# DF-332 Automatic Document Feeder (1)



## Specifications

| | |
|---|---|
| Name | Duplexing Document Feeder |
| Type | Paper Take-up : Take-up from top of stack, U-turn feeding<br>Transport : Endless-belt transport<br>Ejection : U-turn and switchback reversal ejection (Single-sided mode)<br>: U-turn ejection (Double-sided mode ) |
| Installation | Mounted on the copier |
| Alignment | Center |
| Document Loading | Left, Face-up, Normal direction |
| Document Feed Method | Standard mode, Thick Paper mode, Mixed Original mode |
| Document Sizes | Inch area: Inch area: 5-1/2 × 8-1/2L to 11 × 17L<br>Metric area: B6L to A3L |
| Capacity | 100 sheets (80 g/m$^2$; 21-1/4 lbs.)<br>38 sheets (210 g/m$^2$; 55-3/4 lbs.) |
| Power Source | DC24V ± 5% (supplied from the copier) |
| Power Consumption | 60 W or less |

Detailed Specifications

# DF-332 Automatic Document Feeder (2)

| | |
|---|---|
| Dimensions | Width: 586 mm (23 in.)<br>Depth: 519 mm (20-1/2 in.)<br>Height: 135 mm (5-1/4 in.) |
| Power Source | 14.2 kg (31-1/4 lbs.) |
| Environmental Requirements | Same as copier |

# Differences from DF-331

## DF-331



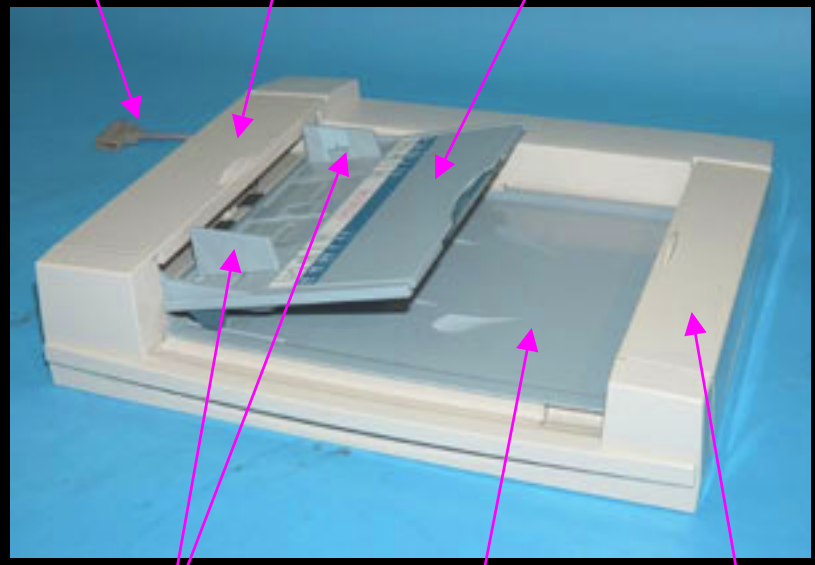
Original Reference Position: Rear
Original Set Position: Right

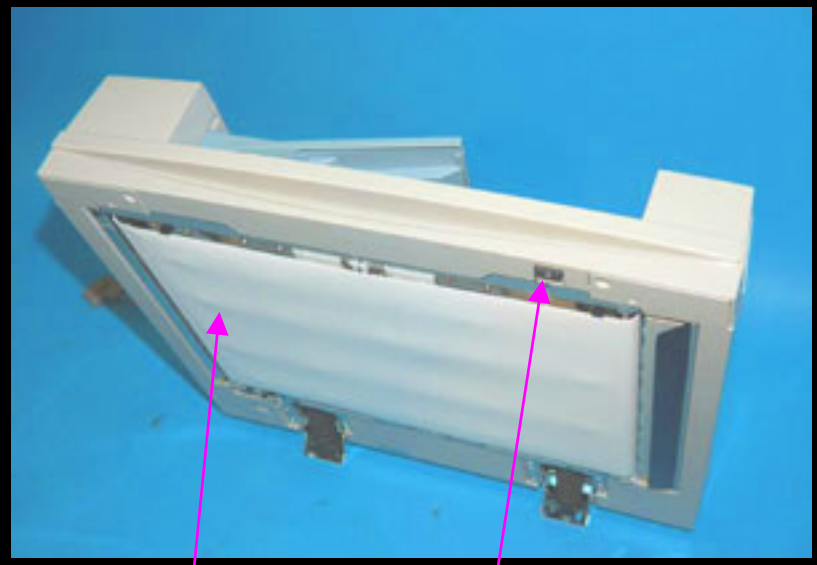
## DF-332



Original Reference Position: Center
Original Set Position: Left

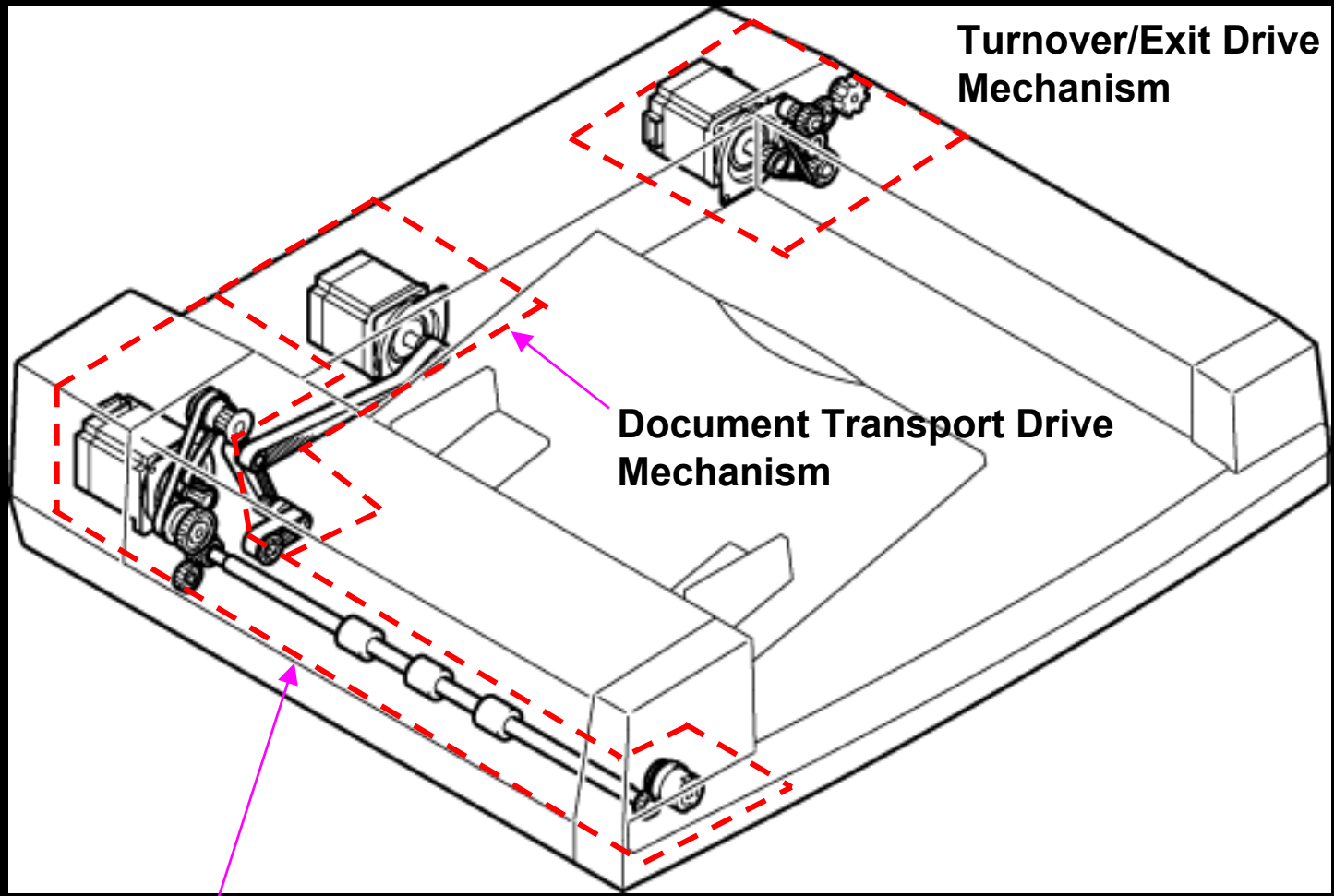
# Component Identification (1)



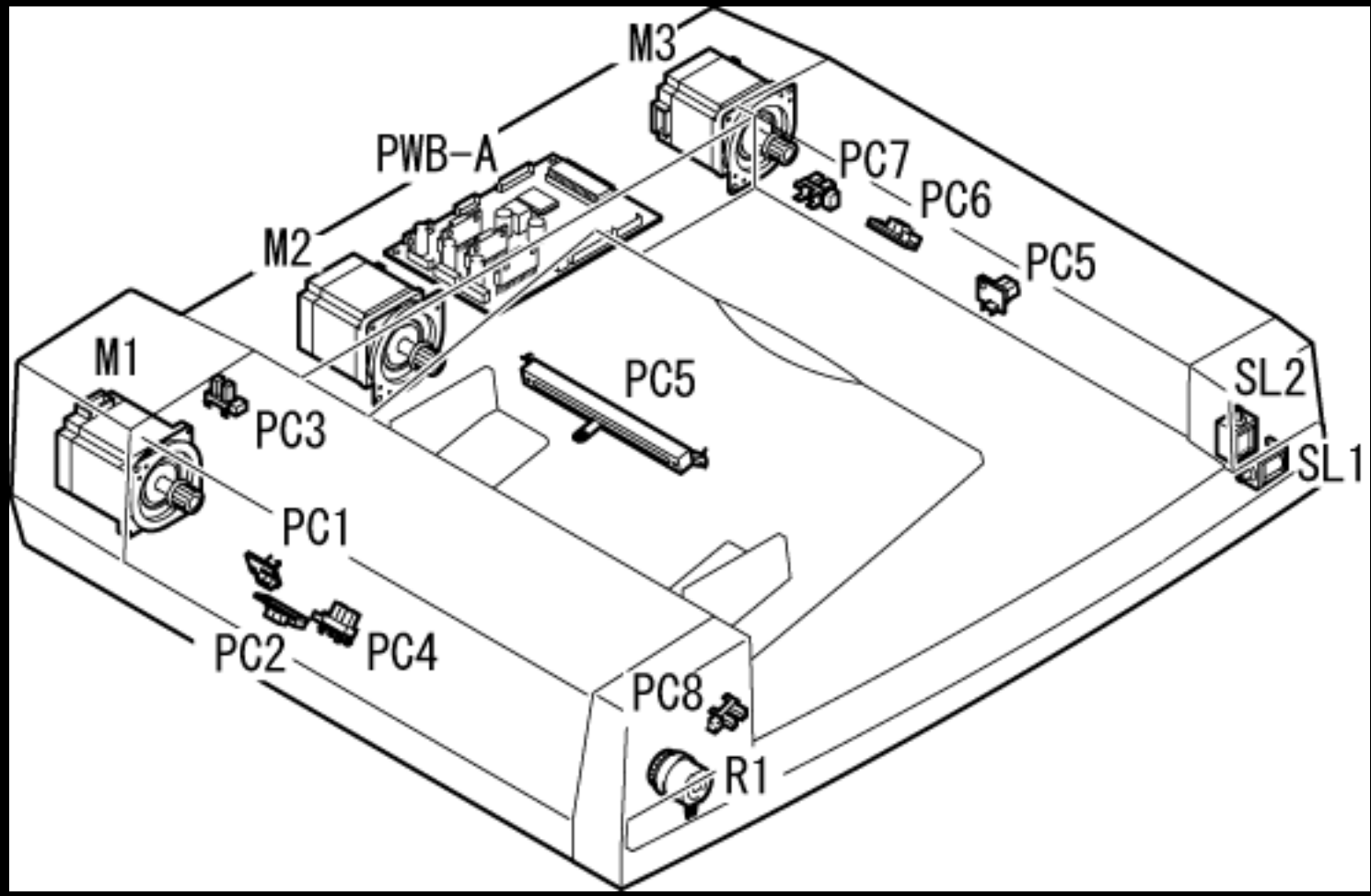
# Component Identification (2)

## Drive System



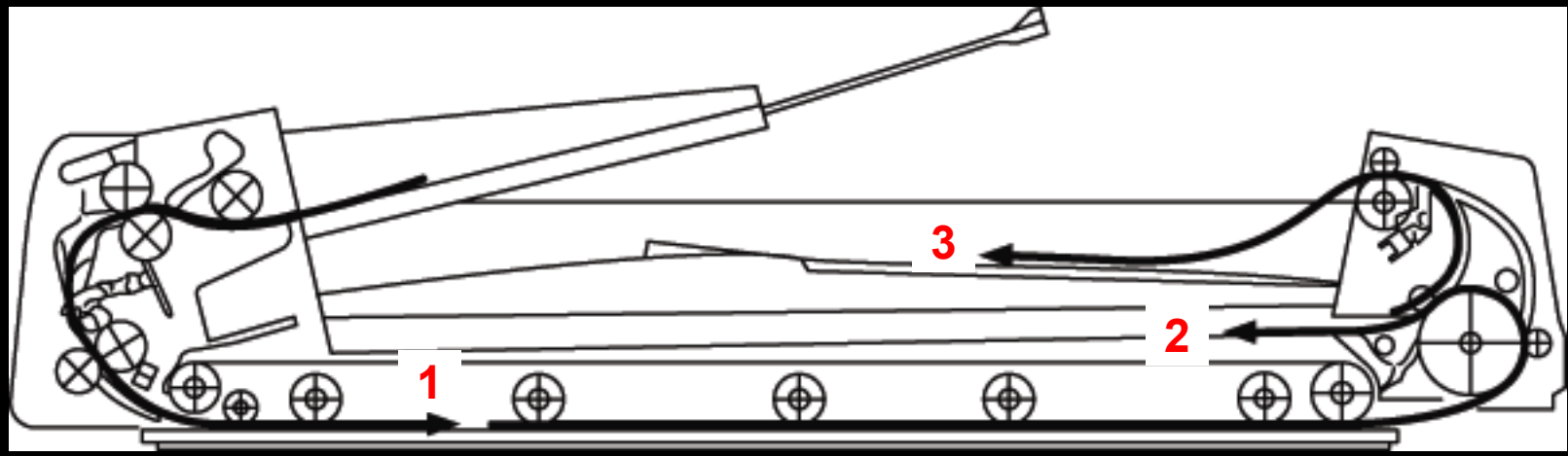
# Component Identification (3)

## Electrical Components Layout

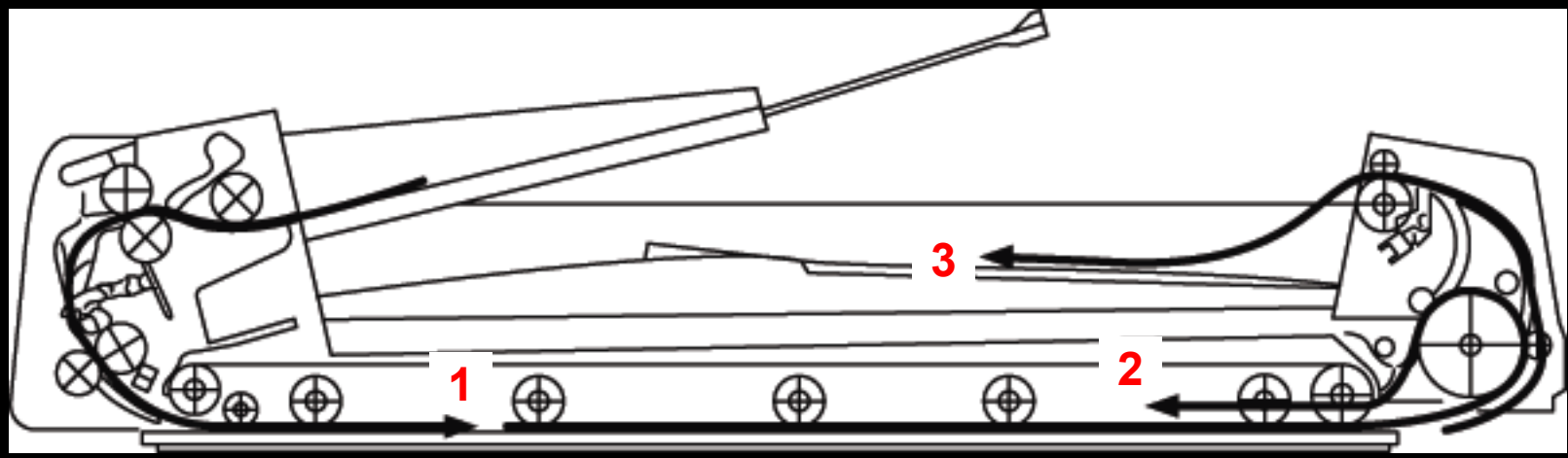


# Paper Path

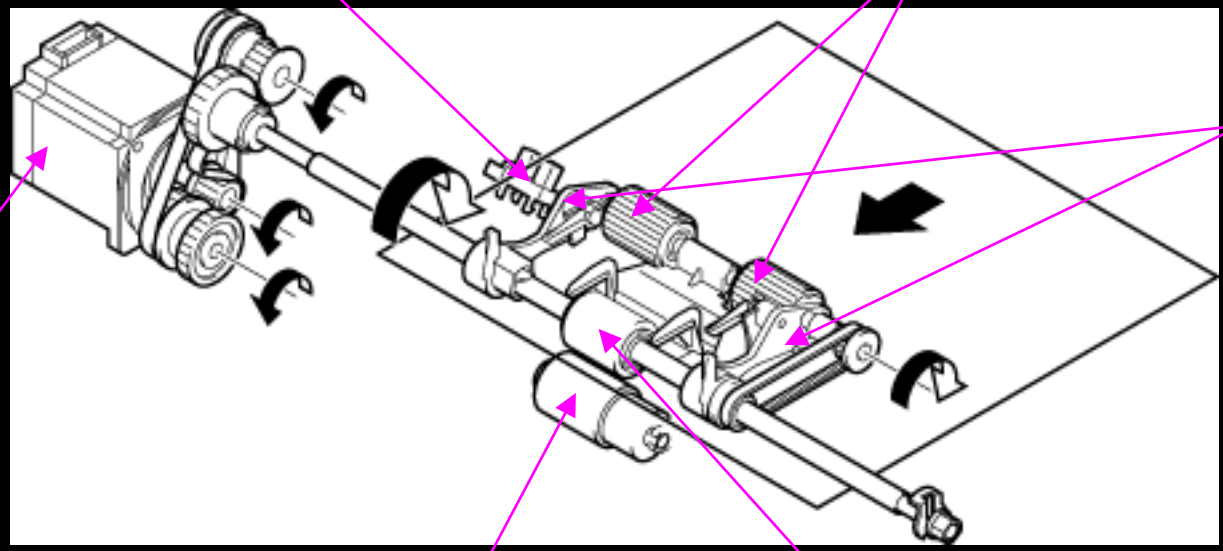
## Single-sided Document Mode




## Double-sided Document Mode

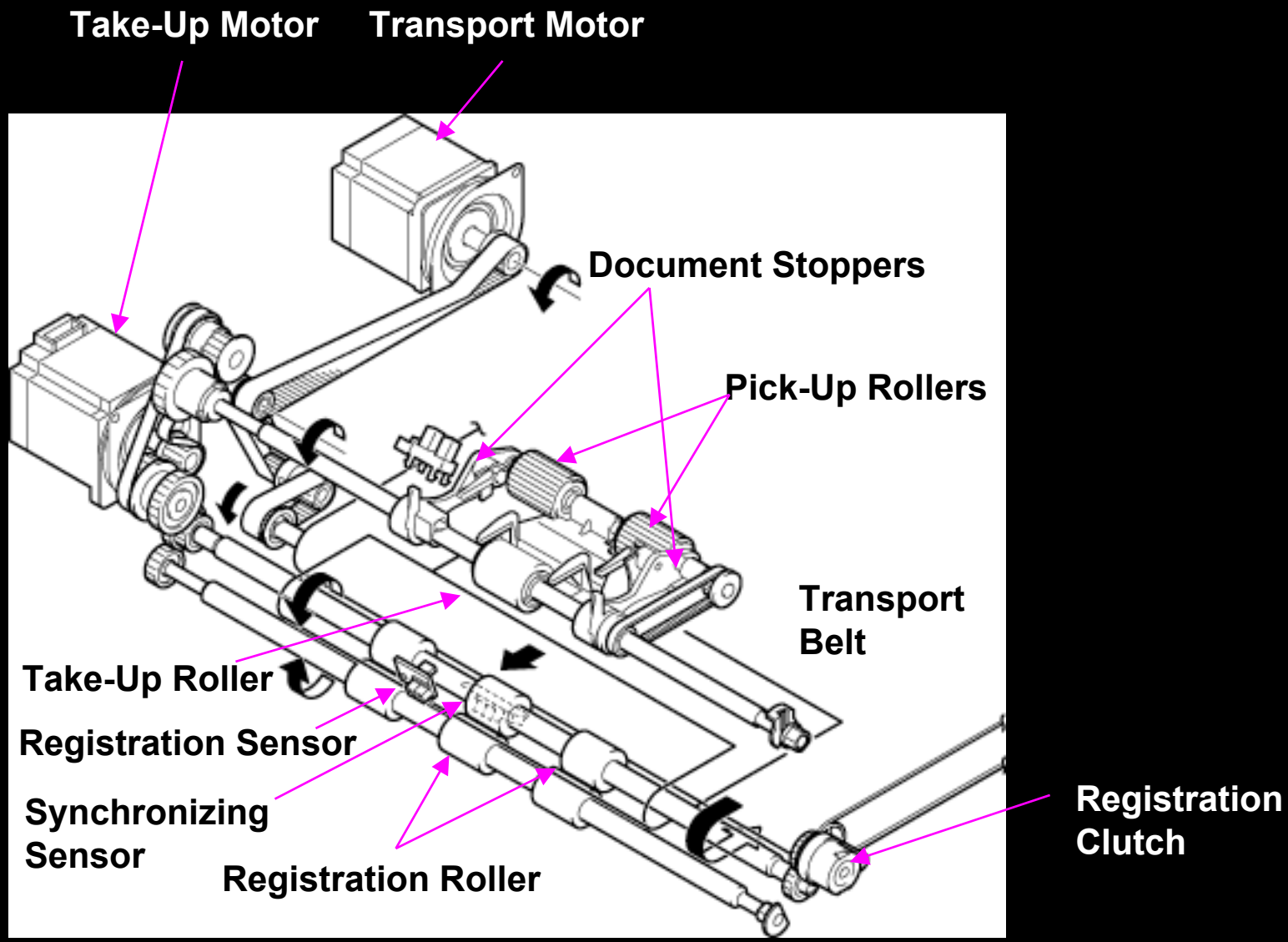


# Document Pick-Up Mechanism




**Original Reference Position: Center**

# Document Take-Up/Transport Mechanism



# Document Take-Up Operation Flow

Registration Clutch: ON

↓

Take-Up Motor: Forward Rotation

↓

Pick-Up Rollers go down and are rotated via timing belt & gears.

↓

At the same time, Document Stoppers go up.

↓

An original is taken-up and transported.

↓

A loop is formed to correct the skew feeding after Registration Sensor is activated.

→

Take-Up Motor: OFF

↓

Registration Clutch: OFF
(release of Registration Roller)
Take-Up Motor: Backward Rotation

↓

The original is transported.

↓

Synchronizing Sensor: ON

↓

Start of the original size detection in the feeding direction.

↓

Take-Up Motor: OFF

# Document Transport Operation Flow

Transport Motor: Forward Rotation

↓

Take-Up Motor: Backward Rotation

↓

The original is transported onto the Original Glass.

↓

The original size is determined when Registration Sensor: OFF

↓

Take-Up Motor: OFF when Pick-Up Sensor: OFF

↓

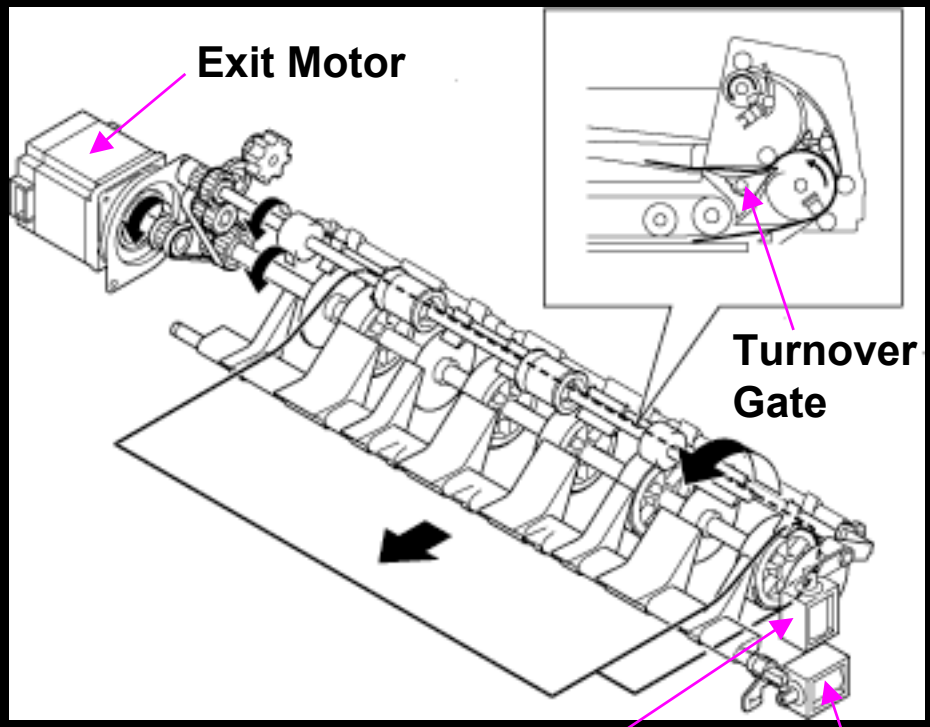
Transport Motor: OFF when the original is reached to its reference position

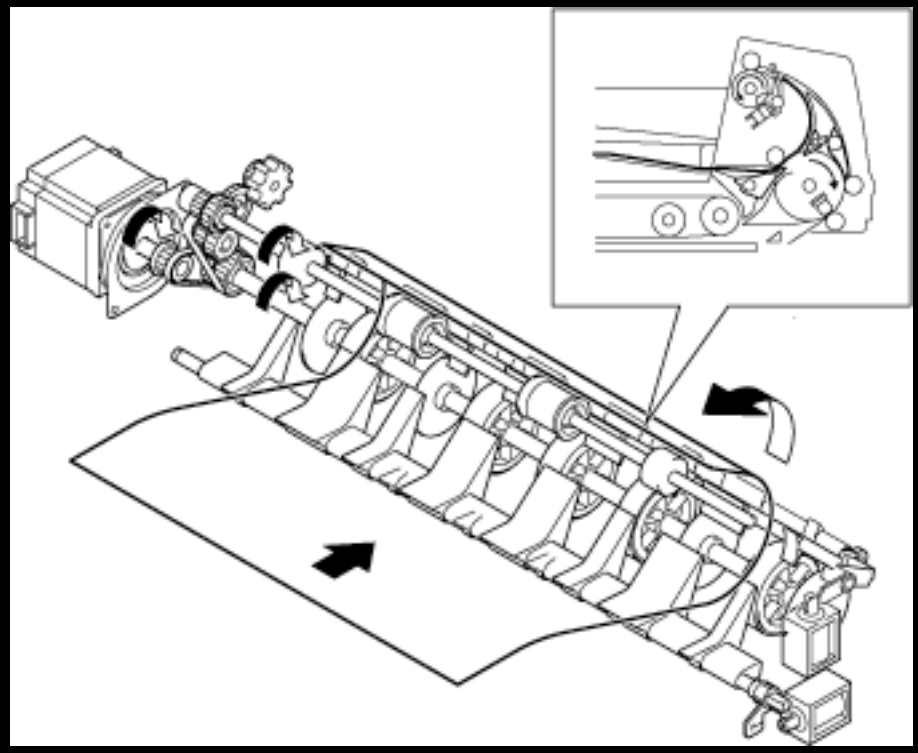
↓

Registration Clutch: ON

# Document Exit Mechanism (1)

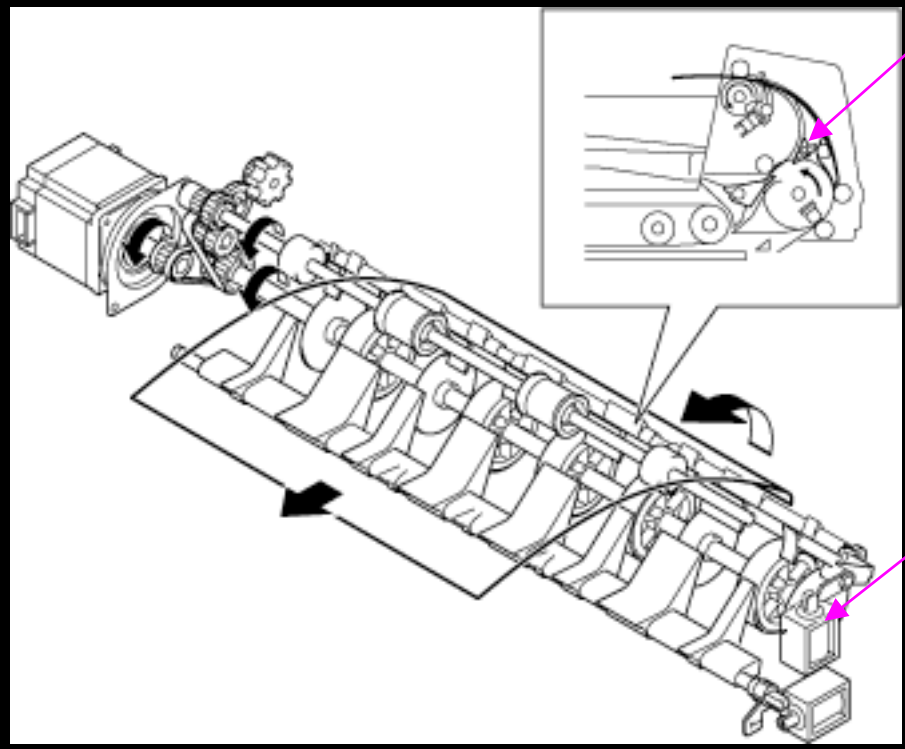
## Single-sided Document Mode



# Document Exit Mechanism (2)

## Double-sided Document Mode



# Exit Operation Flow (1)

## Document Exit Motion in Single-Sided Mode

Exit Motor: Forward Rotation

↓

Transport Motor: Forward Rotation

↓

The original is transported to the switchback section.

↓

Transport Motor: OFF after the original leaves from the Transport Belt

↓

Exit Motor: OFF after passing a specified time from Turnover Sensor: OFF

↓

Exit Motor: Backward Rotation

→

The original is transported to the Exit Roller.

↓

The rotation speed of the Exit Motor is reduced before the Exit Sensor goes OFF.

↓

The original is ejected on the Exit Tray with lower speed.

↓

Exit Motor: OFF

# Exit Operation Flow (2)

## Document Exit Motion in Double-Sided Mode

Exit Solenoid: ON

↓

Exit Motor: Forward Rotation

↓

Transport Motor: Forward Rotation

↓

The original is transported to the exit section.

↓

Transport Motor: OFF after the original leaves from the Transport Belt

↓

Turnover Sensor: OFF

→

Exit Solenoid: OFF after passing a specified time

↓

The rotation speed of the Exit Motor is reduced before the Exit Sensor goes OFF.

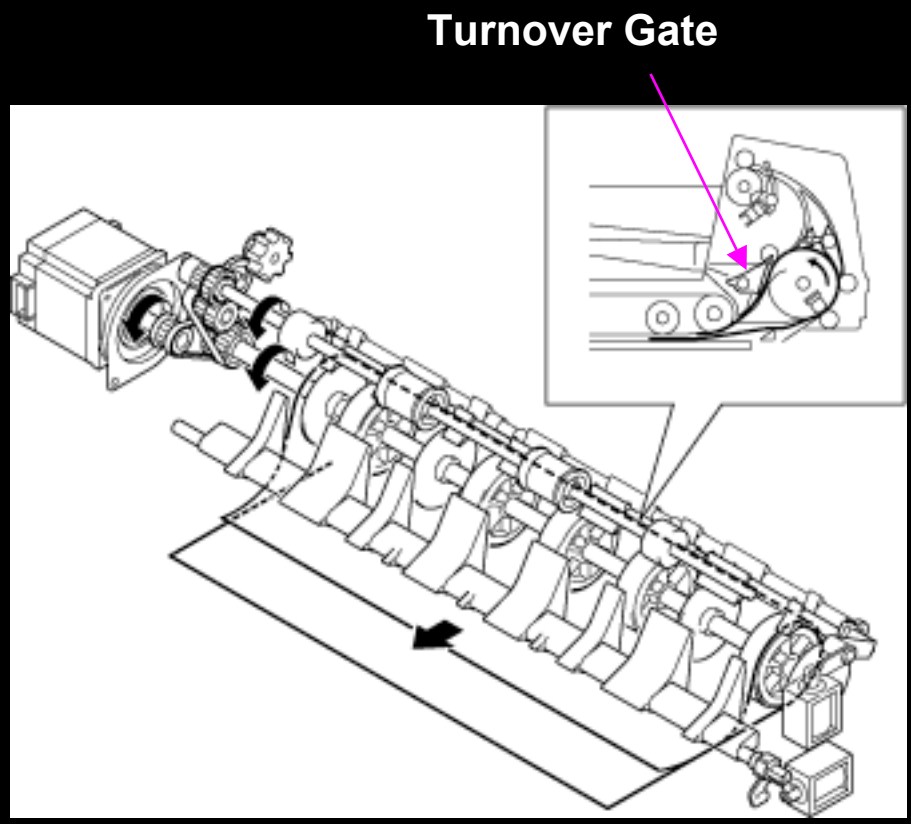
↓

The original is ejected on the Exit Tray with lower speed.

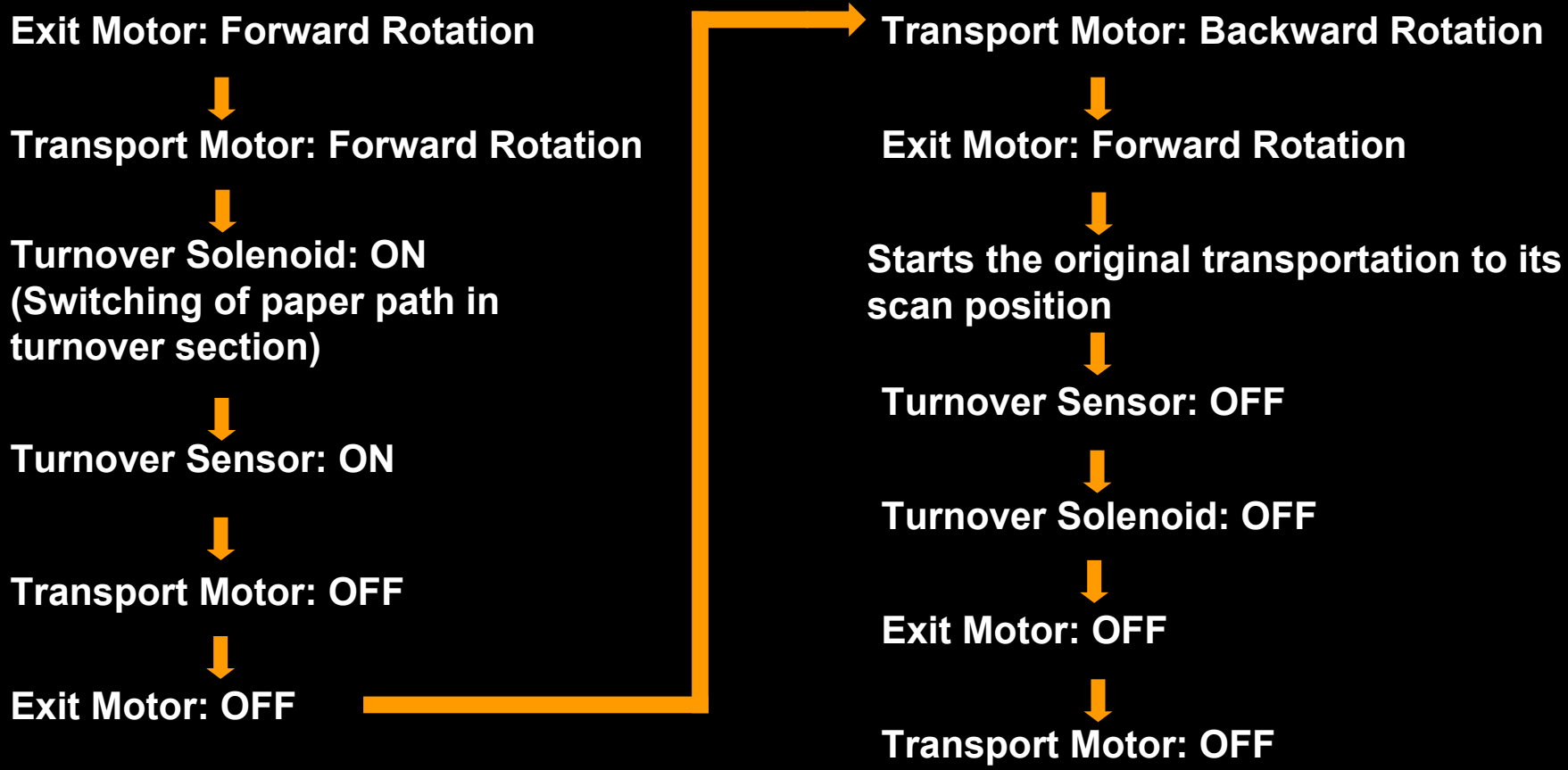
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Exit Motor: OFF

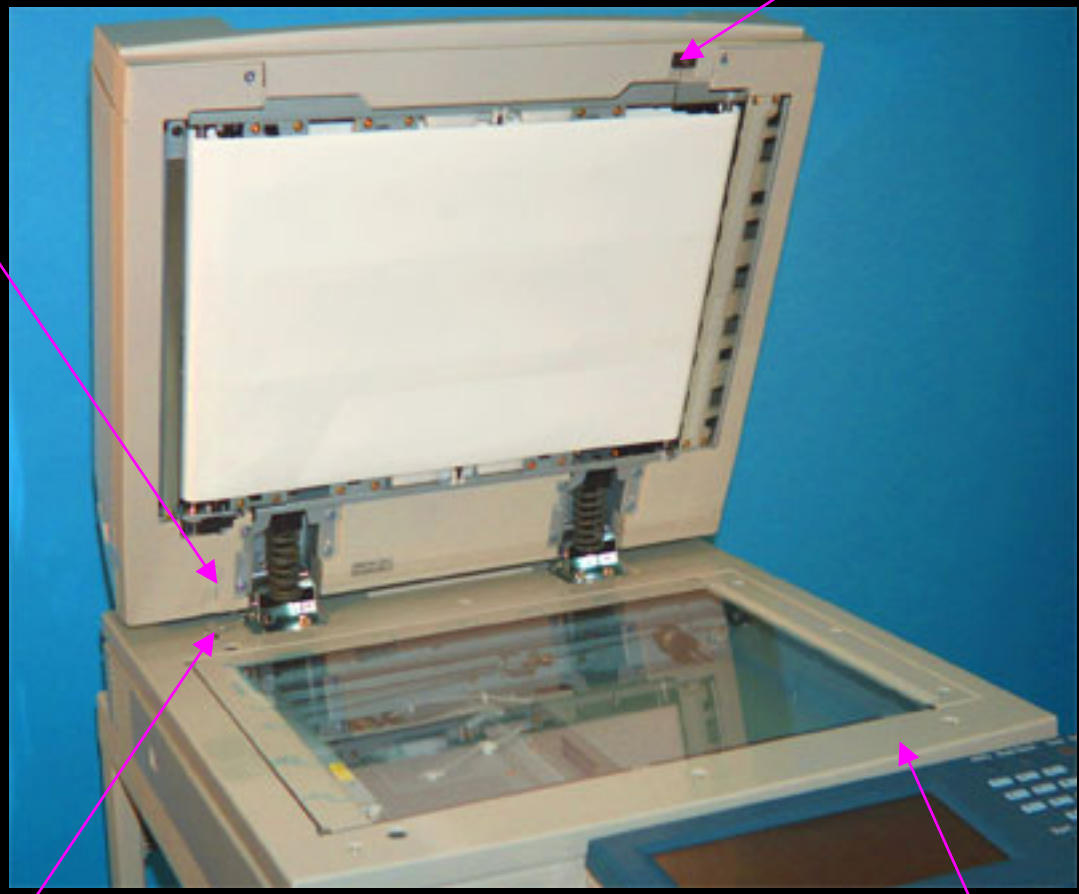
# Turnover Mechanism (Two-Sided Mode)



# Turnover Operation Flow



# Raised/Lowered Position Detection



# Operating Sequence

## Operating Sequence

