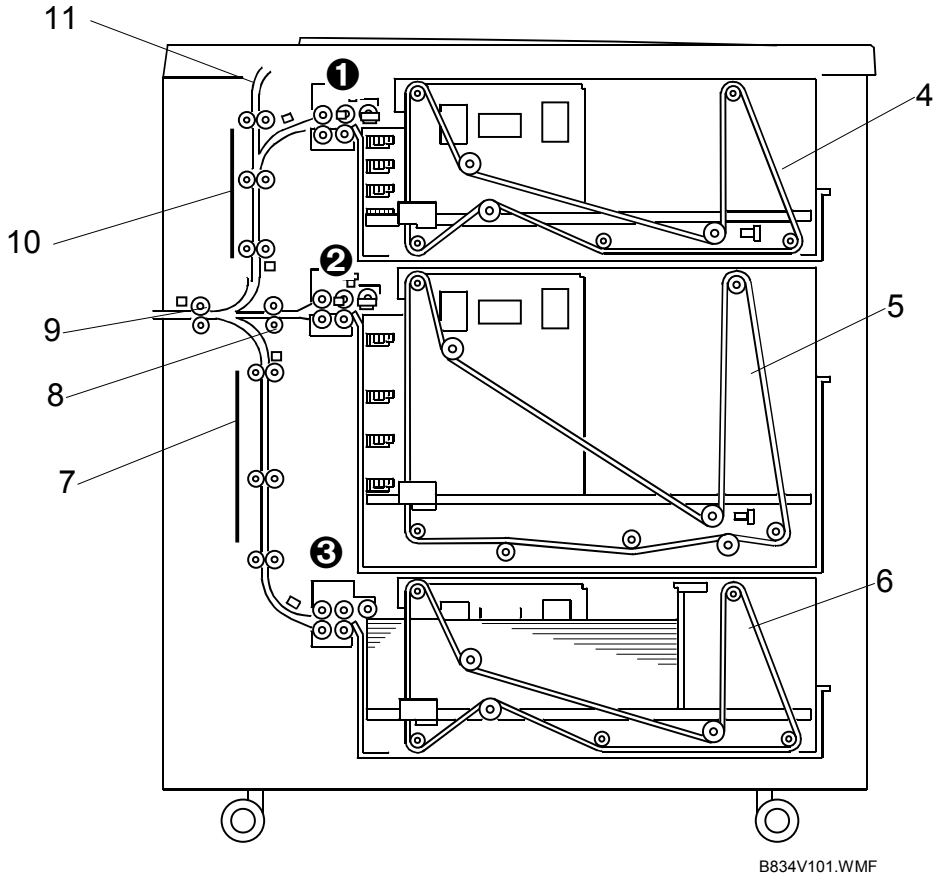
The image position sensor [A] is located in the LCT paper path above the paper path and in front of the LCT exit rollers. (This sensor is mounted on its own control board.)

The sensor is a CIS (Contact Image Sensor). It checks the side edges of each sheet as it passes, and feeds this information back to the machine.

If the side-to-side registration of the paper is slightly out of alignment, the machine will correct the image position when the laser writes the image on the surface of the drum. This function does not correct the position of the paper.

# 3. OVERALL MECHANICAL INFORMATION

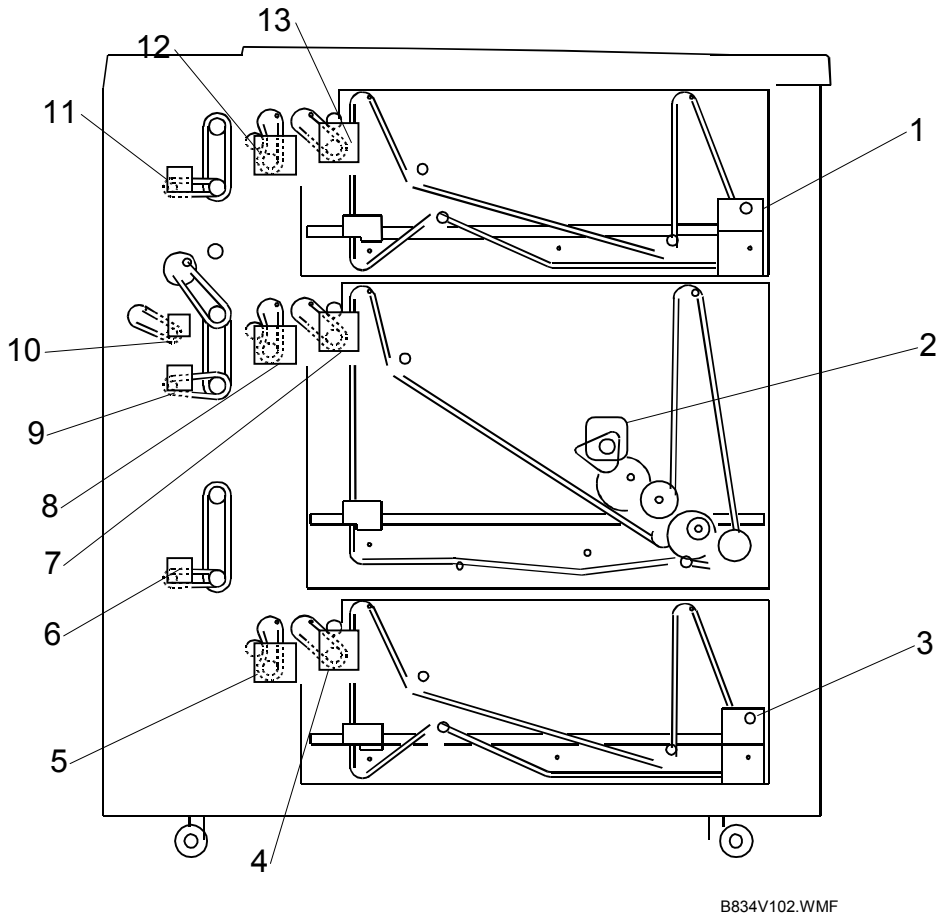
## 3.1 MECHANICAL COMPONENT LAYOUT




1. 4th Paper Feed Unit*[1]
2. 5th Paper Feed Unit
3. 6th Paper Feed Unit
4. 4th Tray Drive Belt
5. 5th Tray Drive Belt
6. 6th Tray Drive Belt
7. Lower Transport Rollers
8. Horizontal Transport Roller
9. LCT Exit roller
10. Upper Transport Rollers
11. Feed Slot (from Bypass Tray)

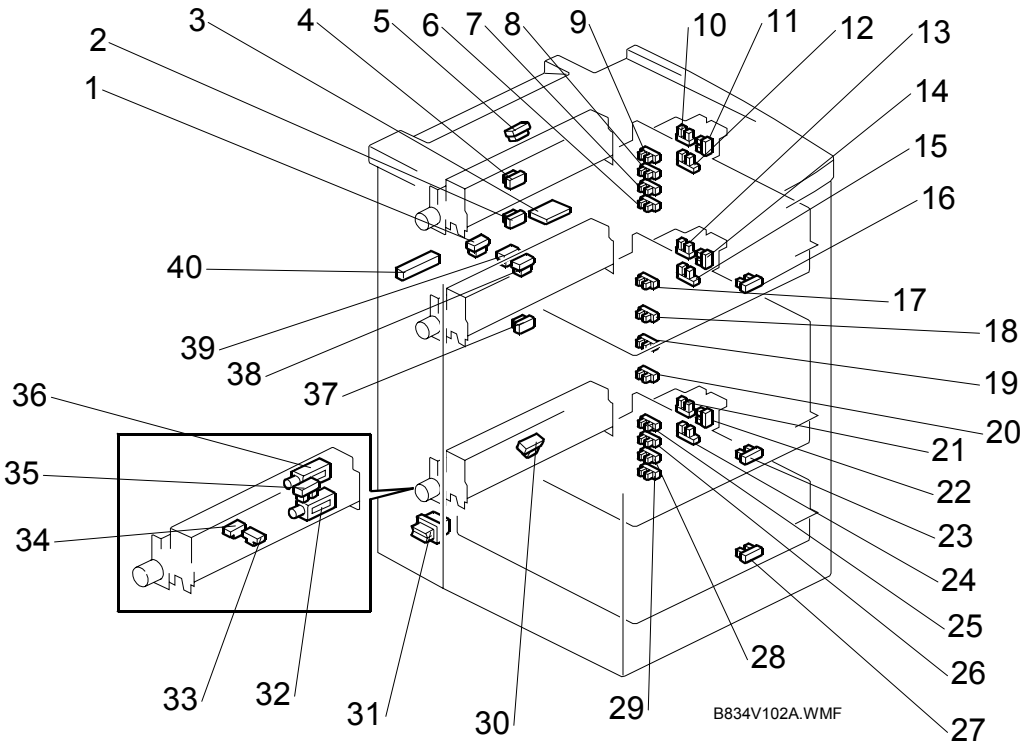
*[1] Each feed unit has 1 paper feed motor that drives the pick-up roller and paper feed roller, and 1 grip motor that drives the separation roller and grip roller.

## 3.2 DRIVE LAYOUT

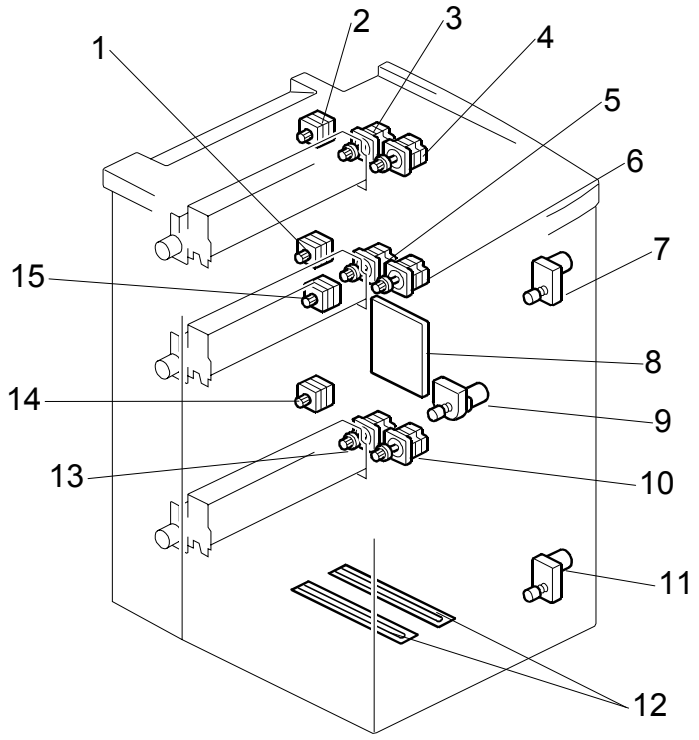



1. 4th Lift Motor
2. 5th Lift Motor
3. 6th Lift Motor
4. 6th Paper Feed Motor
5. 6th Grip Motor
6. 6th Transport Motor
7. 5th Paper Feed Motor
8. 5th Grip Motor
9. 5th Transport Motor
10. LCT Exit Motor
11. 4th Transport Motor
12. 4th Grip Motor
13. 4th Paper Feed Motor

# 3.3 ELECTRICAL COMPONENTS



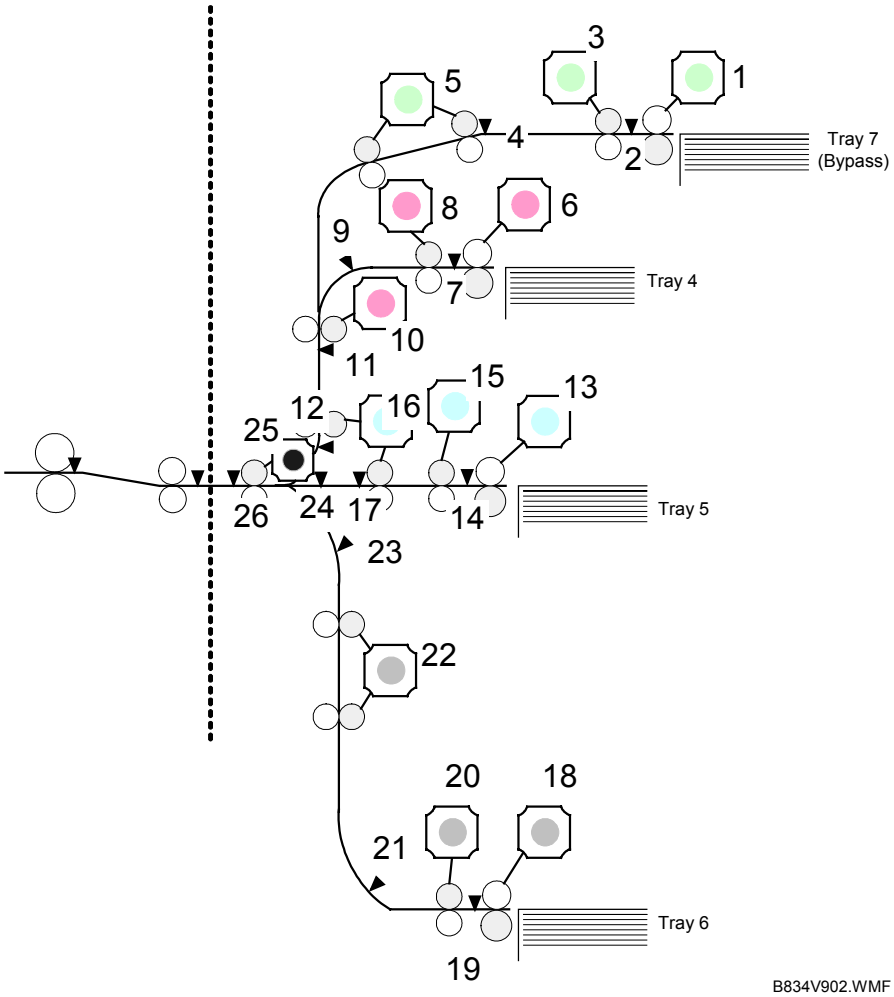

1. LCT Exit Sensor
2. 4th Relay Sensor
3. Image Position Sensor Board
4. 4th Relay Sensor - Upper
5. 4th Transport Sensor
6. 4th Paper Height Sensor 4
7. 4th Paper Height Sensor 3
8. 4th Paper Height Sensor 2
9. 4th Paper Height Sensor 1
10. 4th Paper Width Sensor 3
11. 4th Paper Width Sensor 2
12. 4th Paper Width Sensor 1
13. 5th Paper Width Sensor 3
14. 5th Paper Width Sensor 2
15. 5th Paper Width Sensor 1
16. 4th Paper Length Sensor
17. 5th Paper Height Sensor 4
18. 5th Paper Height Sensor 3
19. 5th Paper Height Sensor 2
20. 5th Paper Height Sensor 1
21. 6th Paper Width Sensor 3
22. 6th Paper Width Sensor 2
23. 5th Paper Length Sensor
24. 6th Paper Width Sensor 1
25. 6th Paper Height Sensor 4
26. 6th Paper Height Sensor 3
27. 6th Paper Length Sensor
28. 6th Paper Height Sensor 2
29. 6th Paper Height Sensor 1
30. 6th Transport Sensor
31. Door Safety Switch
32. 6th Separation Solenoid
33. 6th Paper End Sensor
34. 6th Paper Feed Sensor
35. 6th Lift Sensor
36. 6th Pick-up Solenoid
37. 6th Relay Sensor
38. 5th Transport Sensor
39. 5th Relay Sensor
40. LCT Image Position Sensor




B834V102B.WMF

1. 5th Transport Motor
2. 4th Transport Motor
3. 4th Grip Motor
4. 4th Paper Feed Motor
5. 5th Grip Motor
6. 5th Paper Feed Motor
7. 4th Lift Motor
8. Main Control Board
9. 5th Lift Motor
10. 6th Paper Feed Motor
11. 6th Lift Motor
12. Anti-Condensation Heaters (Options)
13. 6th Grip Motor
14. 6th Transport Motor
15. LCT Exit Motor

## 3.4 A3/DLT LCT B834 LAYOUT (WITH BYPASS)




1. Paper Feed Motor Bypass)
2. Paper Feed Sensor Bypass)
3. Grip Motor Bypass)
4. Transport Sensor Bypass)
5. Transport Motor Bypass)
6. 4th Paper Feed Motor
7. 4th Paper Feed Sensor
8. 4th Grip Motor
9. 4th Transport Sensor
10. 4th Transport Motor
11. 4th Relay Sensor – Upper
12. 4th Relay Sensor – Lower
13. 5th Paper feed Motor
14. 5th Paper Feed Sensor
15. 5th Grip Motor
16. 5th Transport Motor
17. 5th Transport Sensor
18. 6th Paper feed Motor
19. 6th Paper Feed Sensor
20. 6th Grip Motor
21. 6th Transport Sensor
22. 6th Transport Motor
23. 6th Relay Sensor
24. 5th Relay Sensor
25. LCT Exit Motor
26. LCT Exit Sensor

# 3.5 ELECTRICAL COMPONENT SUMMARY

| Motors | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| M1 | 4th Grip Motor | Drives the separation roller and the grip roller of the 4th tray. |
| M2 | 4th Lift Motor | Drives the bottom plate of the 4th tray up and down. |
| M3 | 4th Paper Feed Motor | Drives the pick-roller and feed roller that picks up each sheet and starts to feed it out of the 4th tray. |
| M4 | 4th Transport Motor | Drives the rollers in the vertical feed path that feed the paper from the 4th tray to the LCT exit motor. |
| M5 | 5th Grip Motor | Drives the separation roller and the grip roller of the 5th tray. |
| M6 | 5th Lift Motor | Drives the bottom plate of the 5th tray up and down. |
| M7 | 5th Paper Feed Motor | Drives the pick-roller and feed roller that picks up each sheet and starts to feed it out of the 5th tray. |
| M8 | 5th Transport Motor | Drives the transport rollers in the vertical feed path that feed the paper from the 4th tray and the 5th tray to the LCT exit motor. |
| M9 | 6th Grip Motor | Drives the separation roller and the grip roller of the 6th tray. |
| M10 | 6th Lift Motor | Drives the 5th tray up and down. |
| M11 | 6th Paper Feed Motor | Drives the pick-roller and feed roller that picks up each sheet and starts to feed it out of the 6th tray. |
| M12 | 6th Transport Motor | Drives the rollers in the vertical feed path that feed the paper from the 6th tray to the LCT exit motor. |
| M13 | LCT Exit Motor | Feeds the paper out the LCT and into the entrance of the copier. |

| PCBs | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| PCB1 | Main Control Board | Controls the operation of all motors and sensors in the LCT unit. |
| PCB2 | Image Position Sensor Board | Operates the CIS sensor (performs waveform correction) the LCT. The CRB (CIS Relay Board) and CIS sensor perform side-to-side image correction. The CRB and CIS are a single unit. The CRB is not a separate board. |

| Sensors | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| S1 | 4th Lift Sensor | Detects when the paper in the 4th tray is at the correct height for paper feed and switches the 4th lift motor off. |
| S2 | 4th Paper End Sensor | Detects when the last sheet feeds from the 4th tray. |
| S3 | 4th Paper Feed Sensor | Detects the paper when it arrives at the 4th paper feed roller and checks for misfeeds. |
| S4 | 4th Paper Height Sensor 1 | 4th from the bottom of the 4th tray, detects stack height: 100% |
| S5 | 4th Paper Height Sensor 2 | 5th from the bottom of the 4th tray, detects stack height: 75% |
| S6 | 4th Paper Height Sensor 3 | 6th from the bottom of the 4th tray, detects stack height: 50% |
| S7 | 4th Paper Height Sensor 4 | 4th from the bottom of the 4th tray, detects stack height: 25% and signals near-end. |
| S8 | 4th Paper Length Sensor (B834) | Detects the length of the paper in the 4th tray (used in combination with the paper width sensors). |
| S9 | 4th Paper Width Sensor 1 (B834) | 1 of a set of 3 sensors that detect the width of the |

| Sensors | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| | | paper in the 4th tray. |
| S10 | 4th Paper Width Sensor 2 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 4th tray. |
| S11 | 4th Paper Width Sensor 3 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 4th tray. |
| S12 | 4th Paper Size Sensor 1 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 4th tray. |
| S13 | 4th Paper Size Sensor 2 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 4th tray. |
| S14 | 4th Paper Size Sensor 3 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 4th tray. |
| S15 | 4th Relay Sensor | Detects the leading and trailing edges of the paper in the paper path near the bottom of the 4th tray. Checks the timing of the feed and signals a jam if the paper is late or lags at this location. |
| S16 | 4th Relay Sensor - Upper (B834) | Detects the leading and trailing edges of the paper in the paper path near the top of the 4th tray. Checks the timing of the feed and signals a jam if the paper is late or lags at this location. |
| S17 | 4th Transport Sensor | Detects jams in the paper path where the transport motor feeds the paper from the 4th tray. |
| S18 | 5th Lift Sensor | Detects when the paper in the 5th tray is at the correct height for paper feed and switches the 4th lift motor off. |
| S19 | 5th Paper End Sensor | Detects when the last sheet feeds from the 5th tray. |
| S20 | 5th Paper Feed Sensor | Detects the paper when it arrives at the 5th paper feed roller and checks for misfeeds. |
| S21 | 5th Paper Height Sensor 1 | 4th from the bottom of the 5th tray, detects stack height: 100% |
| S22 | 5th Paper Height Sensor 2 | 5th from the bottom of the 5th tray, detects stack height: 75% |
| S23 | 5th Paper Height Sensor 3 | 6th from the bottom of the 5th tray, detects stack height: 50% |
| S24 | 5th Paper Height Sensor 4 | 4th from the bottom of the 5th tray, detects stack height: 25% and signals near-end. |
| S25 | 5th Paper Length Sensor (B834) | Detects the length of the paper in the 5th tray (used in combination with the paper width sensors). |
| S26 | 5th Paper Width Sensor 1 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 5th tray. |
| S27 | 5th Paper Width Sensor 2 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 5th tray. |
| S28 | 5th Paper Width Sensor 3 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 5th tray. |
| S29 | 5th Paper Size Sensor 1 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 5th tray. |
| S30 | 5th Paper Size Sensor 2 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 5th tray. |
| S31 | 5th Paper Size Sensor 3 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 5th tray. |
| S32 | 5th Relay Sensor (B834) | Detects the leading and trailing edges of the paper in the paper path near the 5th tray. Checks the timing of the feed and signals a jam if the paper is late or lags at this location. |
| S33 | 5th Transport Sensor | Detects jams in the paper path where the transport motor feeds the paper from the 5th tray. |
| S34 | 6th Lift Sensor | Detects when the paper in the 6th tray is at the correct height for paper feed and switches the 4th |

| Sensors | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| | | lift motor off. |
| S35 | 6th Paper End Sensor | Detects when the last sheet feeds from the 6th tray. |
| S36 | 6th Paper Feed Sensor | Detects the paper when it arrives at the 6th paper feed roller and checks for misfeeds. |
| S37 | 6th Paper Height Sensor 1 | 4th from the bottom of the 6th tray, detects stack height: 100% |
| S38 | 6th Paper Height Sensor 2 | 5th from the bottom of the 6th tray, detects stack height: 75% |
| S39 | 6th Paper Height Sensor 3 | 6th from the bottom of the 6th tray, detects stack height: 50% |
| S40 | 6th Paper Height Sensor 4 | 4th from the bottom of the 6th tray, detects stack height: 25% and signals near-end. |
| S41 | 6th Paper Length Sensor (B834) | Detects the length of the paper in the 6th tray (used in combination with the paper width sensors). |
| S42 | 6th Paper Width Sensor 1 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 6th tray. |
| S43 | 6th Paper Width Sensor 2 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 6th tray. |
| S44 | 6th Paper Width Sensor 3 (B834) | 1 of a set of 3 sensors that detect the width of the paper in the 6th tray. |
| S45 | 6th Paper Size Sensor 1 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 6th tray. |
| S46 | 6th Paper Size Sensor 2 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 6th tray. |
| S47 | 6th Paper Size Sensor 3 (B832) | 1 of a set of 3 sensors that detect the width of the paper in the 6th tray. |
| S48 | 6th Relay Sensor (B834) | Detects the leading and trailing edges of the paper in the paper path near the 6th tray. Checks the timing of the feed and signals a jam if the paper is late or lags at this location. |
| S49 | 6th Transport Sensor | Detects jams in the paper path where the transport motor feeds the paper from the 6th tray. |
| S50 | LCT Exit Sensor | Detects jams at the exit of the LCT unit. |
| S51 | LCT Image Position Sensor | Mounted on the CRB (CIS Relay Board), this contact image sensor detects the side-to-side edges of the paper in the paper path. The machine uses this information to correct the position of the image when the lasers fire. |

| Solenoids | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| SOL1 | 4th Pick-up Solenoid | Engages/disengages rotation of the pick-up roller in the 4th tray. |
| SOL2 | 4th Separation Solenoid | Controls up-down movement of the separation roller in the 4th tray. |
| SOL3 | 5th Pick-up Solenoid | Engages/disengages rotation of the pick-up roller in the 5th tray. |
| SOL4 | 5th Separation SOL | Controls up-down movement of the separation roller in the 5th tray. |
| SOL5 | 6th Pick-up Solenoid | Engages/disengages rotation of the pick-up roller in the 6th tray. |
| SOL6 | 6th Separation Solenoid | Controls up-down movement of the separation roller in the 6th tray. |

| Switches | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| SW1 | Door Safety Switch | An interlock safety switch that detects when the front door is opened and closed. |

| Other | | |
|---|---|---|
| **No.** | **Name** | **Description** |
| H1, H2 | Anti-Condensation Heaters | Evaporates moisture around the trays in the LCT (230V 18W). This is an option |