# **1-BIN TRAY**

(Machine Code: B376)



26 January, 2001 SPECIFICATIONS

# 1. OVERALL MACHINE INFORMATION

# 1.1 SPECIFICATIONS

Paper Size: A5 lengthwise to A3

HLT to DLT

Paper Weight:  $60 \text{ g/m}^2 \sim 105 \text{ g/m}^2$ , 16 lb ~ 28 lb

Tray Capacity: 125 sheets (80 g/m², 20 lb)

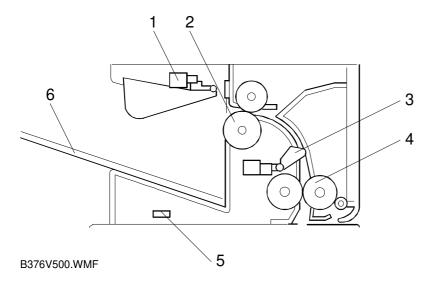
Power Source: 5 Vdc, 24 Vdc (from copier)

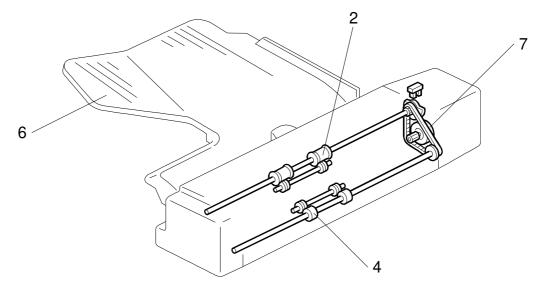
Power Consumption: 15 W

Weight: 4 kg

Size (W x D x H): 470 mm x 550 mm x 110 mm

# 1.2 MECHANICAL COMPONENT AND DRIVE LAYOUT





- 1. Paper Limit Sensor
- 2. Exit Roller
- 3. Entrance Sensor
- 4. Entrance Roller

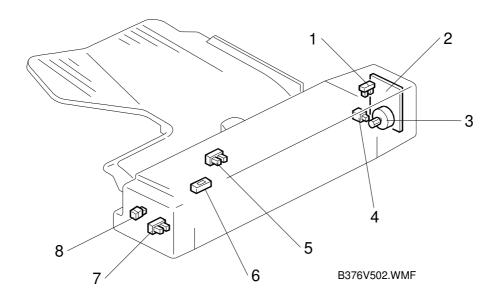
5. Paper Sensor

B376V501.WMF

- 6. Paper Tray
- 7. Tray Motor

# Peripherals

# 1.3 ELECTRICAL COMPONENT LAYOUT



- 1. Motor Lock Sensor
- 2. Main Board
- 3. Tray Motor
- 4. Right Cover Switch

- 5. Paper Limit Sensor
- 6. Paper Sensor
- 7. Entrance Sensor
- 8. Paper Indicator

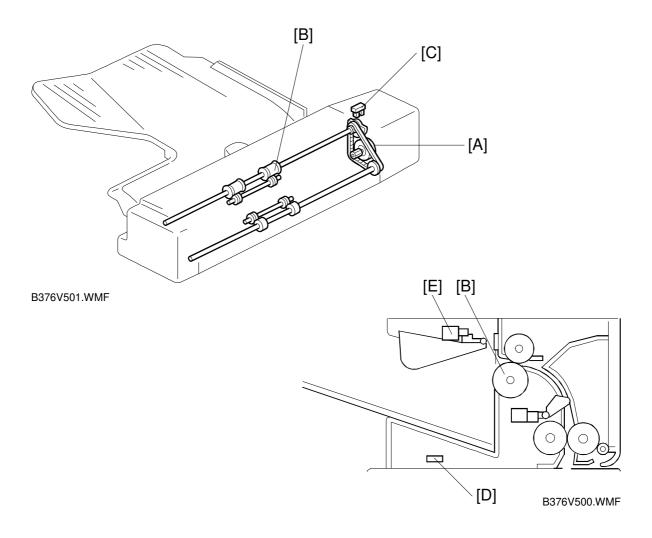
# 1.4 ELECTRICAL COMPONENT DESCRIPTION

| Symbol   | Name            | Function  | Index No. |
|----------|-----------------|---|-----------|
| Motors   |                 |   |           |
| M1       | Tray            | Drives the entrance and exit rollers.                     | 3         |
| Sensors  |                 |   |           |
| S1       | Entrance        | Checks for misfeeds.                                      | 7         |
| S2       | Paper Limit     | Detects the paper stack limit in the tray.                | 5         |
| S3       | Paper           | Detects whether there is paper in the tray.               | 6         |
| S4       | Motor Lock      | Detects whether the tray motor is turning.                | 1         |
| Switches |                 | <u> </u>  |           |
| SW1      | Right Cover     | Detects whether the right cover is opened.                | 4         |
| PCBs     |                 | <u> </u>  |           |
| PCB1     | Main            | Controls the 1-bin tray and communicates with the copier. | 2         |
| LEDs     |                 |   |           |
| LED1     | Paper Indicator | Indicates when there is paper in the tray.                | 8         |

BASIC OPERATION 26 January, 2001

#### 2. DETAILED DESCRIPTIONS

#### 2.1 BASIC OPERATION



When the leading edge of the first sheet of copy paper reaches the copier's hot roller, the tray motor [A] starts and turns off approximately 0.5 s after the trailing edge of the paper passes through the exit rollers [B].

The tray lock sensor [C] checks whether the tray motor rotates or not. When the tray lock sensor does not generate pulses for 300 ms while the tray motor is on, the copier will stop and display an SC code.

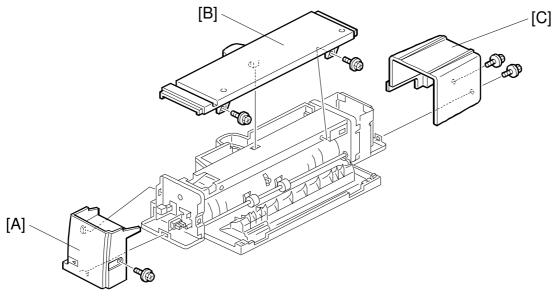
The paper sensor [D] checks whether there is paper in the tray or not. The paper sensor turns on when paper is stacked in the tray, and the paper indicator is turned on.

The paper limit sensor [E] detects when the tray is full. While a sheet of copy paper is passing this sensor, the sensor feeler is always pushed up by the paper. When the paper limit sensor stays on for more than the expected time (based on the copy speed and paper size), the copier indicates that the tray is full.

26 January, 2001 COVER REMOVAL

### 3. REPLACEMENT AND ADJUSTMENT

### 3.1 COVER REMOVAL



B376R500.WMF

#### Front Cover

- 1. Remove the scanner unit if it is at the front.
- 2. Remove the front cover [A] (1 screw).

#### **Upper Cover**

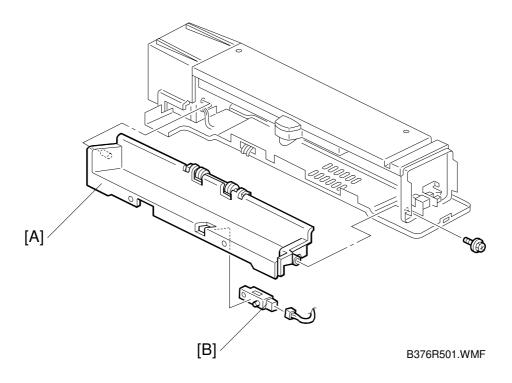
- 1. Remove the scanner unit.
- 2. Remove the upper cover [B] (2 screws).

#### Rear Cover

- 1. Remove the scanner unit.
- 2. Remove the rear cover [C] (2 screws).

eripherals

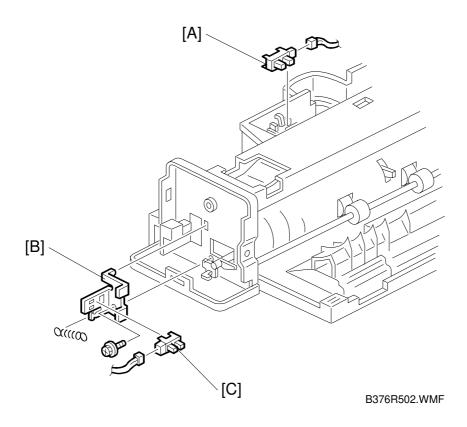
# 3.2 PAPER SENSOR REPLACEMENT



- 1. Remove the front cover.
- 2. Remove the exit guide plate [A] (1 screw).
- 3. Replace the paper sensor [B] (1 connector).

# Peripherals

# 3.3 ENTRANCE AND PAPER LIMIT SENSOR REPLACEMENT



1. Remove the front and upper covers.

#### Paper Limit Sensor

2. Replace the paper limit sensor [A] (1 connector).

#### **Entrance Sensor**

- 2. Remove the sensor bracket [B] (1 screw, 1 spring).
- 3. Replace the entrance sensor [C] (1 connector).