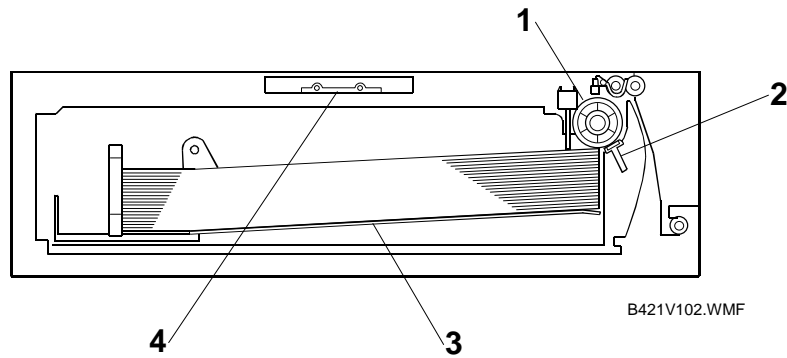


PAPER TRAY UNIT

(Machine Code: B421)

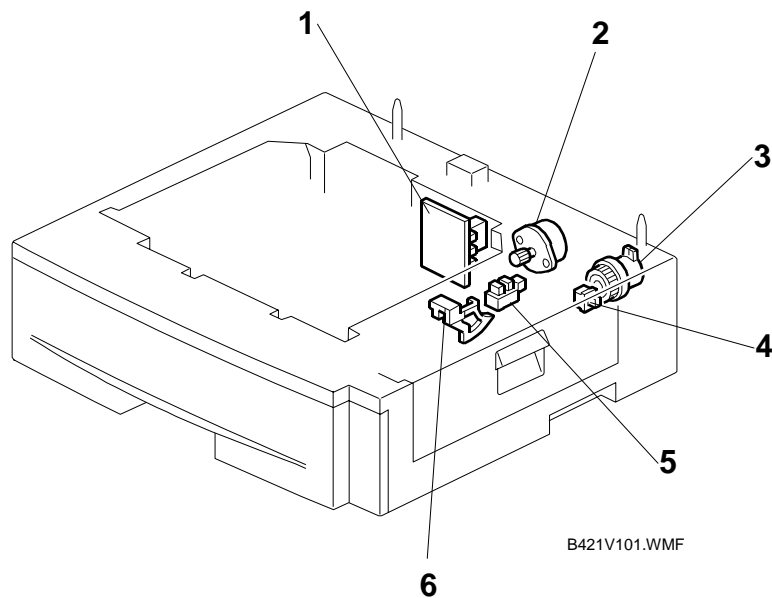
1. OVERALL MACHINE INFORMATION

1.1 MECHANICAL COMPONENT LAYOUT



- | | |
|-----------------|-------------------------|
| 1. Feed Roller | 3. Bottom Plate |
| 2. Friction Pad | 4. Optional Tray Heater |

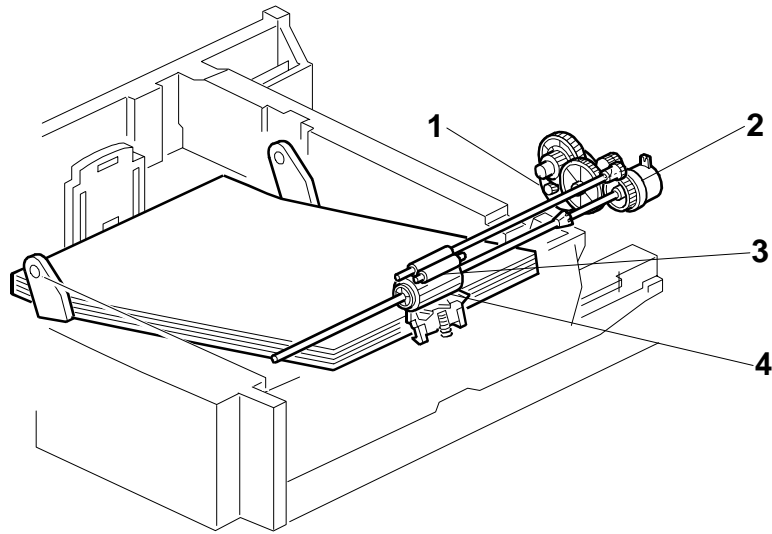
1.2 ELECTRICAL COMPONENT LAYOUT



- | | |
|----------------------|----------------------|
| 1. Tray Main Board | 4. Door Switch |
| 2. Paper Feed Motor | 5. Paper Feed Sensor |
| 3. Paper Feed Clutch | 6. Paper End Sensor |

Peripherals

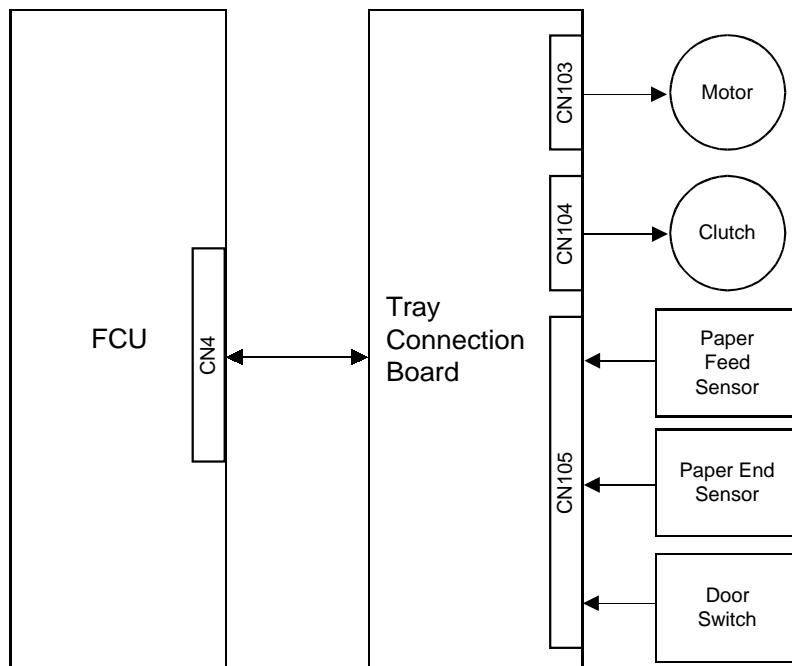
1.3 DRIVE LAYOUT



B421D106.WMF

- | | |
|----------------------|-----------------|
| 1. Paper Feed Motor | 3. Feed Roller |
| 2. Paper Feed Clutch | 4. Friction Pad |

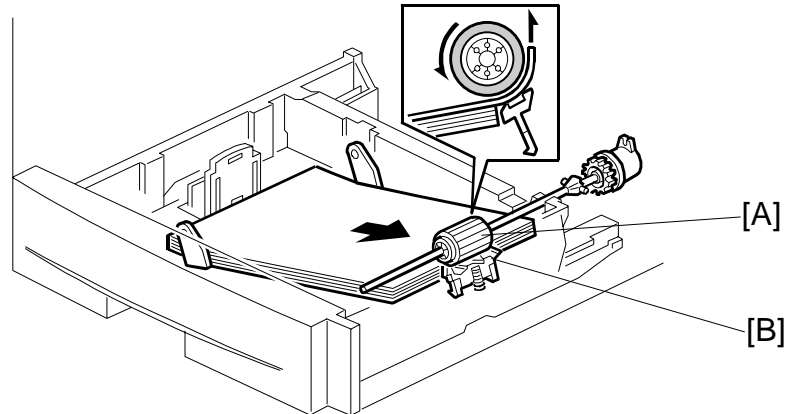
1.4 OVERALL ELECTRICAL CIRCUIT



B421V107.WMF

1.5 DETAILED DESCRIPTIONS

1.5.1 PAPER FEED AND SEPARATION



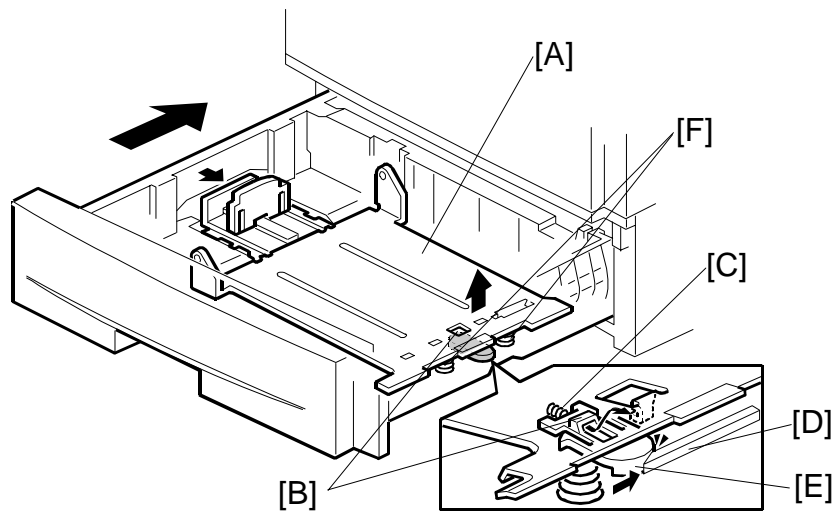
B421D101.WMF

The paper tray holds 500 sheets. A friction-pad feed system is used.

[A]: Paper feed roller

[B]: Friction pad

1.6 PAPER LIFT MECHANISM

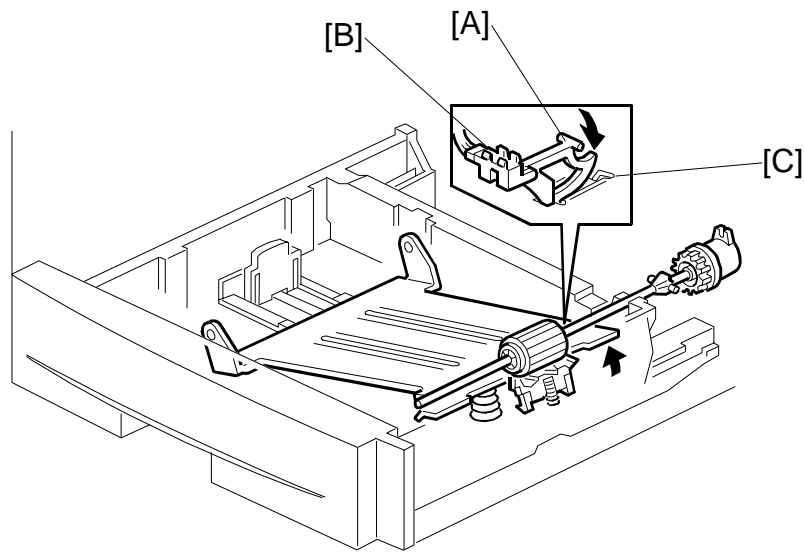


B421D102.WMF

With tray partially or fully out of unit: Pushing down bottom plate [A] engages latch [B], locking the plate down. Latch [B] is held in place by spring [C].

When user pushes tray in: Runner [D] on frame pushes in rounded slider [E], retracting the latch. Springs [F] push the plate up. The latch remains retracted while the drawer is in the unit, so that the plate cannot be locked down.

1.7 PAPER END DETECTION

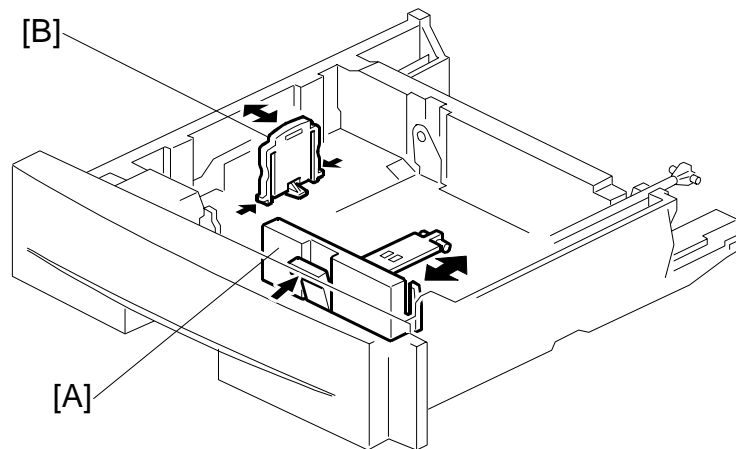


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[A]: Paper End Feeler
[B]: Paper End Sensor
[C]: Cutout in Paper Tray

- If paper present: Feeler [A] pushed up, deactivating sensor [B].
- If no paper: Feeler [A] drops into cutout [C], activating sensor [B].
- The feeler is rounded so that it lifts out of the way when the tray is inserted or pulled out.

1.8 SIDE AND END FENCES



B421D104.WMF

[A]: Side Fence

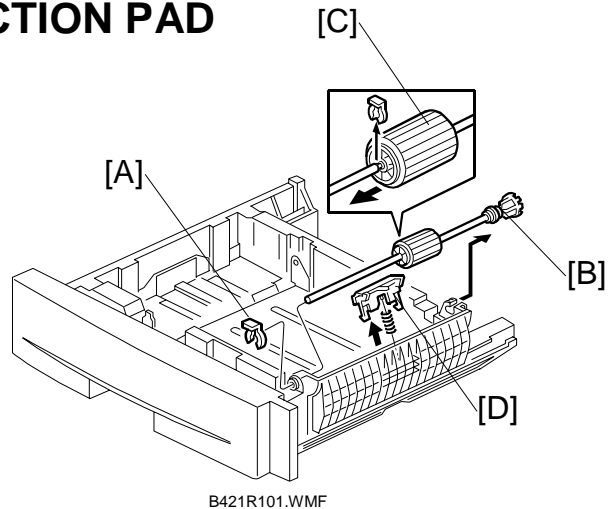
[B]: End Fence

- Side Fence: Set width to A4, 8 1/4", or 8 1/2".
- End fence: Set from 11" to 13", with standard settings at 11", A4, and 13". To feed 14" paper, the end fence can be removed and placed in internal compartment.
- Both fences can be secured with screws at standard positions.

2. REPLACEMENT AND ADJUSTMENT

2.1 FEED ROLLER AND FRICTION PAD

1. Take the tray out of the paper tray unit.
2. Clip ring [A]
3. Shaft assembly [B]
4. Feed roller [C] (⌀ x 1)
5. Friction pad [D]



2.2 REMOVING THE PAPER TRAY UNIT FROM THE COPIER

If Optional Tray Heater Is Not Installed

1. Lift the copier off of the paper tray unit.

If Optional Tray Heater Is Installed

1. Refer to Section 1.4.2, and carry out the following steps of that procedure in this order:
 - Step 2 (remove both paper trays)
 - Step 7 (remove copy tray)
 - Step 8 (remove rear cover)
 - Step 9 (remove FCU cover plate)
2. Refer to Section 1.4.2, and do the following:
 - Unscrew the ground line.
 - Unclamp the heater harness clamps.
 - Disconnect the heater harness from the relay harness.
 - Unwrap and remove the core.
3. Pull the relay harness down and out through the hole in the PSU bracket, and then pull it all the way in through the hole at the rear of the (main) paper tray unit.
4. Remove the 3 screws fastening the paper tray unit to the copier (☛ 1.4.2, Step 6).
5. Lift the copier off the paper tray unit.

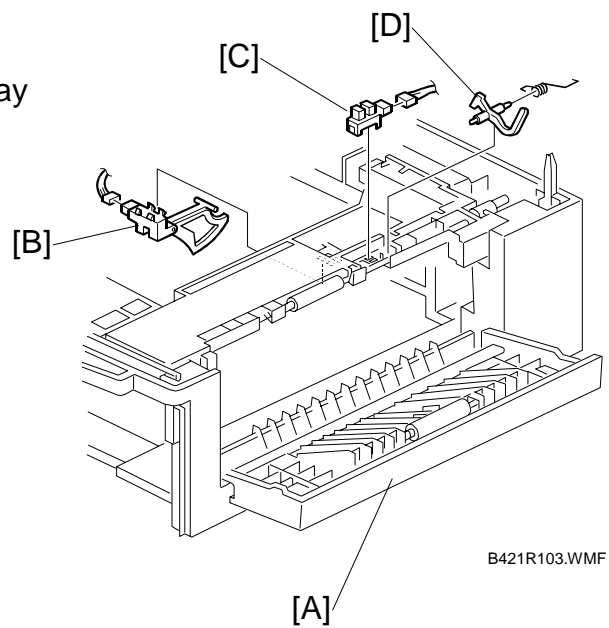
NOTE: To reinstall, refer to the procedure in Section 1.4.2. Carry out most of that procedure, starting from Step 5 and omitting unnecessary steps.

2.3 SENSORS

1. Remove the copier from the paper tray unit (☛ 2.2).
2. Open the PTU's right door [A].

[B]: Paper end sensor (☛ × 1)

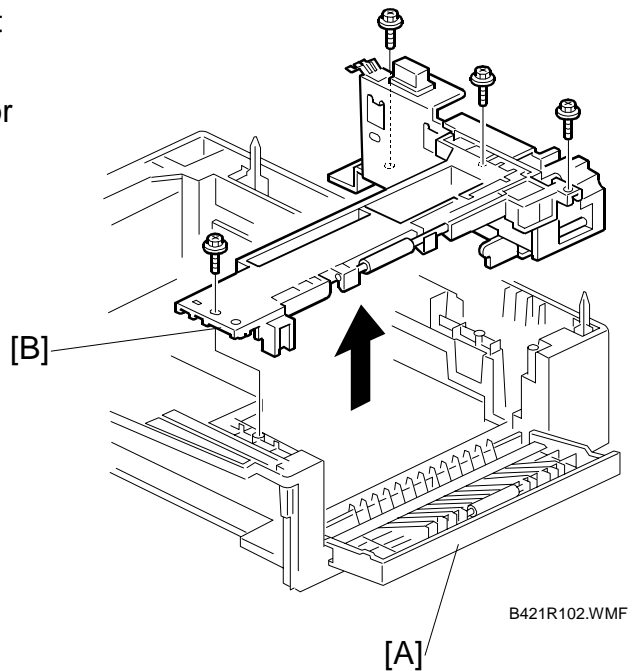
[C]: Paper feed sensor
(1 feeler [D], ☛ × 1)



2.4 DRIVE SECTION

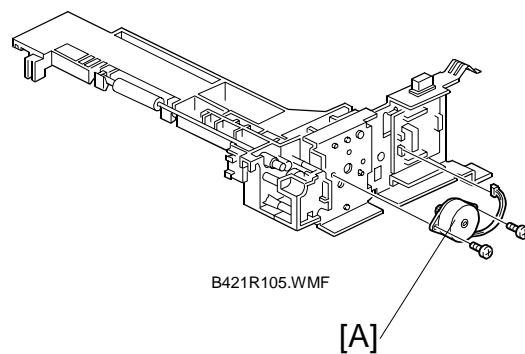
2.4.1 DRIVE BLOCK

1. Remove copier from paper tray unit (☛ 2.2).
2. Open the paper tray unit's right door [A].
3. Drive block [B] (🔩 × 4)



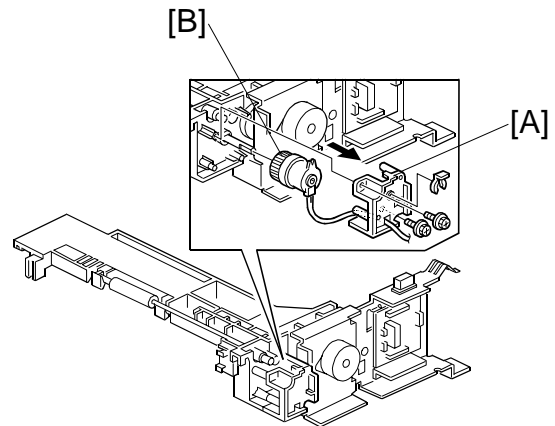
2.4.2 PAPER FEED MOTOR

1. Drive block (☛ 2.4.1)
2. Paper feed motor [A] (🔩 × 1)



2.4.3 PAPER FEED CLUTCH

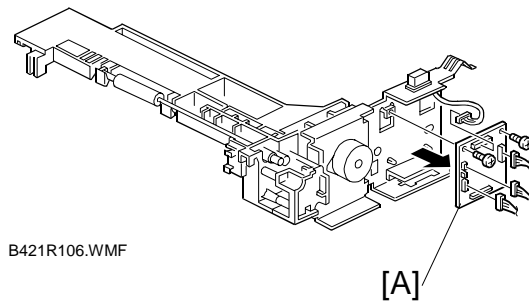
1. Drive block (☛ 2.4.1)
2. Detach the clutch cover [A]
(☛ x 1, ☛ x 2).
3. Paper feed clutch [B] (☛ x 1)
NOTE: Detach the connector from the board side, not the clutch side.



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2.4.4 TRAY MAIN BOARD (☛ 2.4.1)

1. Tray main board [A]
(☛ x 2, all connectors)



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