

**Models**  
**LT-402/LT-412**  
**Large Capacity Trays**  
with Parts Catalog  
(Used on Model 7165)

 **SERVICE MANUAL and PARTS CATALOG**



# **LT-402/LT-412**

# **SERVICE MANUAL**

**NOVEMBER 2001**

**Used on Konica Model  
7165**

## **IMPORTANT NOTICE**

Because of the possible hazards to an inexperienced person servicing this equipment, as well as the risk of damage to the equipment, Konica Business Technologies strongly recommends that all servicing be performed by Konica-trained service technicians only.

Changes may have been made to this equipment to improve its performance after this service manual was printed. Accordingly, Konica Business Technologies, Inc., makes no representations or warranties, either expressed or implied, that the information contained in this service manual is complete or accurate. It is understood that the user of this manual must assume all risks or personal injury and/or damage to the equipment while servicing the equipment for which this service manual is intended.

Corporate Publications Department

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# SAFETY PRECAUTIONS

## Installation Environment

Safety considerations usually are directed toward machine design and the possibility of human error. In addition, the environment in which a machine is operated must not be overlooked as a potential safety hazard.

Most electrical equipment is safe when installed in a normal environment. However, if the environment is different from what most people consider to be normal, it is conceivable that the combination of the machine and the room air could present a hazardous combination. This is because heat (such as from fusing units) and electrical arcs (which can occur inside switches) have the ability to ignite flammable substances, including air.

**When installing a machine, check to see if there is anything nearby which suggests that a potential hazard might exist.** For example, a laboratory might use organic compounds which, when they evaporate, make the room air volatile. Potentially dangerous conditions might be seen or smelled. *The presence of substances such as cleaners, paint thinners, gasoline, alcohol, solvents, explosives, or similar items should be cause for concern.*

If conditions such as these exist, take appropriate action, such as one of the following suggestions.

- Determine that the environment is controlled (such as through the use of an exhaust hood) so that an offending substance or its fumes cannot reach the machine.
- Remove the offending substance.
- Install the machine in a different location.

The specific remedy will vary from site to site, but the principles remain the same. To avoid the risk of injury or damage, be alert for changes in the environment when performing subsequent service on any machine, and take appropriate action.

## Unauthorized Modifications

Konica equipment has gained a reputation for being reliable products. This has been attained by a combination of outstanding design and a knowledgeable service force.

The design of the equipment is extremely important. It is the design process that determines tolerances and *safety margins* for mechanical, electrical, and electronic aspects. It is not reasonable to expect individuals not involved in product engineering to

know what effect may be caused by altering any aspect of the machine's design. Such changes have the potential of degrading product performance and reducing safety margins.

For these reasons, *installation of any modification not specifically authorized by Konica Business Machines U.S.A., Inc., is strictly prohibited.*

The following list of prohibited actions is not all-inclusive, but demonstrates the intent of this policy.

- Using an extension cord or any unauthorized power cord adapter.
- Installing any fuse whose rating and physical size differs from that originally installed.
- Using wire, paper clips, solder, etc., to replace or eliminate any fuse (including temperature fuses).
- Removing (except for replacement) any air filter.
- Defeating the operation of relays by any means (such as wedging paper between contacts).
- Causing the machine to operate in a fashion other than as it was designed.
- Making any change which might have a chance of defeating built-in safety features.
- Using any unspecified replacement parts.

## General Safety Guidelines

This equipment has been examined in accordance with the laws pertaining to various product safety regulations prior to leaving the manufacturing facility to protect the operators and service personnel from injury. However, as with any operating device, components will break down through the wear-and-tear of everyday use, as will additional safety discrepancies be discovered. For this reason, it is important that the technician periodically performs safety checks on the equipment to maintain optimum reliability and safety.

The following checks, not all-inclusive, should be made during each service call:

**CAUTION:** Avoid injury. Ensure that the equipment is disconnected from its power source before continuing.

- Look for sharp edges, burrs, and damage on all external covers and copier frame.
- Inspect all cover hinges for wear (loose or broken).
- Inspect cables for wear, frays, or pinched areas.

- Ensure that the power cord insulation is not damaged (no exposed electrical conductors).
- Ensure that the power cord is properly mounted to the frame by cord clamps.
- Check the continuity from the round lug (GND) of the power cord to the frame of the copier – ensure continuity. An improperly grounded machine can cause an electrically-charged machine frame.

### Safeguards During Service Calls

Confirm that all screws, parts, and wiring which are removed during maintenance are installed in their original positions.

- When disconnecting connectors, do not pull the wiring, particularly on AC line wiring and high voltage parts.
- Do not route the power cord where it is likely to be stepped on or crushed.
- Carefully remove all toner and dirt adhering to any electrical units or electrodes.
- After part replacement or repair work, route the wiring in such a way that it does not contact any burrs or sharp edges.
- Do not make any adjustments outside of the specified range.

### Applying Isopropyl Alcohol

Care should be exercised when using isopropyl alcohol, due to its flammability. When using alcohol to clean parts, observe the following precautions:

- Remove power from the equipment.
- Use alcohol in small quantities to avoid spillage or puddling. Any spillage should be cleaned up with rags and disposed of properly.
- Be sure that there is adequate ventilation.
- Allow a surface which has been in contact with alcohol to dry for a few minutes to ensure that the alcohol has evaporated completely before applying power or installing covers.

### Summary

It is the responsibility of every technician to use professional skills when servicing Konica products. There are no short cuts to high-quality service. Each piece of equipment must be thoroughly inspected with respect to safety considerations as part of every routine service call. The operability of the copier, and more importantly, the safety of those who operate or service the equipment, are directly dependent upon the conscientious effort of each and every technician.

Remember...when performing service calls, use good judgment (have a watchful eye) to identify safety hazards or potential safety hazards that may be present, and correct these problem areas as they are identified – the safety of those who operate the equipment as well as those who service the copier depend on it!





# OUTLINE

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# LT-402/LT-412 PRODUCT SPECIFICATIONS

## [1] Type

### Type:

Side mount type large volume paper feed tray

## [2] Functions

### Standard size paper :

#### LT-402

- Metric area

A4 / B5 / 8.5 x 11

Wide paper (314mm x 223mm max.)

- Inch area

8.5 x 11 / A4

Wide paper (314mm x 223mm max.)

#### LT-412

- Metric area

A3 / B4 / A4 / A4R / F4

11 x 17 / 8.5 x 14 / 8.5 x 11 / 8.5 x 11R

Wide paper (314mm x 459mm max.)

- Inch area

11 x 17 / 8.5 x 14 / 8.5 x 11 / 8.5 x 11R

A3 / B4 / A4 / A4R / F4

Wide paper (314mm x 459mm max.)

### Maximum quantity:

4000 sheets (80 g/m<sup>2</sup> or 20lbs)

## [3] Machine Data

### Power source

24V DC/5V (supplied from the main body),

AC27.3V

### Max. power consumption

LT-402 Max. 82W

LT-412 Max. 100 W

### Weight

LT-402 Approx. 30 kg

LT-412 Approx. 42 kg

### Machine dimensions

LT-402 430(W) x 639(D) x 690(H) mm

LT-412 670(W) x 639(D) x 695(H) mm

## [4] Maintenance

### Maintenance:

Same as the main body

### Machine life:

Same as the main body

## [5] Operating Environment

### Temperature:

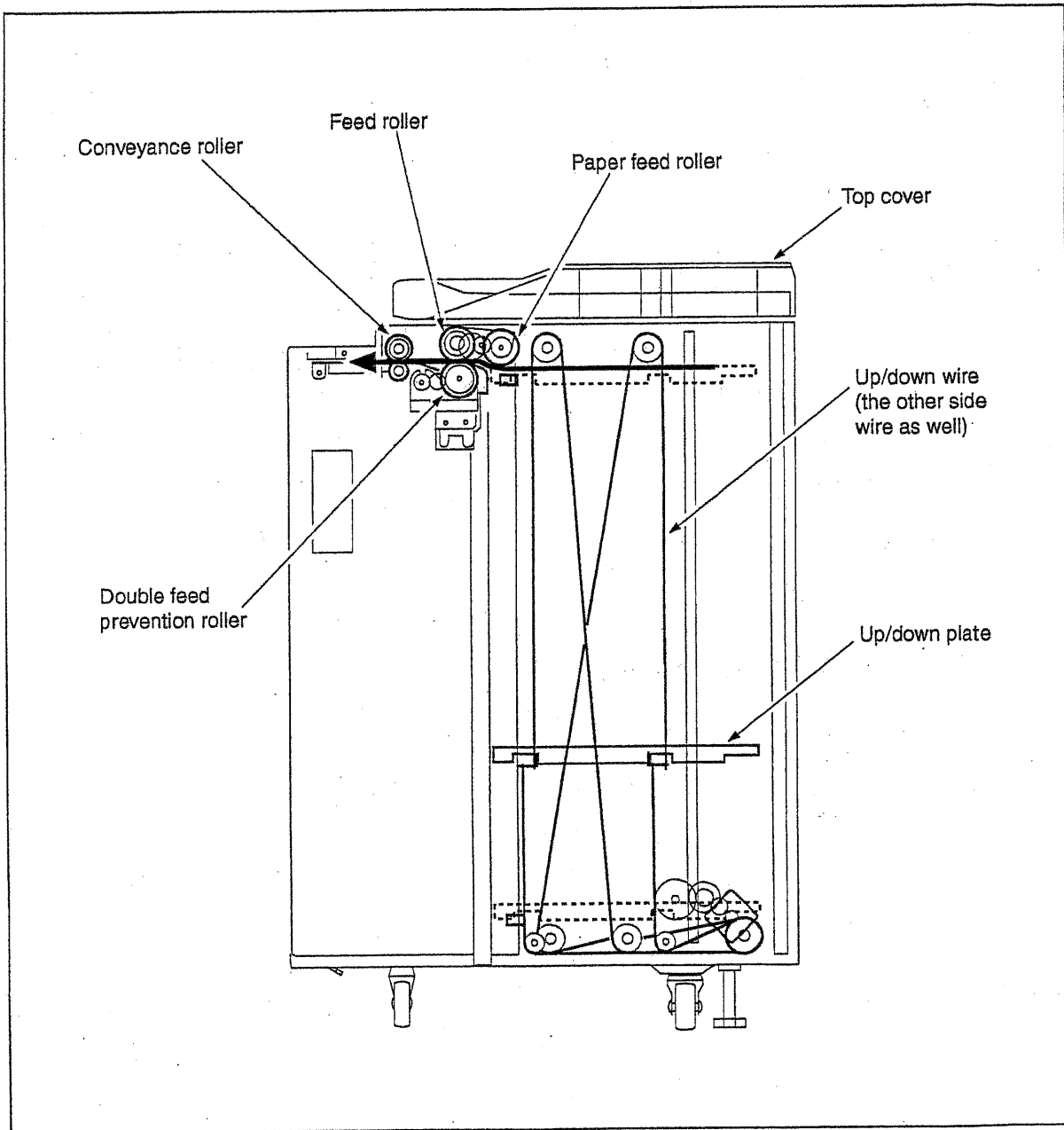
10°C to 30°C (50°F to 86°F)

### Humidity:

10% to 80%RH

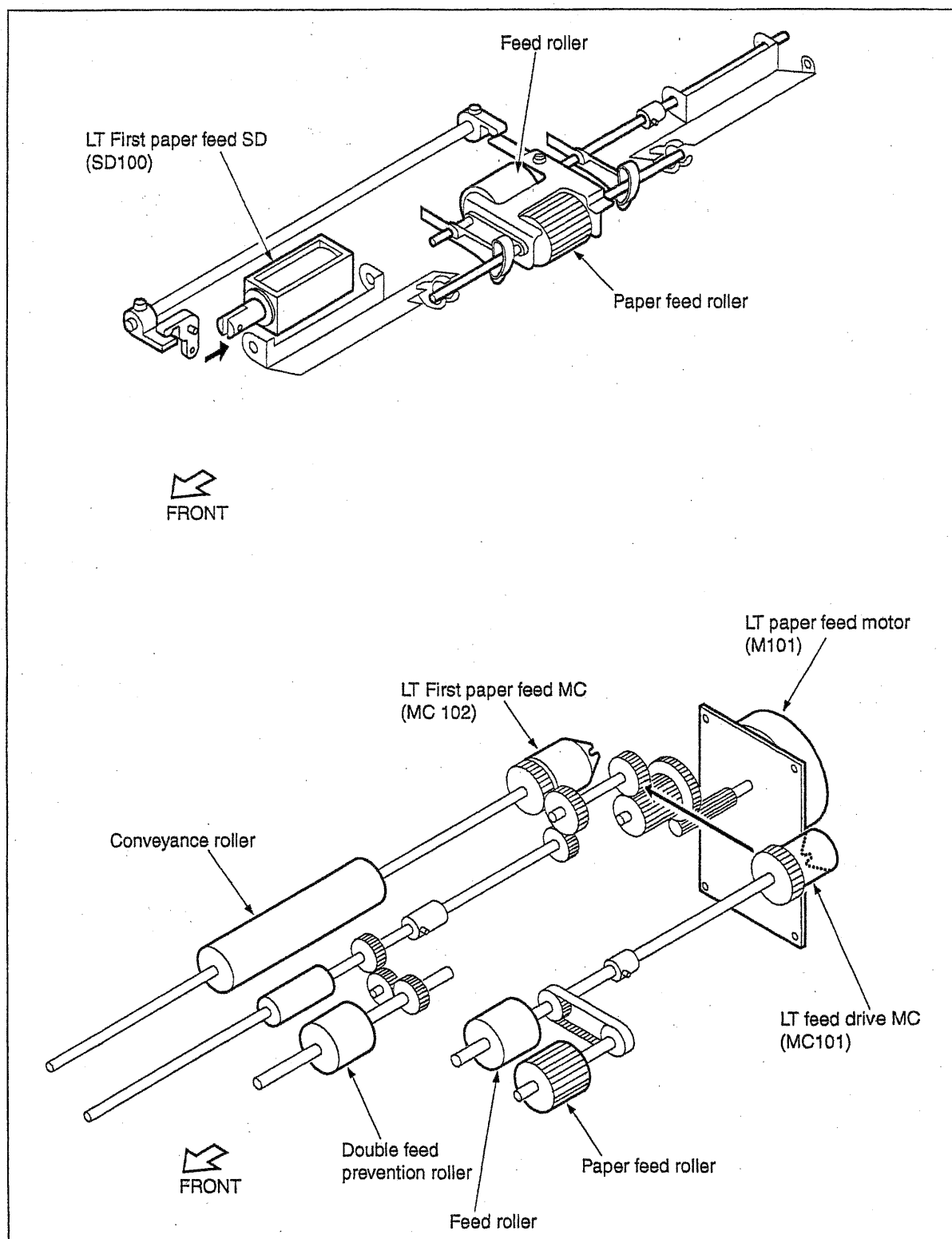
**Note:** The information herein may be subject to change for improvement without notice.

# CENTER CROSS-SECTIONAL DRAWING



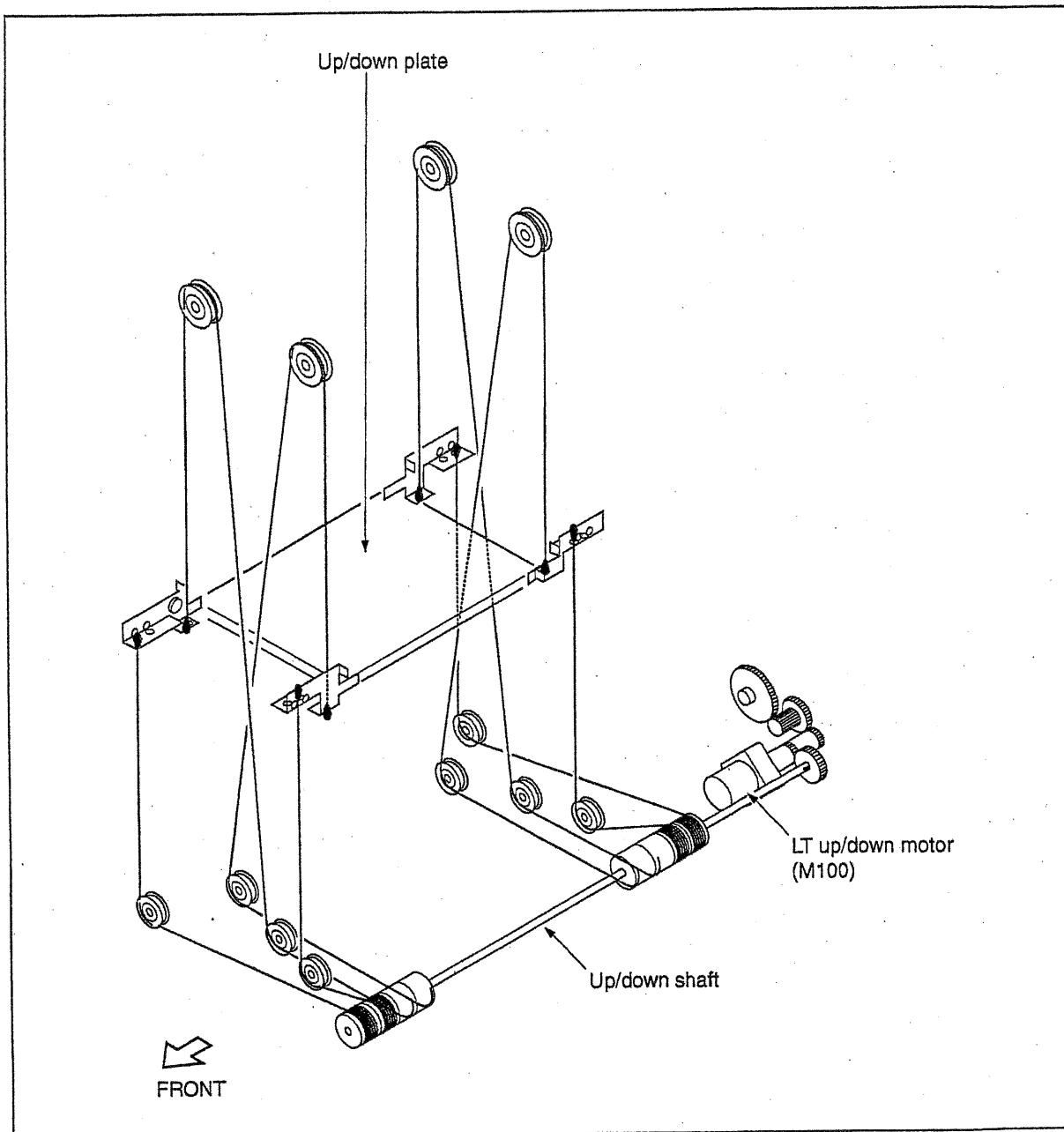
# DRIVE SYSTEM DRAWING

## [1] Paper feed drive section

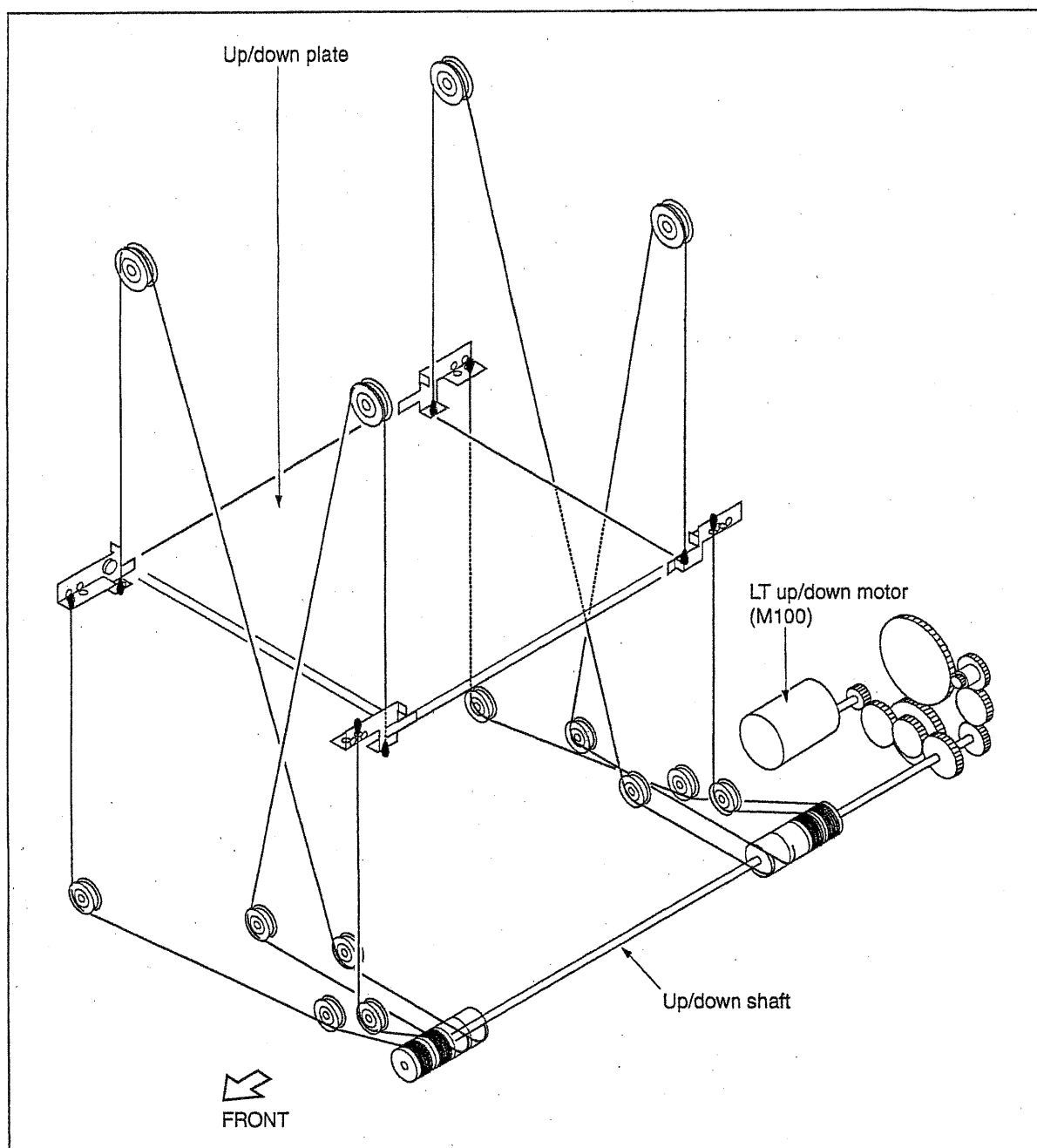


[2] Stacked paper up/down wire drive section

a. LT-402



## b. LT-412



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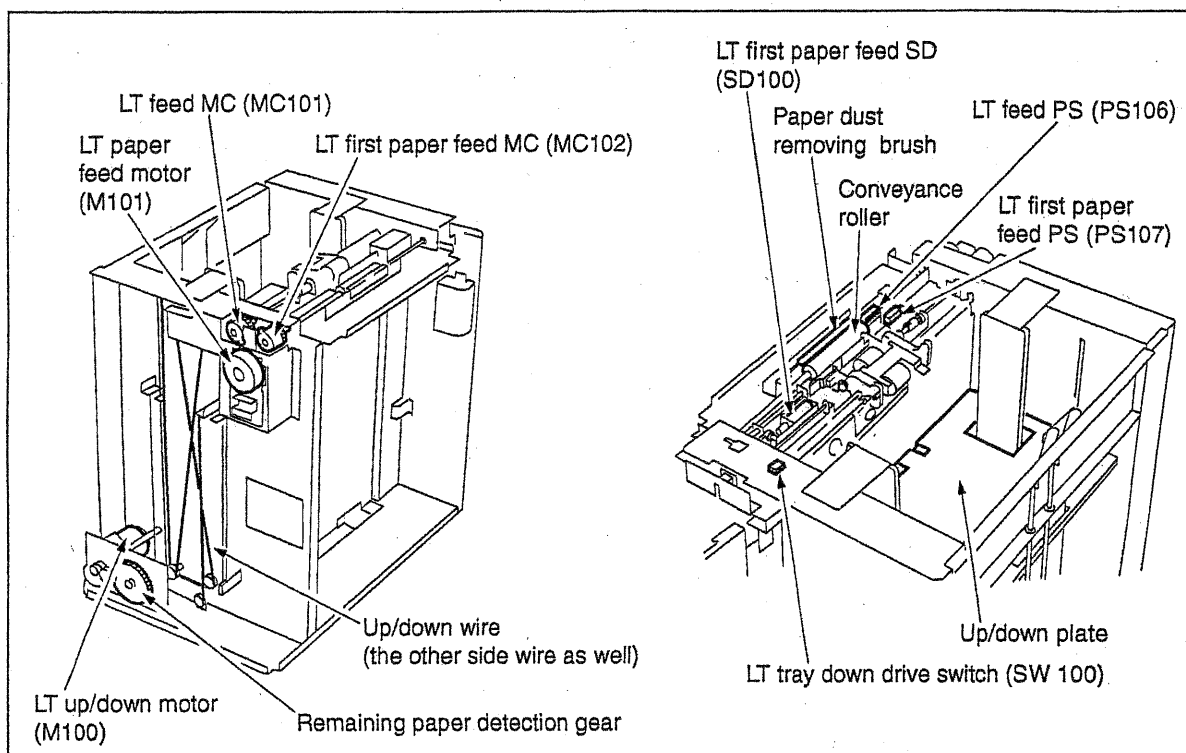
# 2

## UNIT EXPLANATION

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# PAPER FEED SECTION

## [1] Composition



## [2] Mechanisms

Mechanism	Method
Paper lifting *1	Wire drive
Paper feed	Paper feed roller
No paper detection	Photo sensor (PS108) +actuator
Remaining paper detection *2	Remaining paper detection gear+ photo sensor (PS102, PS103, PS104, PS105)
Paper conveyance	Roller conveyance

### \*1 Paper lifting

#### a.Up/down plate lifting drive operation

The up/down plate is lifted with the up/down wires. When the top cover closes, LT up/down motor (M100) rotates and the up/down plate connected to the up/down wires rises.

#### b.Up/down plate down drive operation

The up/down plate automatically lowers by 120 mm when the top cover is opened.

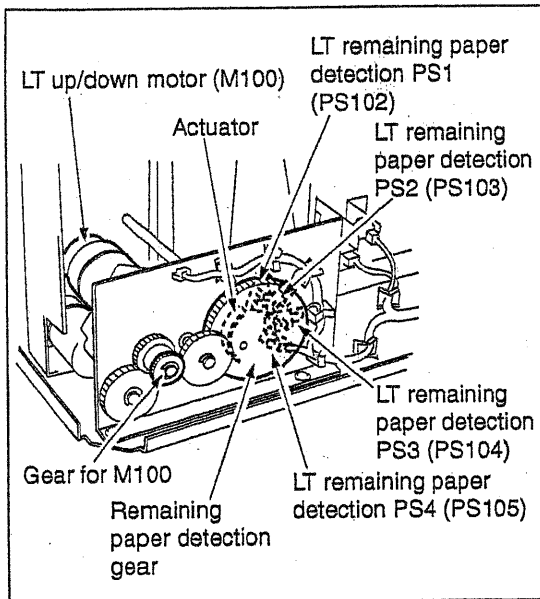
Subsequently, it is lowered by 120 mm each time LT tray down drive switch (SW100) is pressed.

### \*2 Remaining paper detection

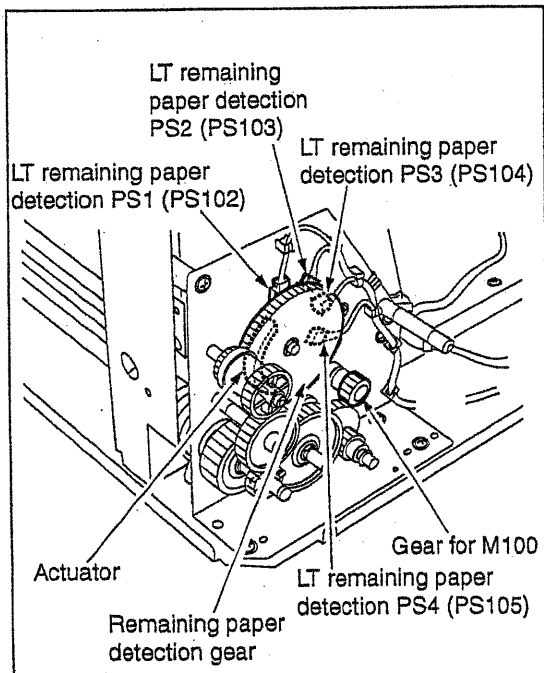
The LCT is equipped with a remaining paper detection gear which rotates together with LT up/down motor (M100) driving the up/down plate. The remaining paper detection gear has an actuator to turn ON/OFF LT remaining paper detection PS1 (PS102), LT remaining paper detection PS2 (PS103), LT remaining paper detection PS3 (PS104), and LT remaining paper detection PS4 (PS105).

Each sensor is turned ON/OFF according to the rotating position of the remaining paper detection gear and since this is linked with the up/down position of the up/down plate, the remaining paper quantity in the LCT can be determined by monitoring the ON/OFF of each sensor. The remaining paper quantity detected with the four sensors is displayed on the main body display.

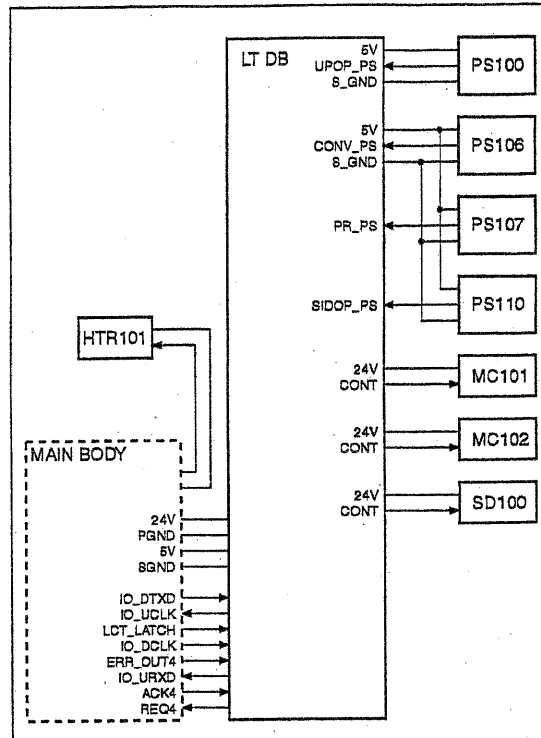
#### a. LT-402



#### b. LT-412



### [3] First paper feed control



The first paper is fed by the paper feed roller and the feed roller driven by M101 (LT paper feed) via MC101 (LT feed MC). The paper feed roller and feed roller touche the paper when SD100 (LT first feed) is ON, feeding the paper to the conveyance roller. Then, SD100 (LT first paper feed) turns OFF to release the paper feed roller and feed roller from the paper. The conveyance roller is also driven by M101, by turning ON MC102 (LT first feed MC), paper is fed to the main body. The related signals are: PS100 (LT top cover open/close detection), PS106 (LT feed), PS107 (LT first feed), and PS110 (LT jam access door open/close detection).

## 1. Operation

### a. First paper feed timing

- (1) Start of first paper feed  
At predefined interval after the START button is pressed.
- (2) Start of second and subsequent papers  
When PS106 (LT feed) is turned OFF by the preceding paper.
- (3) OFF timing  
When the main body M7 (paper exit) turns OFF.

### b. Interlock

The power supply line of M101 (LT paper feed) is equipped with MS101 (LT interlock/1) and MS102 (LT interlock/2). When the top cover is opened, MS101 turns OFF, and when the jam access door is opened MS102 turns OFF, thereby cutting off the power supply to M101.

Furthermore, the top cover is equipped with PS100 (LT top cover open/close detection) and the jam access door is equipped with PS110 (LT jam access door open/close detection) and when either of these doors is opened during paper feed, the M101 drive signal is turned OFF to stop the paper feed operation.

### c. Internal heater

The LCT is equipped with HTR101 (LT internal heater) to protect the paper from humidity. HTR101 is directly controlled by the main body PRCB (printer control board) rather than by the LTDB (LT drive board).

## 2. Signals

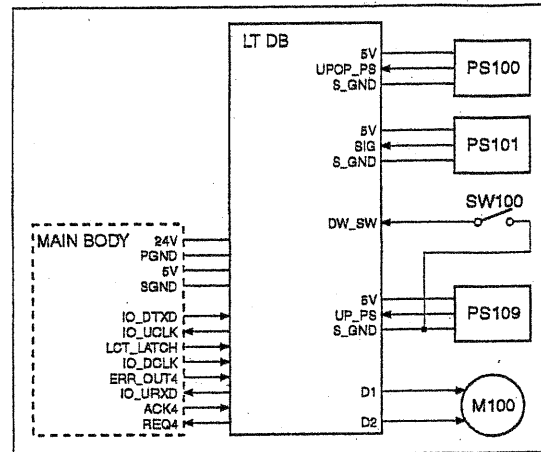
### a. Input signals

- (1) UPOP\_PS (PS100 to LTDB)  
Top cover open/close detection signal  
[L]: Cover opened  
[H]: Cover closed
- (2) CONV\_PS (PS106 to LTDB)  
Conveyance roller exit paper detection signal  
[L]: Paper detected  
[H]: Paper not detected
- (3) PR\_PS (PS107 to LTDB)  
Conveyance roller entrance (pre-registration position) paper detection signal  
[L]: Paper detected  
[H]: Paper not detected
- (4) SIDOP\_PS (PS110 to LTDB)  
Jam access door open/close detection signal  
[L]: Door opened  
[H]: Door closed
- (5) LCTM\_EM (M101 to LTDB)  
M101 rotation error detection signal  
[L]: M101 rotating  
[H]: M101 not rotating
- (6) IO\_DTXD (MAIN BODY to LTDB)  
Serial data to transmit main body PRCB (printer control board) operating status to LTDB
- (7) LCT\_LATCH (MAIN BODY to LTDB)  
IO\_DTXD signal latch signal
- (8) IO\_DCLK (MAIN BODY to LTDB)  
IO\_DTXD signal clock signal
- (9) ERR\_OUT4 (MAIN BODY to LTDB)  
Signal to notify LTDB (LT drive board) when there is error in the main body
- (10) ACK4 (MAIN BODY to LTDB)  
Serial data transmission enable signal from LCT to main body PRCB (printer control board)

## b. Output signals

- (1) CONT (LTDB to MC101)  
MC101 (LT feed MC) ON/OFF drive signal  
[L]: MC101 ON  
[H]: MC101 OFF
- (2) CONT (LTDB to MC102)  
MC102 (LT first paper feed MC) ON/OFF drive signal  
[L]: MC102 ON  
[H]: MC102 OFF
- (3) CONT (LTDB to SD100)  
SD100 (LT first paper feed) ON/OFF drive signal  
[L]: SD100 ON  
[H]: SD100 OFF
- (4) LCTM\_CONT (LTDB to M101)  
M101 (LT paper feed) ON/OFF control signal  
[L]: M101 ON  
[H]: M101 OFF
- (5) IO\_URXD (LTDB to MAIN BODY)  
Serial data to transmit the LTDB (LT drive board) operating status to main body PRCB
- (6) IO\_UCLK (LTDB to MAIN BODY)  
IO\_URXD signal clock signal
- (7) REQ4 (LTDB to MAIN BODY)  
Serial data send request signal from LCT to main body PRCB
- (8) LCTM\_CLK (M101 to LTDB)  
M101 (LT paper feed) rotational speed control clock signal
- (9) LCTM\_F/R (M101 to LTDB)  
M101 (LT paper feed) rotational direction indication signal  
This machine always indicates [H]: normal rotation.

## [4] Up/down plate drive control



When the top cover opens or closes, M100 (LT up/down motor) rotates forward or backward to move the up/down plate up or down. The up/down plate descends by 120 mm each time SW100 (LT tray down drive) is pressed while the top cover is opened.

The related signals are PS100 (LT top cover open/close detection), PS101 (LT lower limit detection), and PS109 (LT upper limit detection).

### 1. Operation

#### a. Up/down plate descend timing

- (1) ON timing  
When the top cover is opened and PS100 (LT top cover open/close detection) is turned OFF, M100 rotates backward to lower the up/down plate. When SW100 (LT tray down drive) turns ON by pressing, M100 rotates backward to move the up/down plate down.
- (2) OFF timing  
M100 turns OFF at predefined interval after PS100 turns OFF or SW100 turns ON. This in turn lowers the up/down plate by 120 mm.
- (3) Others  
The up/down plate descends by 120 mm each time SW100 is pressed until PS101 turns ON to indicate the bottom limit of the up/down plate.

## b. Up/down plate ascend timing

### (1) ON timing

When the top cover is closed and PS100 (LT top cover open/close detection) is turned ON, M100 (LT UP/DOWN) rotates forward to raise the up/down plate.

### (2) OFF timing

When the up/down plate rises and PS109 (LT upper limit detection) turns ON to indicate the detection of the topmost paper, M100 (LT UP/DOWN) turns OFF and stops the up/down plate. The up/down plate also stops when the top cover is opened and PS100 (LT top cover open/close detection) turns OFF.

## 2. Signals

### a. Input signals

#### (1) SIG (PS101 to LTDB)

Up/down plate lower limit detection signal

[L]: Up/down plate not at lower limit

[H]: Up/down plate at lower limit

#### (2) UP\_PS (PS109 to LTDB)

Up/down plate upper limit detection signal

[L]: Up/down plate not at upper limit

[H]: Up/down plate at upper limit

#### (3) DW\_SW (SW100 to LTDB)

SW100 (LT tray down switch) ON/OFF detection signal

[L]: SW100 ON

[H]: SW100 OFF

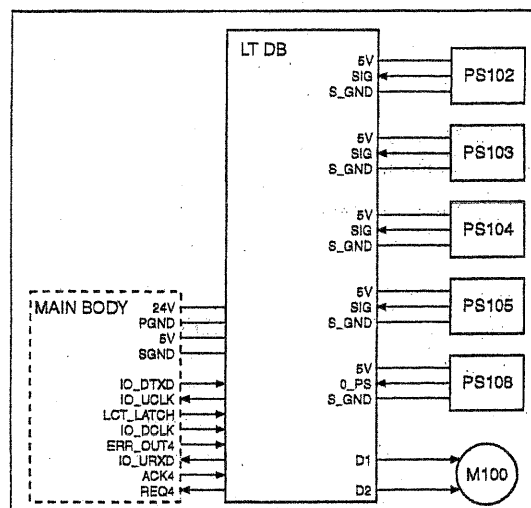
### b. Output signal

#### (1) D1, 2 (LTDB to M100)

M100 (LT UP/DOWN) drive signal

These signals switches the direction of the drive current to control the rotation direction of M100.

## [5] Remaining paper detection/No paper detection control



The remaining paper quantity is detected by PS102 (LT remaining paper detection 1), PS103 (LT remaining paper detection 2), PS104 (LT remaining paper detection 3), and PS105 (LT remaining paper detection 4) and no paper detection is made by PS108 (LT no paper detection).

The signals detected by these sensors are controlled by LTDB (LT drive board) and displayed on the main body display.

## 1. Operation

### a. Remaining paper detection control

The remaining paper quantity is determined from the ON/OFF combination of sensors PS102 (LT remaining paper detection 1), PS103 (LT remaining paper detection 2), PS104 (LT remaining paper detection 3), and PS105 (LT remaining paper detection 4) which detect the rotational position of M100 (LT UP/DOWN) that is driving the up/down plate. Each sensor turns ON or OFF according to the position of the remaining paper detection gear which is linked with the rotation of M100.

The remaining paper quantity is detectable at eight levels, but it is displayed on the main body display as five levels.

## &lt;Remaining paper quantity and display&gt;

Stacked paper quantity	PS102	PS103	PS104	PS105	Remaining paper quantity display
0 to 700	OFF	OFF	OFF	OFF	1 flashing
701 to 1200	ON	OFF	OFF	OFF	1 on
1201 to 1700	ON	ON	OFF	OFF	2 on
1701 to 2200	ON	ON	ON	OFF	2 on
2201 to 2700	ON	ON	ON	ON	3 on
2701 to 3200	OFF	ON	ON	ON	3 on
3201 to 3700	OFF	OFF	ON	ON	4 on
3701 or more	OFF	OFF	OFF	ON	4 on

**Caution:** The remaining paper quantity is indicated on the control panel with four horizontal bars.

Stacked paper quantity differs depending on the thickness of the paper.

**b. No paper detection control**

When there is no more paper inside the LCT, PS108 (LT no paper detection) turns ON and a message is displayed on the main body display.

## 2. Signals

### a. Input signals

(1) SIG (PS102 to LTDB)

Remaining paper detection gear rotational position detection signal

[L]: PS102 OFF

[H]: PS102 ON

(2) SIG (PS103 to LTDB)

Remaining paper detection gear rotational position detection signal

[L]: PS103 OFF

[H]: PS103 ON

(3) SIG (PS104 to LTDB)

Remaining paper detection gear rotational position detection signal

[L]: PS104 OFF

[H]: PS104 ON

(4) SIG (PS105 to LTDB)

Remaining paper detection gear rotational position detection signal

[L]: PS105 OFF

[H]: PS105 ON

(5) 0\_PS (PS108 to LTDB)

LCT no paper detection signal

[L]: No paper

[H]: Paper present



# 3

## DISASSEMBLY/ASSEMBLY

This section explains how to disassemble and reassemble the machine. When disassembling and reassembling the machine, follow the precautions given below.

1. Be sure the power cord has been unplugged from the wall outlet.
2. The disassembled parts must be reassembled following the disassembly procedure in reverse unless otherwise specified.
3. Care should be taken not to lose small parts. Care should also be taken not to install small parts in wrong places.
4. Do not operate the machine before installing all the disassembled parts completely.
5. Removal of some screws is prohibited in this section. Never loosen them.

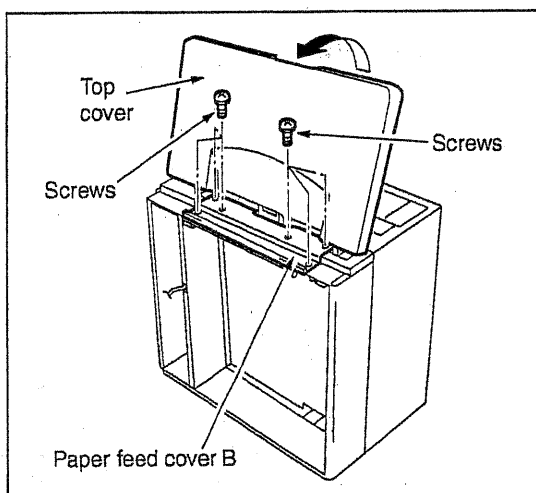
# PAPER FEED SECTION

## [1] Cleaning the Paper Dust Removing Brush

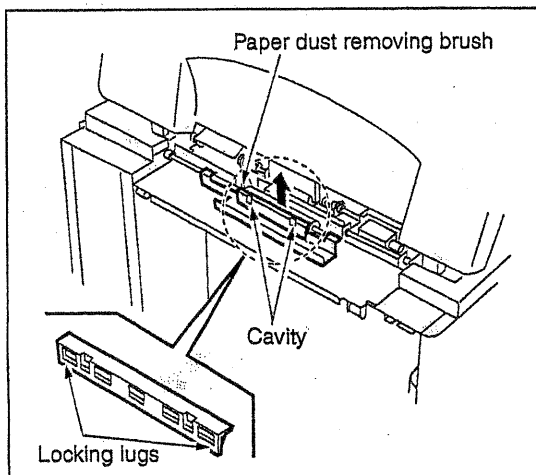
⚠ Caution: If LT is connected to the main body, make sure that main body power plug is disconnected from the power outlet.

### a. Procedure

- (1) Open the top cover.
- (2) Remove six screws to detach the paper feed cover B.



- (3) Insert a flat bladed screwdriver in the cavities (in two locations) for paper dust removing brush to release the locking lugs, then remove the paper dust removing brush.



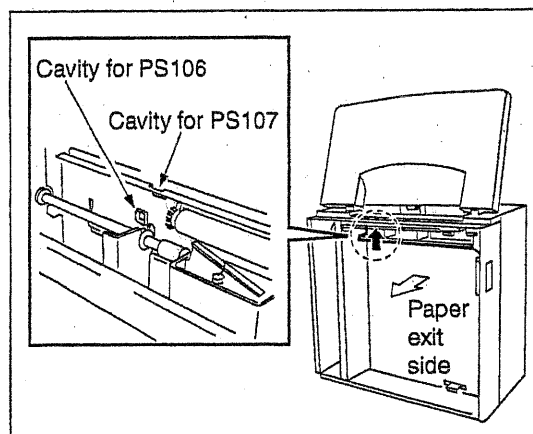
- (4) Clean the paper dust removing brush using a blower brush.
- (5) Reinstall the above parts following the removal steps in reverse.

## [2] Cleaning the LT feed PS (PS106)/LT first paper feed PS (PS107)

⚠ Caution: If LT is connected to the main body, make sure that main body power plug is disconnected from the power outlet.

### a. Procedure

- (1) Looking into the paper exit side of the LCT from below, and clean sensors through the cavity for LT feed PS (PS106) and the cavity for LT first paper feed (PS107) using a blower brush.

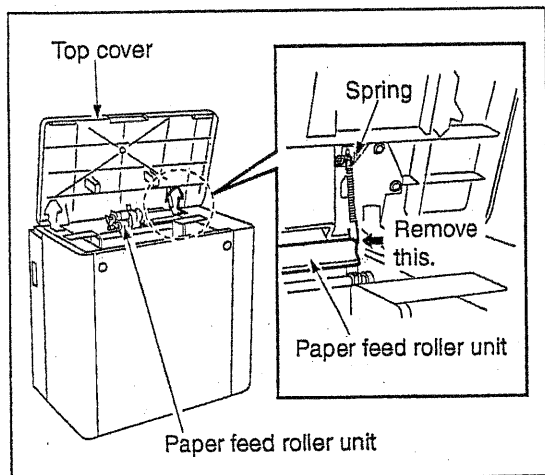


### [3] Removing and Reinstalling the Paper Feed Roller Unit

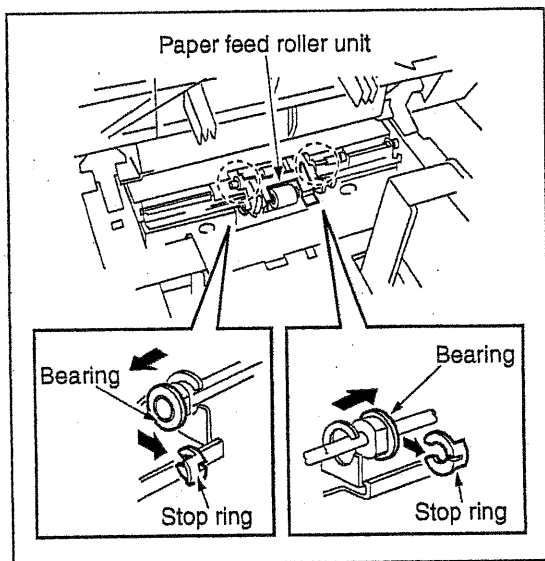
⚠ Caution: If LT is connected to the main body, make sure that main body power plug is disconnected from the power outlet.

#### a. Procedure

- (1) Open the top cover.
- (2) Remove the spring from the paper feed roller unit.



- (3) After removing two stop rings, remove the two bearings outward to remove the paper feed roller unit.



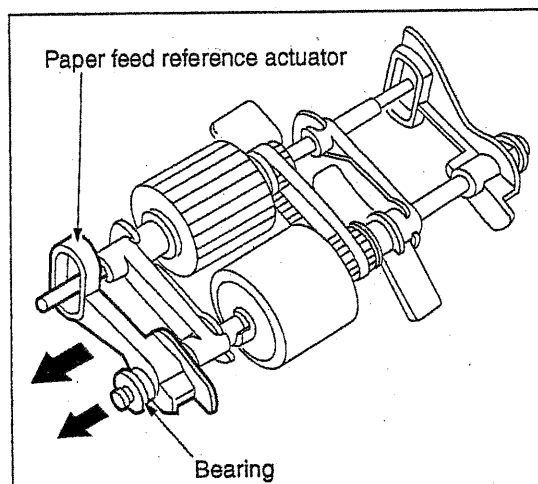
- (4) Reinstall the above parts following the removal steps in reverse.

### [4] Replacing the Paper Feed Roller Rubber/Feed Roller Rubber

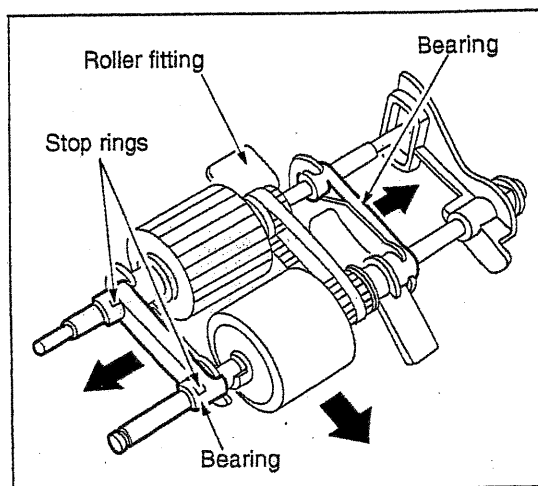
⚠ Caution: If LT is connected to the main body, make sure that main body power plug is disconnected from the power outlet.

#### a. Procedure

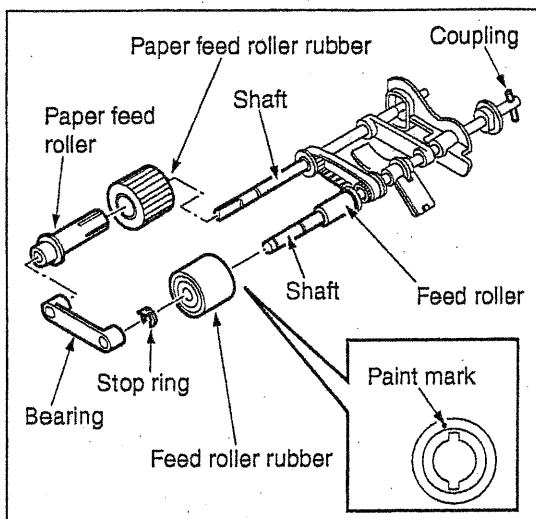
- (1) Remove the paper feed roller unit.
- (2) Remove the bearing and paper feed reference actuator.



- (3) Remove two stop rings.
- (4) Remove two bearings outward to detach the roller section from the roller fitting.



- (5) Remove the bearing from the opposite side of the coupling, then remove the paper feed roller from the shaft.
- (6) Remove the stop ring to pull the feed roller from the shaft.
- (7) Remove the rubber from each roller.



- (8) Reinstall the above parts following the removal steps in reverse.

**Caution1:** Make sure rollers and rubber portions are oriented properly when reinstalling them.

**Caution2:** Make sure the one-way clutch direction is correct.

**Caution3:** Check whether grease or the like is present on each roller.

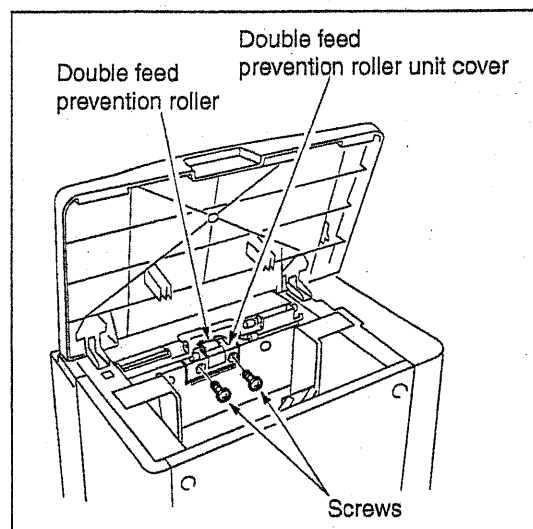
## [5] Replacing the Double Feed Prevention Roller Rubber

**⚠ Caution:** If LT is connected to the main body, make sure that main body power plug is disconnected from the power outlet.

### a. Procedure

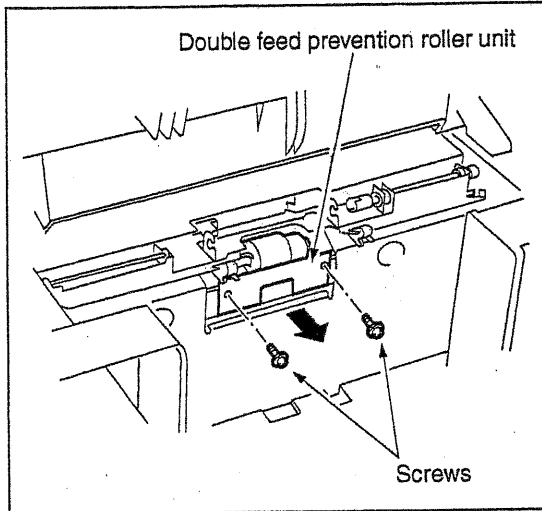
**Caution:** With the power held on, press the LT tray down switch (SW100) to move the up/down plate down to the bottom in advance.

- (1) Remove the paper feed roller unit.
- (2) Remove two screws to detach the double feed prevention roller unit cover.

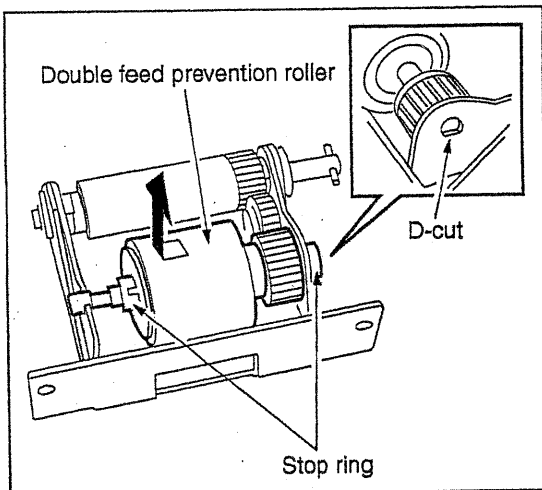


- (3) Remove two screws to detach the double feed prevention roller unit.

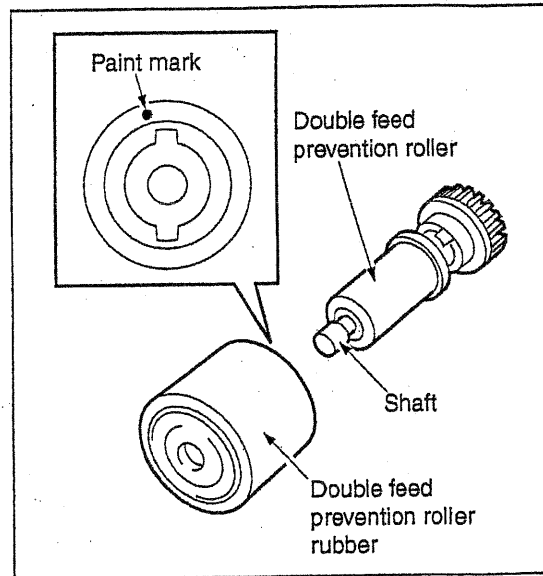
**Caution:** When reinstalling the double feed prevention roller unit, tighten the screws on the rear side first.



- (4) Remove two stop rings, fit the shaft into the D-cut in the fitting, and remove the double feed prevention roller together with the shaft.



- (5) Remove the double feed prevention roller rubber from the double feed prevention roller.



- (6) Reinstall the double feed prevention roller in the reverse order of the removal procedure.

**Caution1:** Make sure the double feed prevention roller rubber is oriented properly when reinstalling it.

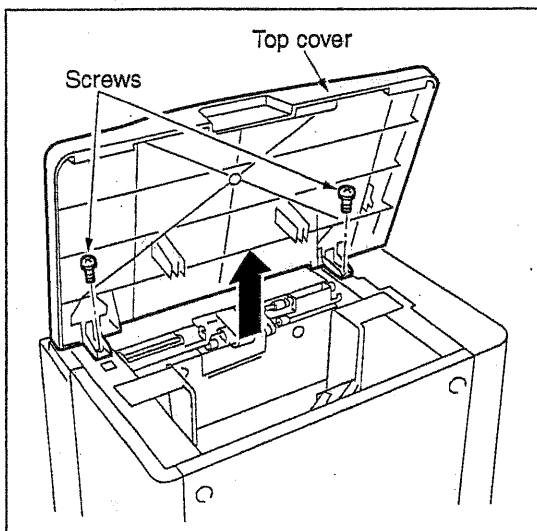
**Caution2:** Check whether scratch or the like is visible on the pet cover for the drive gear.

**Caution3:** Check whether grease or the like is present on double feed prevention roller.

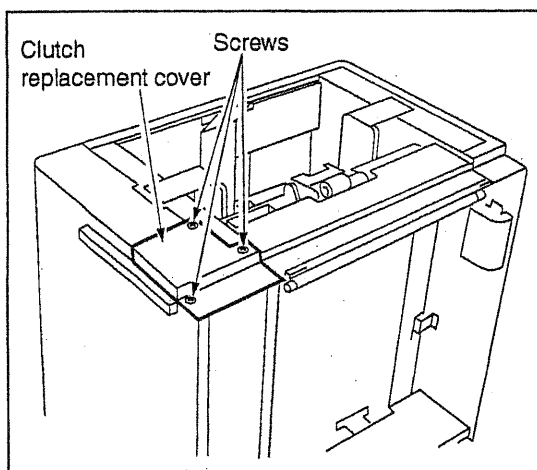
## [6] Replacing the LT feed MC (MC101)/LT first paper feed MC (MC102)

### a. Procedure

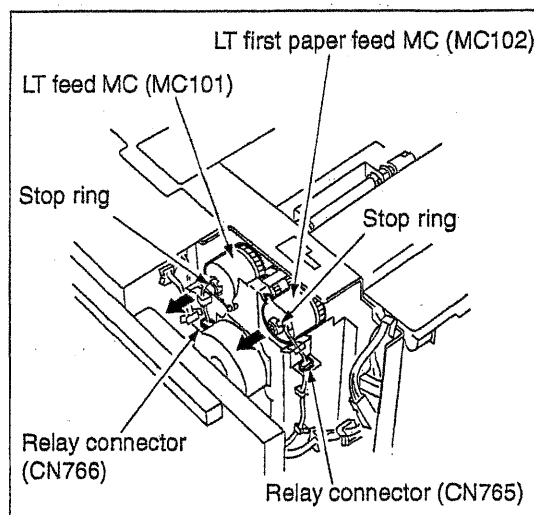
- (1) Open the top cover.
- (2) Remove the spring from the paper feed roller unit.
- (3) Remove two screws to detach the top cover.



- (4) Remove three screws to detach the clutch replacement cover.



- (5) Disconnect two relay connectors (CN765, CN766) of the clutches.
- (6) Remove the stop ring to detach each clutch.



- (7) Reinstall the above parts following the removal steps in reverse.

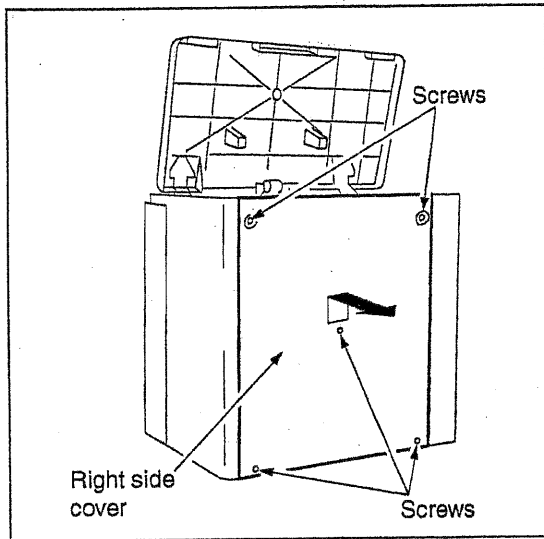
**Caution:** When installing each MC, make sure that the stopper of each clutch is on the predefined position.

## [7] Replacing the LT-402 Up/Down Wires

**Caution:** With the power held on, press the LT tray down switch (SW100) to move the up/down plate down to the bottom in advance.

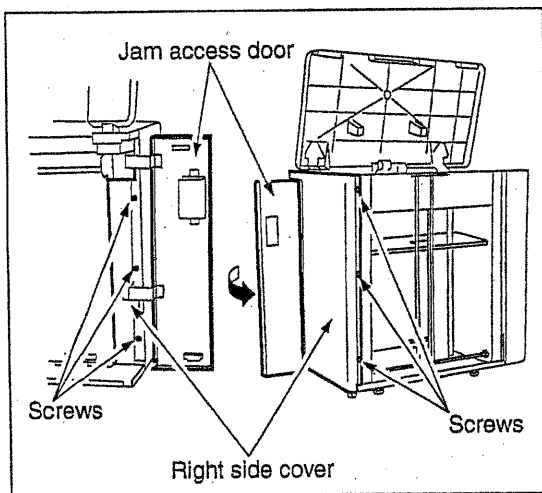
### a. Procedure

- (1) Open the top cover.
- (2) Remove the clutch replacement cover.
- (3) Remove five screws to detach the right side cover.

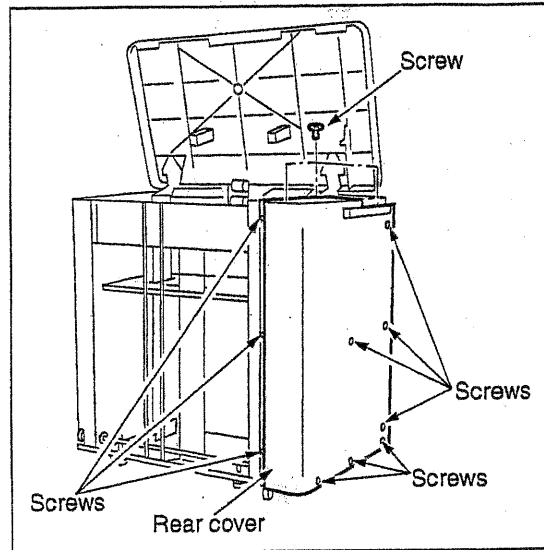


- (4) After opening the jam access door, remove six screws to detach the front cover.

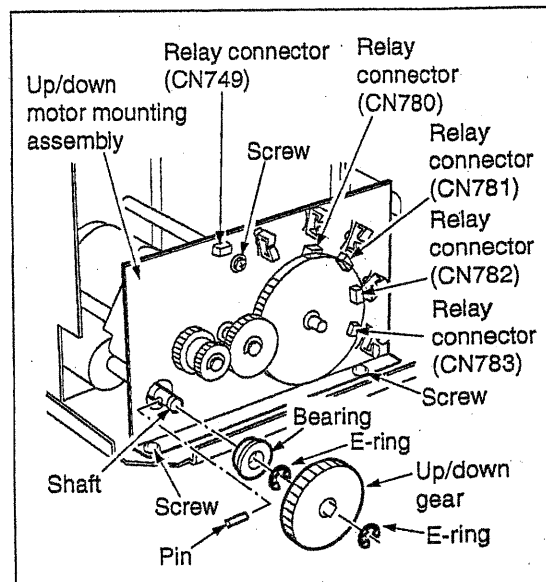
**Caution:** When removing the front cover, close the jam access door after removing the screws.



- (5) Remove twelve screws to detach the rear cover.



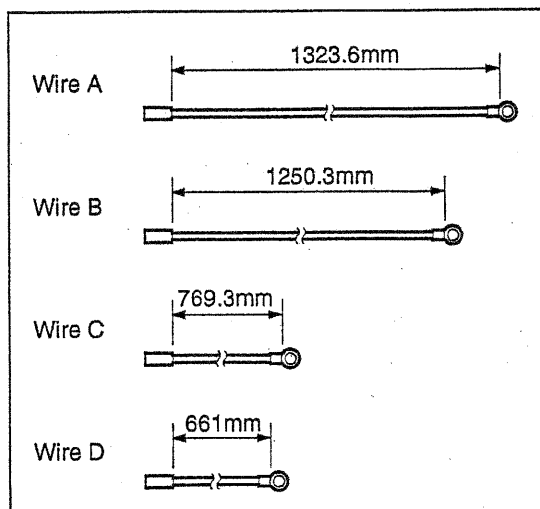
- (6) Remove the five relay connectors (CN749, CN780, CN781, CN782, CN783) to disconnect the wiring harness from the up/down motor mounting assembly.
- (7) Remove the E-ring to detach the up/down gear.
- (8) Pull the pin from the shaft.
- (9) Remove the E-ring to detach the bearing.
- (10) Remove three screws to detach the up/down motor assembly.



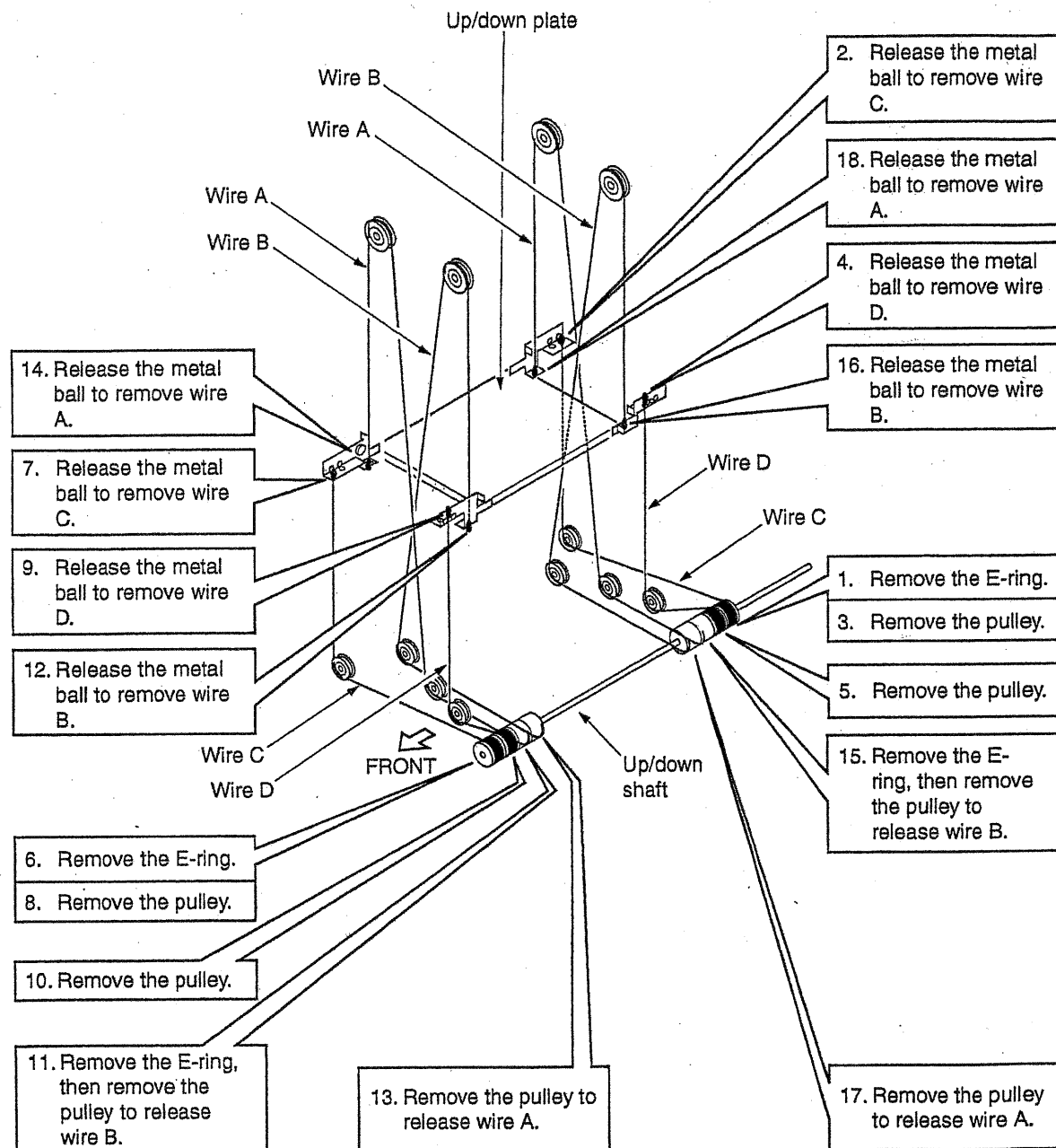


- (11) Replace the up/down wire following the instructions in "Removing Up/Down Wires" and "Installing Up/Down Wires."

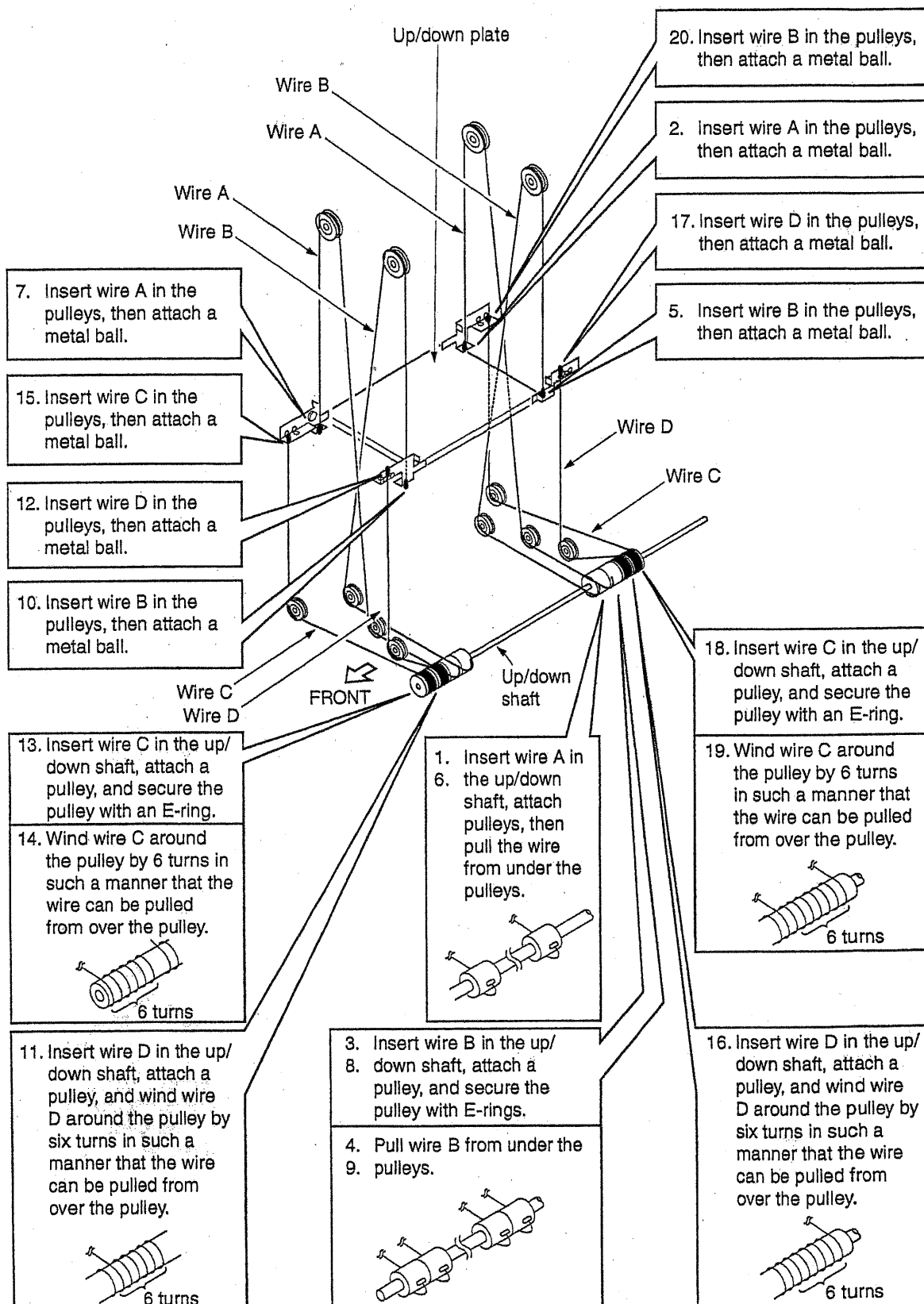
**Caution:** Two sets of four up/down wires with different length, one set at the front and the other at the back, are used. Wires with the same length can be used either at the front or back if they are used in the same location.



<Removing the Up/Down Wires>



<Installing the Up/Down Wires>

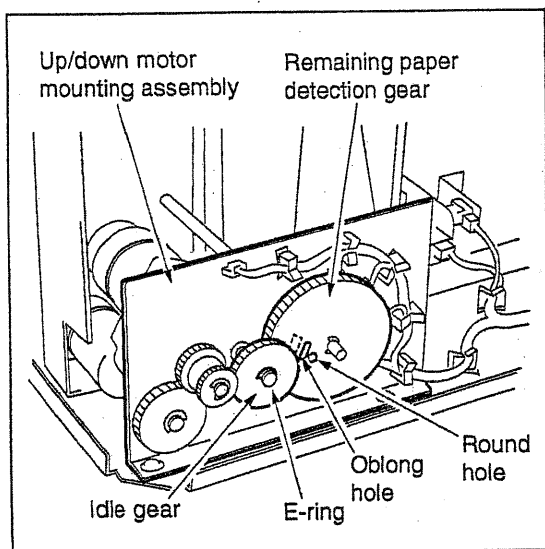


- (12) After installing the up/down wires, make sure the up/down wires are passed in the grooves in the pulleys properly and wires do not run on the sides of the pulleys. Also make sure the up/down plate can be moved up and down smoothly by hand.

**Caution:** If the up/down plate does not move up and down smoothly, reinstall the up/down wires.

- (13) Install the up/down wire drive motor assembly, up/down gear, and relay connectors, following the removal steps in reverse.
- (14) Remove the E-ring to detach the idle gear.
- (15) Rotate the remaining paper detection gear until the round hole in this gear is aligned with the oblong hole in the up/down motor mounting assembly.

**Caution:** Align when the up/down plate is in lowest position.



- (16) Install the idle gear.
- (17) Attach the covers following the removal steps in reverse.

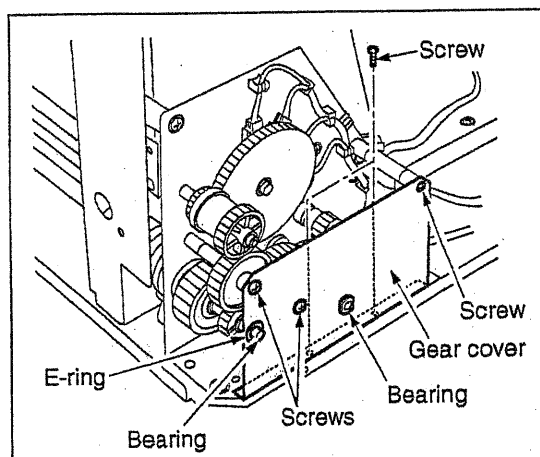
**Caution1:** After replacing the up/down wires, make horizontal and centering adjustment of the up/down plate. (Refer to "ADJUSTMENT SECTION.")

## [8] Replacing the LT-412 Up/Down Wires

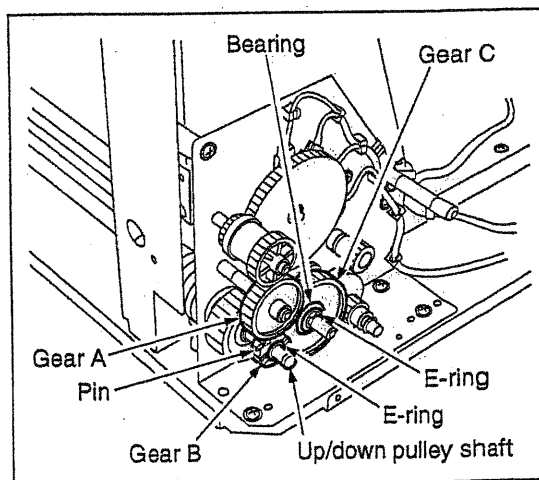
### a. Procedure

**Caution:** With the power held on, press the LT tray down switch (SW100) to move the up/down plate down to the bottom in advance.

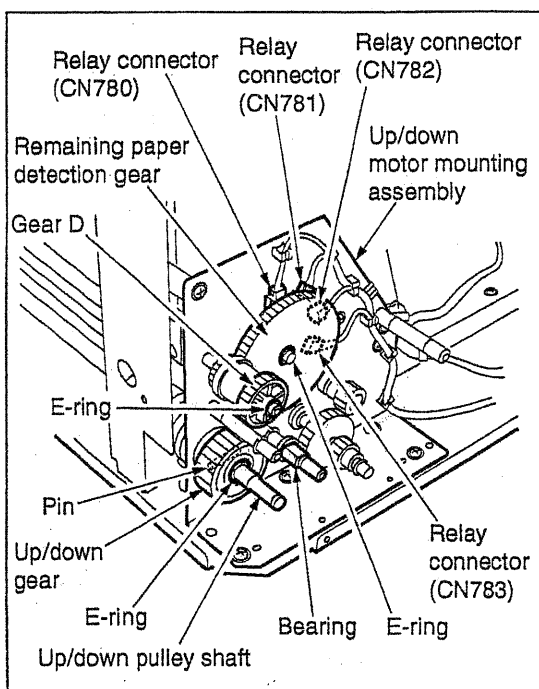
- (1) Remove the clutch replacement cover, side cover (right), front cover, and rear cover following the steps (1) to (5) in [7] Replacing the LT-402 Up/Down Wires.
- (2) Remove the E-ring.
- (3) Remove the five screws to detach the gear cover.
- (4) Remove the two bearings.



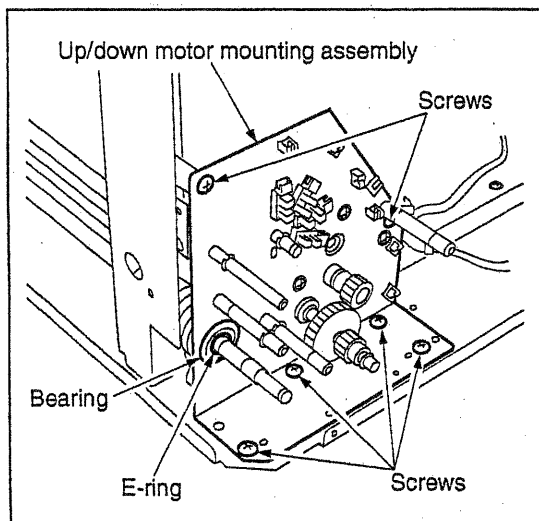
- (5) Remove the gear A.
- (6) Remove the E-ring to remove gear B.
- (7) Remove the detent pin for gear B from the up/down pulley shaft.
- (8) Remove the E-ring and bearing to remove gear C.



- (9) Remove the bearing behind gear C.
- (10) Remove the E-ring to remove the up/down gear.
- (11) Remove the detent pin for up/down gear from the up/down pulley shaft.
- (12) Remove the E-ring to remove gear D.
- (13) Remove the E-ring to remove the remaining paper detection gear.
- (14) Remove four relay connectors (CN780, CN781, CN782, and CN783) to disconnect the wiring harness from the up/down motor mounting assembly.

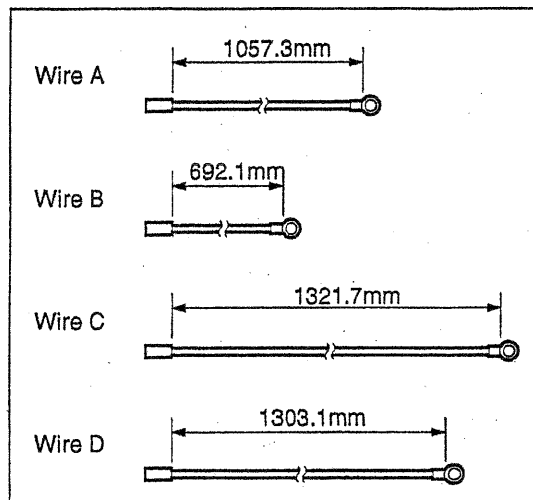


- (15) Remove the E-ring to remove the bearing.
- (16) Remove the six screws to remove the up/down motor mounting assembly.

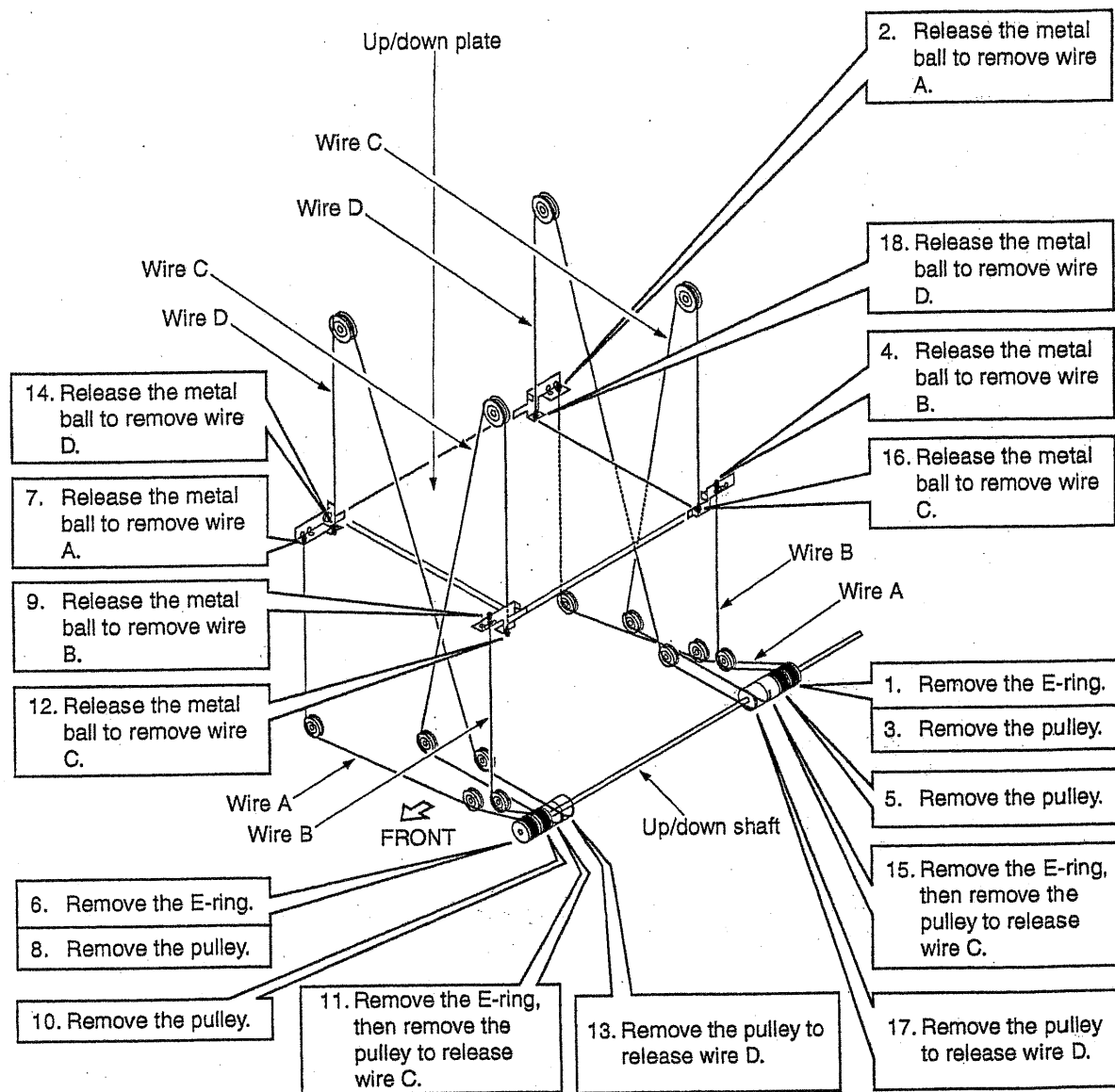


- (17) Replace the up/down wires following the instructions in "Removing the Up/Down Wires" and "Installing Up/Down Wires."

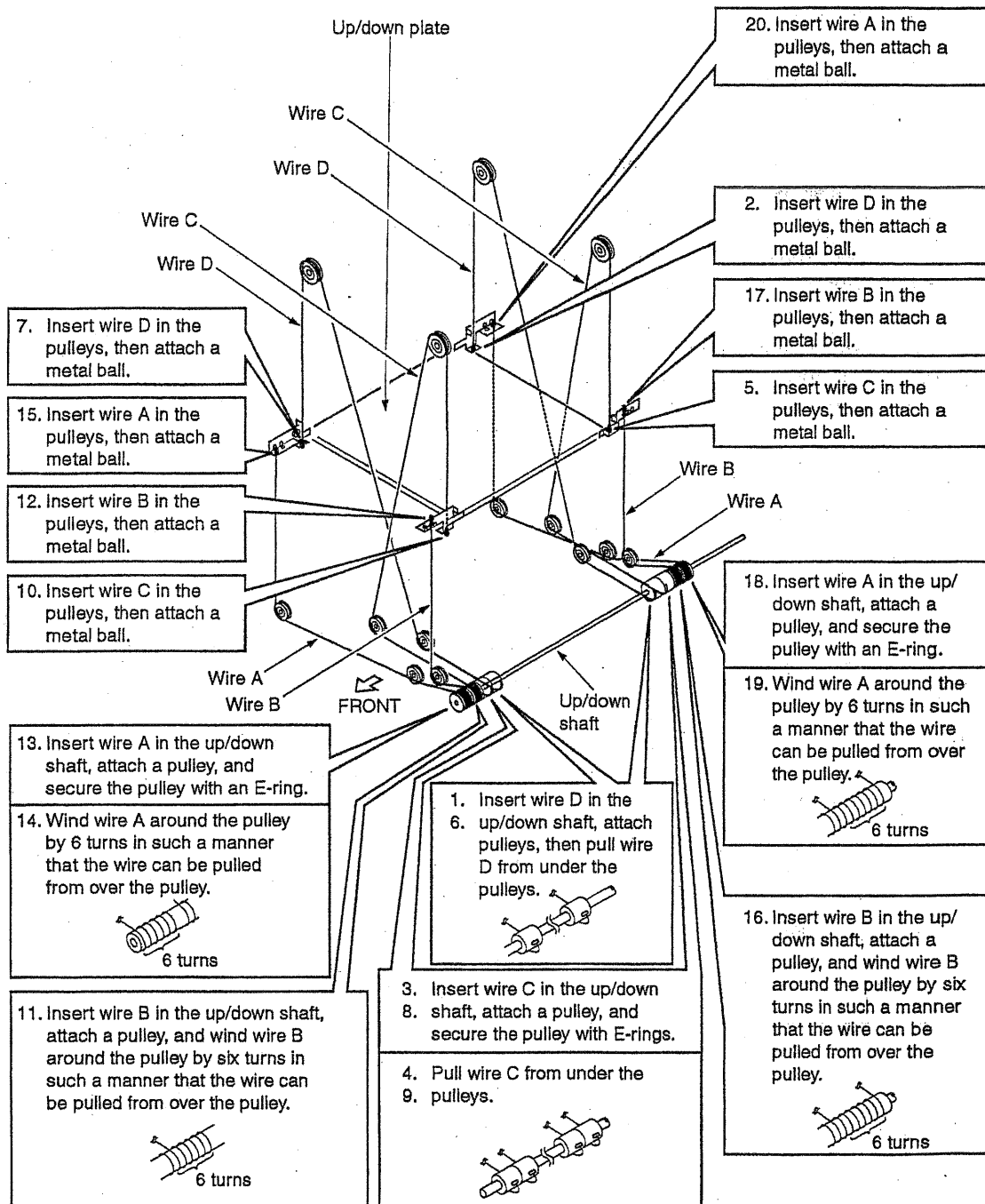
**Caution:** Two sets of four up/down wires with different length, one set at the front and the other at the back, are used. Wires with the same length can be used either at the front or back if they are used in the same location.



<Removing the Up/Down Wires>



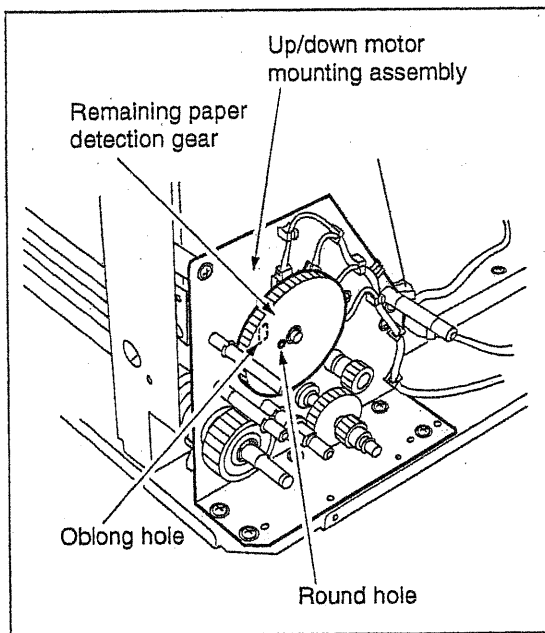
## &lt;Installing the Up/Down Wires&gt;



- (18) After installing the up/down wires, check whether they are engaged with the pulleys properly and whether they do not ride over the pulleys. Next, move the up/down plate manually to check whether it moves up and down smoothly.

**Caution:** If the up/down plate does not move smoothly, remove the up/down wires and install them again.

- (19) Install the up/down motor mounting assembly, relay connectors, remaining paper detection gear, gear D, and up/down gear following the removal steps in reverse.
- (20) Rotate the remaining paper detection gear until the round hole in this gear is aligned with the oblong hole in the up/down motor mounting assembly.



**Caution:** Align them when the up/down plate is at the bottom.

- (21) Install gear C.
- (22) Attach the other gears, gear cover, and external covers following the removal steps in reverse.

**Caution:** After replacing the up/down wires, make horizontal and centering adjustment of the up/down plate. (Refer to "ADJUSTMENT SECTION.")



**Konica**

**PARTS CATALOG**

**Models  
LT-402/412**

NOVEMBER 2001

**KONICA BUSINESS TECHNOLOGIES, INC.**



## How to use this catalog

This parts catalog includes illustrations and part numbers for all replacement parts and assemblies used in this model.

**Model-specific parts** are identified in the illustrations with reference numbers. Use the reference number to locate the corresponding part number on the facing page.

**Common hardware items**, such as screws, nuts, washers, and pins, are identified in the illustrations with reference letters. Use the reference letter to locate the corresponding part number on the hardware listing in the lower right hand corner of the facing page.

**If you know a part number**, but don't know where the part is used, use the numerical index to determine the page number and reference number for that part. Because some common parts are used in several places, there may be more than one entry. Refer to the illustrations to see where the part may be used.

**If you know a part's description**, but don't know where to look to find the part number, use the alphabetical index to determine likely page and reference numbers. Then look at the illustrations to determine that you have identified the correct part. Locate the part number using the listing on the opposite page.

**Retail pricing** that appears with the numerical index, while valid when this catalog was printed, is subject to change without notice. The prices are only suggested prices and are provided only for reference. Dealers may determine their own selling prices. For up-to-date pricing, refer to current Konica price lists or contact the Konica Parts Distribution Center.

### How to order parts

Use standard Konica parts ordering procedures to obtain these parts. For ordering options, contact Konica's Parts Distribution Center.

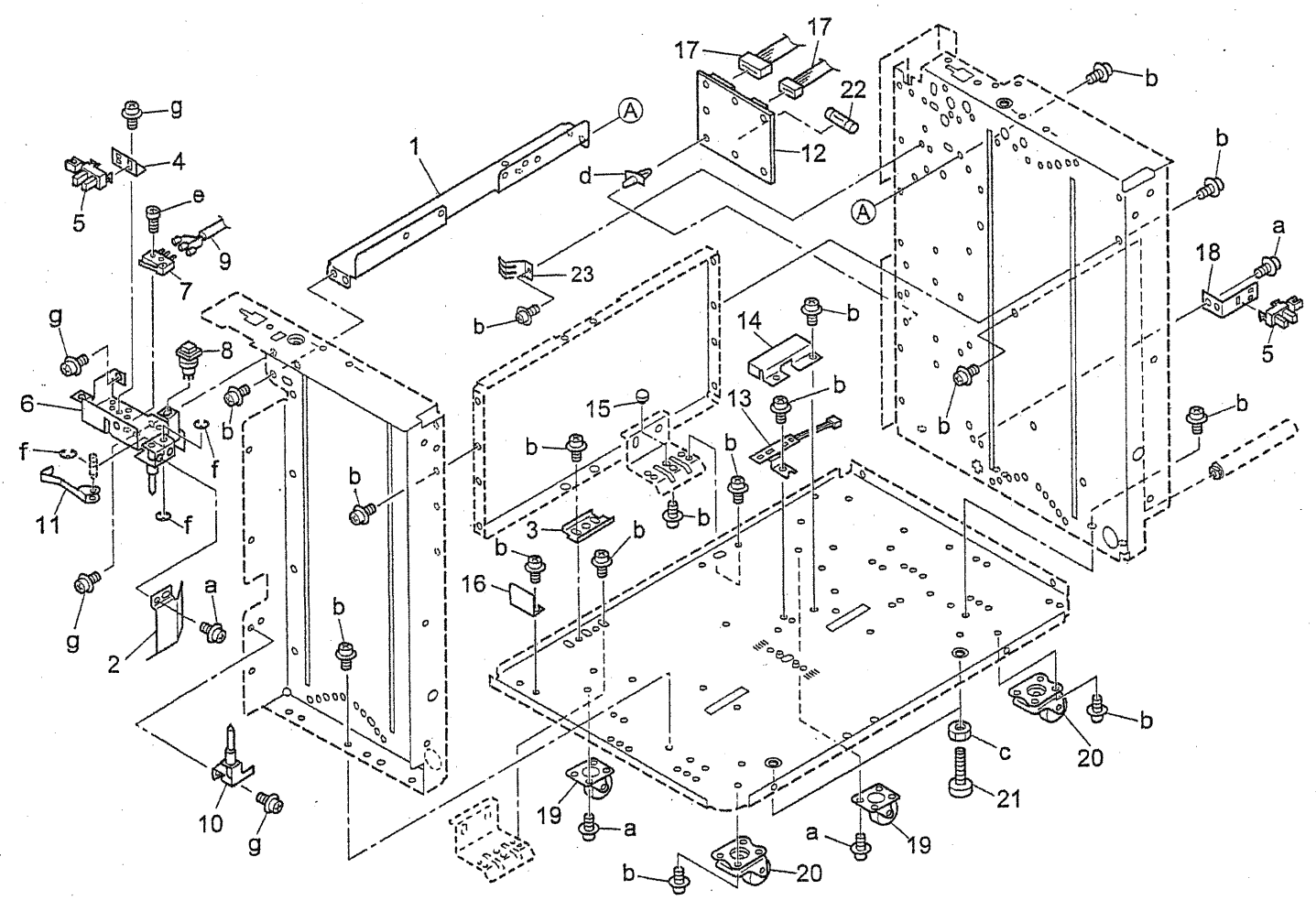
When ordering parts, be sure to specify part numbers exactly as listed in this catalog.

NOTE: Electrical parts may include previously used components.

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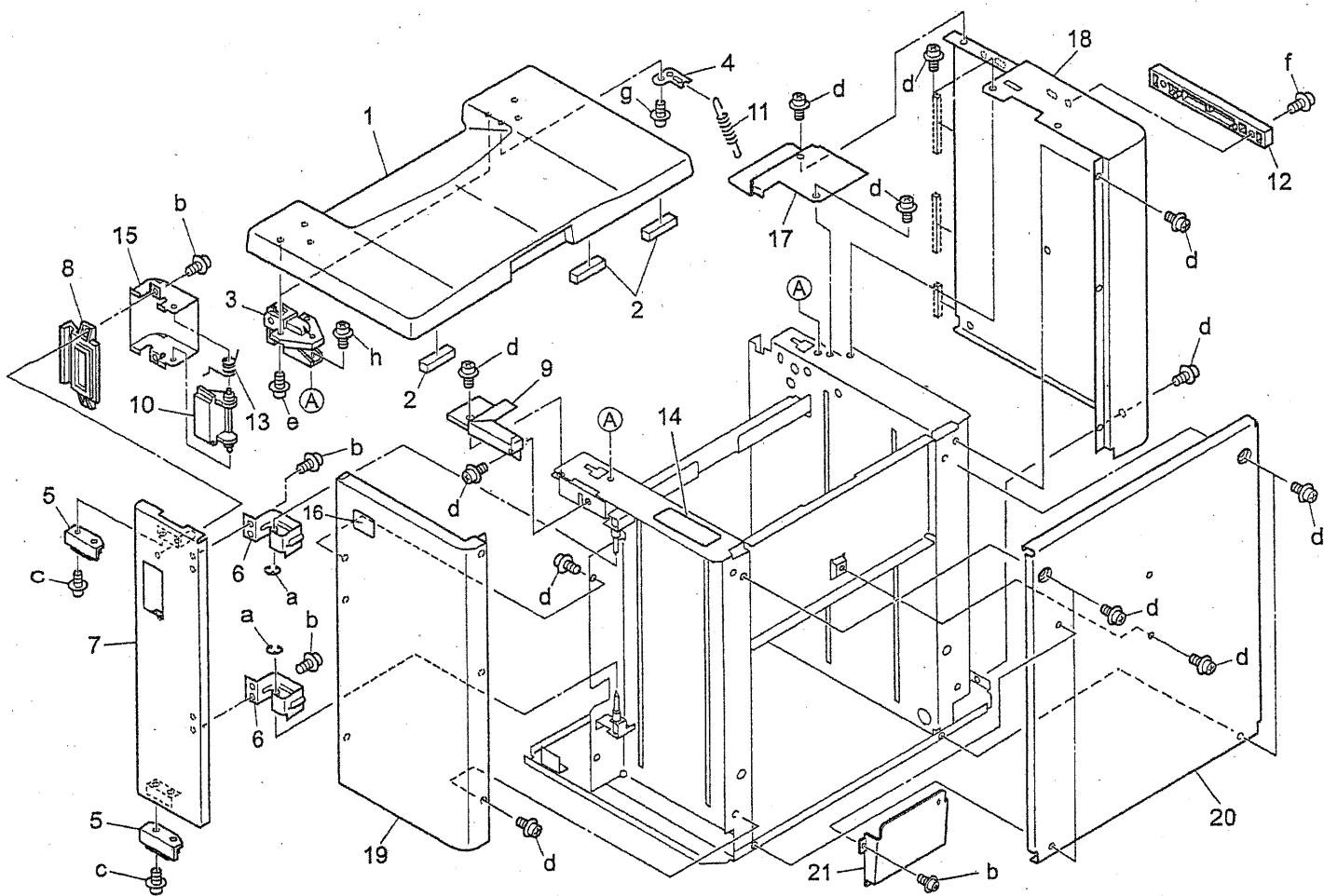
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REF. NO.	PART NUMBER	DESCRIPTION
1	13GG10051	Board Connecting Stay/Left
2	13GG10190	Driving Protect Cover
3	13GG10110	Main Positioning Plate
4	13GG10120	Fixed Plate
5	08AA85510	Photosensor
6	13GG-1070	Door Plate Assembly
7	12QR86010	Interlock Switch
8	25AA85010	Switch/1
9	13GG90011	LCT Signal Wiring/Front
10	13GG-1090	Jam Door Hinge/Lower Assembly
11	12AR45611	Actuator
12	13RJ-9010	LCT Driving Board Assembly
13	25AA83061	Paper Feed Heater
14	55VA42260	Heater Cover
15	13RJ10130	Main Fixed Pin
16	12AR10361	Magnet Pressure Plate
17	13RJ90040	LCT Control Wiring
18	13GG10140	Support Plate/Lower
19	12UM10090	LCT Setting Roller/Left
20	12TR10110	LCT Support Part/Left
21	13GG10150	Bottom Plate Support Part
22	963003200	Fuse
23	129R10210	Main Fixed Plate/1

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z193061
b	00Z194061
c	00Z511001
d	00Z925106
e	00Z182081
f	00Z670206
g	00Z193041

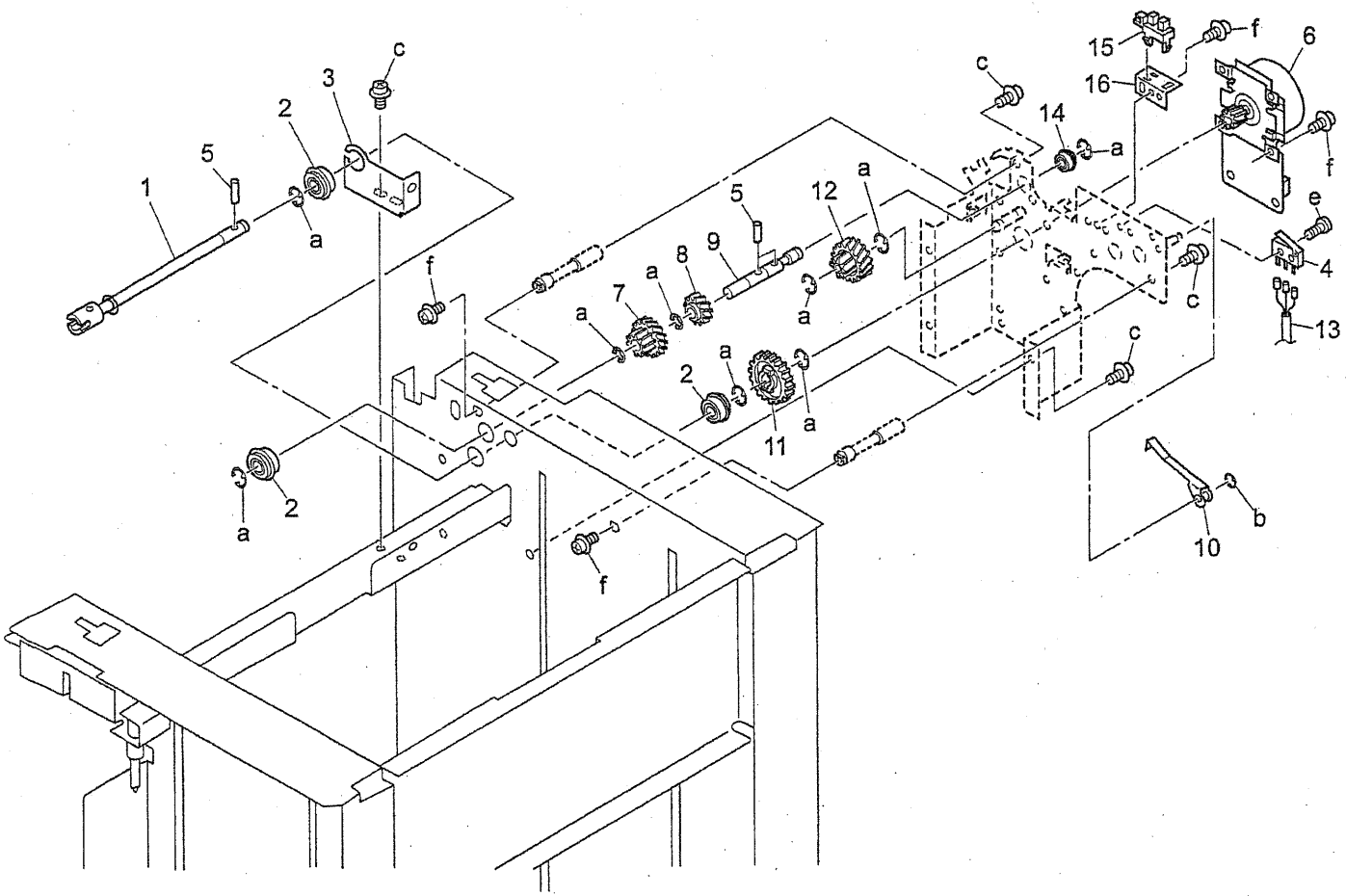




REF. NO.	PART NUMBER	DESCRIPTION
1	13GG12011	Paper Supply Cover
2	12UM12100	Stopper Part
3	13GG12110	Open-Close Hinge
4	25SA50530	Spring Mount Plate
5	050011160	Magnet Catch
6	12AJ12110	Hinge Plate/A
7	13GG12050	Jam Open-Close Door
8	12AJ12251	Mount Cover/B
9	13GG12060	Paper Feed Auxiliary Cover/Front
10	12AJ12261	Open-Close Knob
11	12UM40220	Lift-Up Spring
12	13GG12130	Paper Guide Knob
13	12AJ12270	Open-Close Spring
14	13GG97010	Paper Supply Label
15	12AJ12240	Mount Cover/A
16	13RJ97060	Paper Feed Indicating Label/L
17	13RJ12090	Clutch Exchanging Cover
18	13RJ12040	Rear Cover
19	13RJ12020	Front Cover
20	13RJ12030	Side Cover/Right
21	55VA12401	Accessories Installing Cover

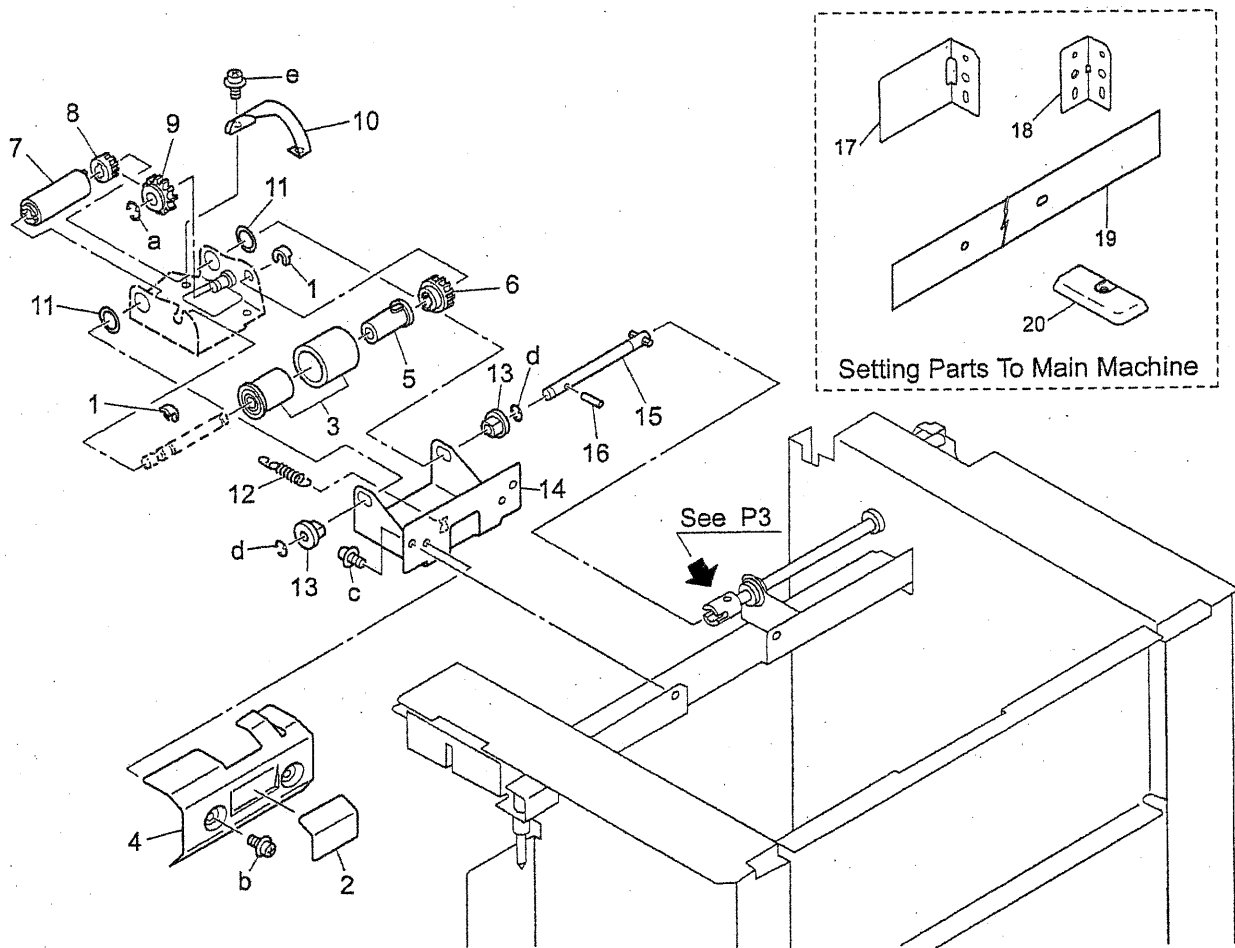
  

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b	00Z194061
c	00Z114061
d	00Z144062
e	00Z254101
f	00Z144082
g	00Z253081
h	00Z164083



REF. NO.	PART NUMBER	DESCRIPTION
1	13GG-1640	Fanning Drive Shaft
2	540076050	Driving Shaft Holder
3	55VA42060	Shaft Support Plate
4	12QR86010	Interlock Switch
5	304078040	Pin (B)
6	56AA80080	DC Brushless Motor/15
7	13RJ79070	Paper Feed Driving Gear/B (Z=22/30)
8	13RJ79080	Paper Feed Driving Gear/C (Z=22)
9	13GG16051	Paper Feed Input Shaft/1
10	12AR45611	Actuator
11	55VA79010	Paper Feed Reversal Gear/A (Z=60)
12	13RJ77770	Resist Idler Gear (Z=66/27)
13	13GG90030	LCT Driving Wiring
14	25AA75090	Paper Feed Rolling Shaft Holder
15	08AA85510	Photosensor
16	13GG10120	Fixed Plate

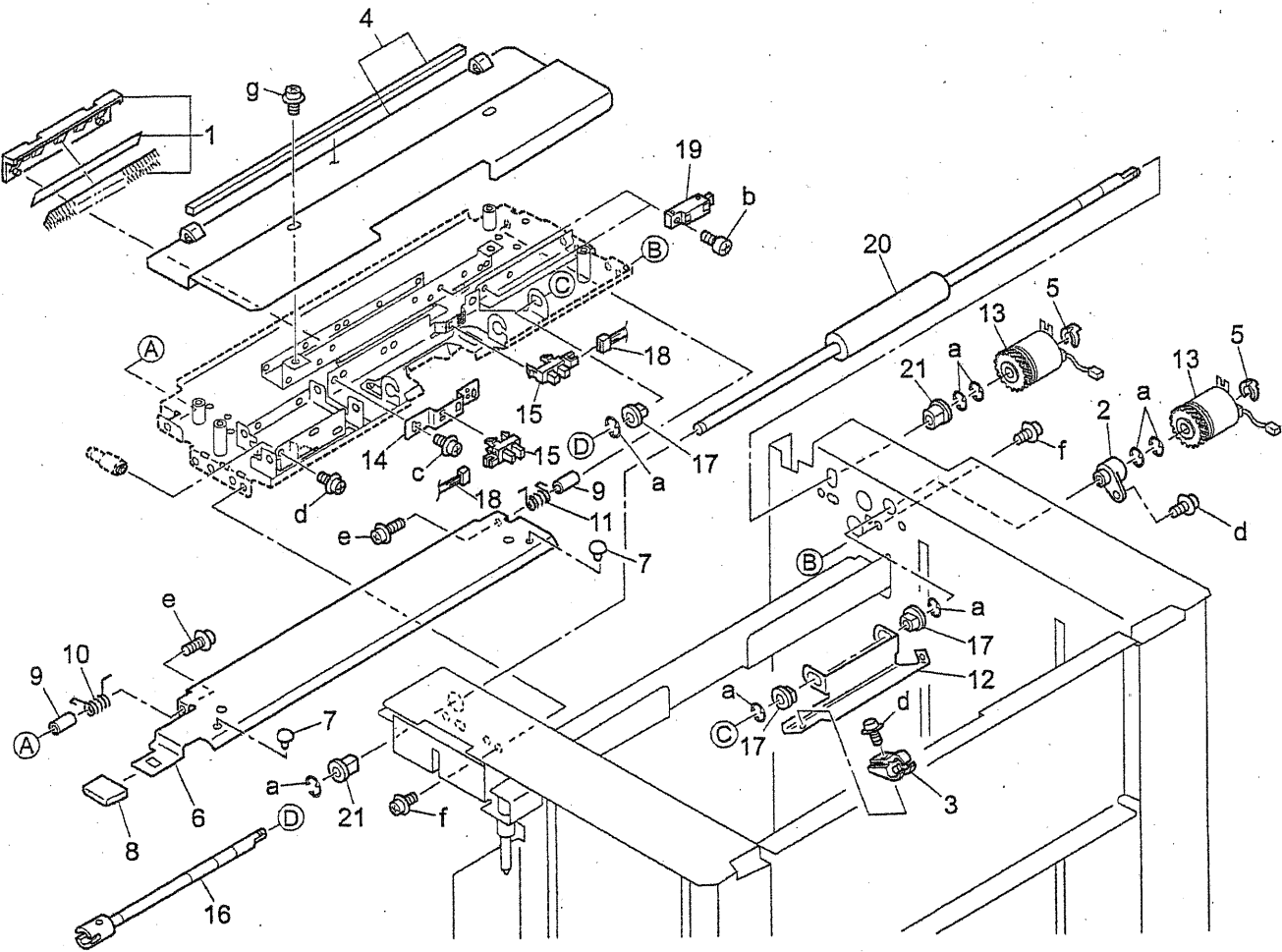
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a	00Z670606
b	00Z670206
c	00Z194061
e	00Z182081
f	00Z193061



REF. NO.	PART NUMBER	DESCRIPTION
1	396040681	Snap Ring
2	55VA41411	Entrance Guide Sheet
3	55VA-4830	Feeding Roller Assembly/B
4	13GG40060	Entrance Guide Plate
5	50BA40220	Reversal Roller
6	55VA79140	Paper Feed Reversal Gear/D (Z=19)
7	55FA58190	Toque Limiter
8	55VA79030	Paper Feed Reversal Gear/C (Z=14)
9	55VA79050	Idler Gear/B (Z=24)
10	55VA42250	Paper Feed Driving Cover/2
11	25AA40120	Spacer
12	55VA40310	Reversal Spring/B
13	008478610	Bushing
14	55VA40190	Paper Feed Holder Plate/Lower
15	13GG-4240	Toque Drive Shaft Assembly
16	098030300	Pin
17	13RJ10310	Ground Plate/1
18	13RJ10320	Ground Plate/2
19	13RJ10330	Ground Plate/3
20	13RJ10340	Cover/A

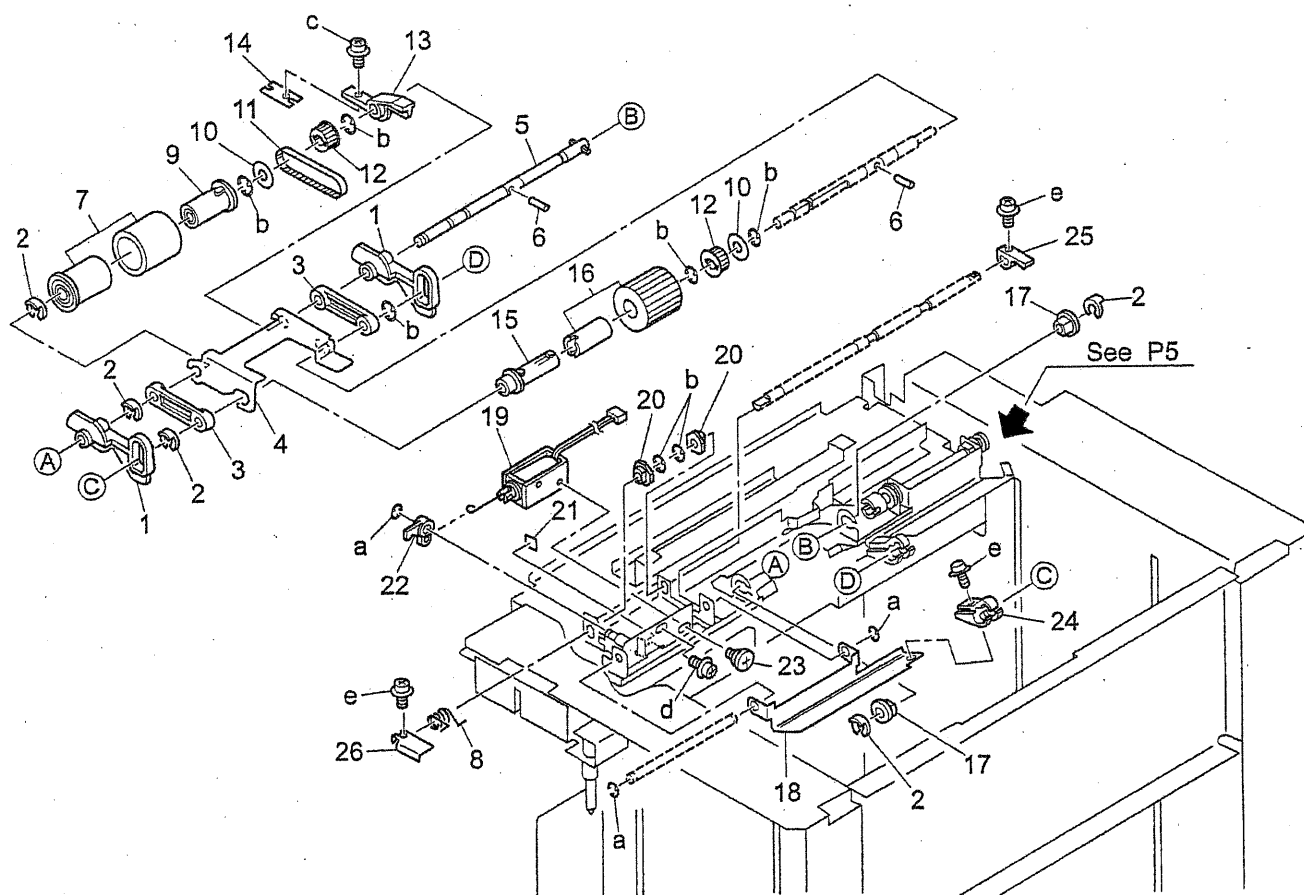
  

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670606
b	00Z193061
c	00Z194061
d	00Z670406
e	00Z193041



REF. NO.	PART NUMBER	DESCRIPTION
1	55VA-4550	Paper Dust Scraper
2	55VA43360	Lock Shaft Holder
3	25AA40742	Connecting Part/A
4	13RJ-1240	Feeding Cover Assembly
5	55VA42120	Shaft Stopper
6	13GG40041	Exit Guide Plate/Lower
7	048645260	Stopper Rubber
8	25AA48900	Open-Close Lever
9	25AA47700	Spring Guide Part
10	13GG40150	Paper Feed Pressure Spring/Front
11	13GG40140	Paper Feed Pressure Spring/Rear
12	13GG40080	Entrance Guide Plate/Rear
13	56AA82010	Paper Feed Clutch
14	13GG40200	Mount Plate/A
15	08AA85510	Photosensor
16	13GG-1650	Paper Feed Driving Shaft/A
17	090075530	Bearing
18	13RJ90060	LCT Signal Wiring/Upper
19	56AA85520	Conveyance Photosensor
20	13GG40050	Paper Conveyance Roller
21	55VA75540	Paper Feed Shaft Holder/B

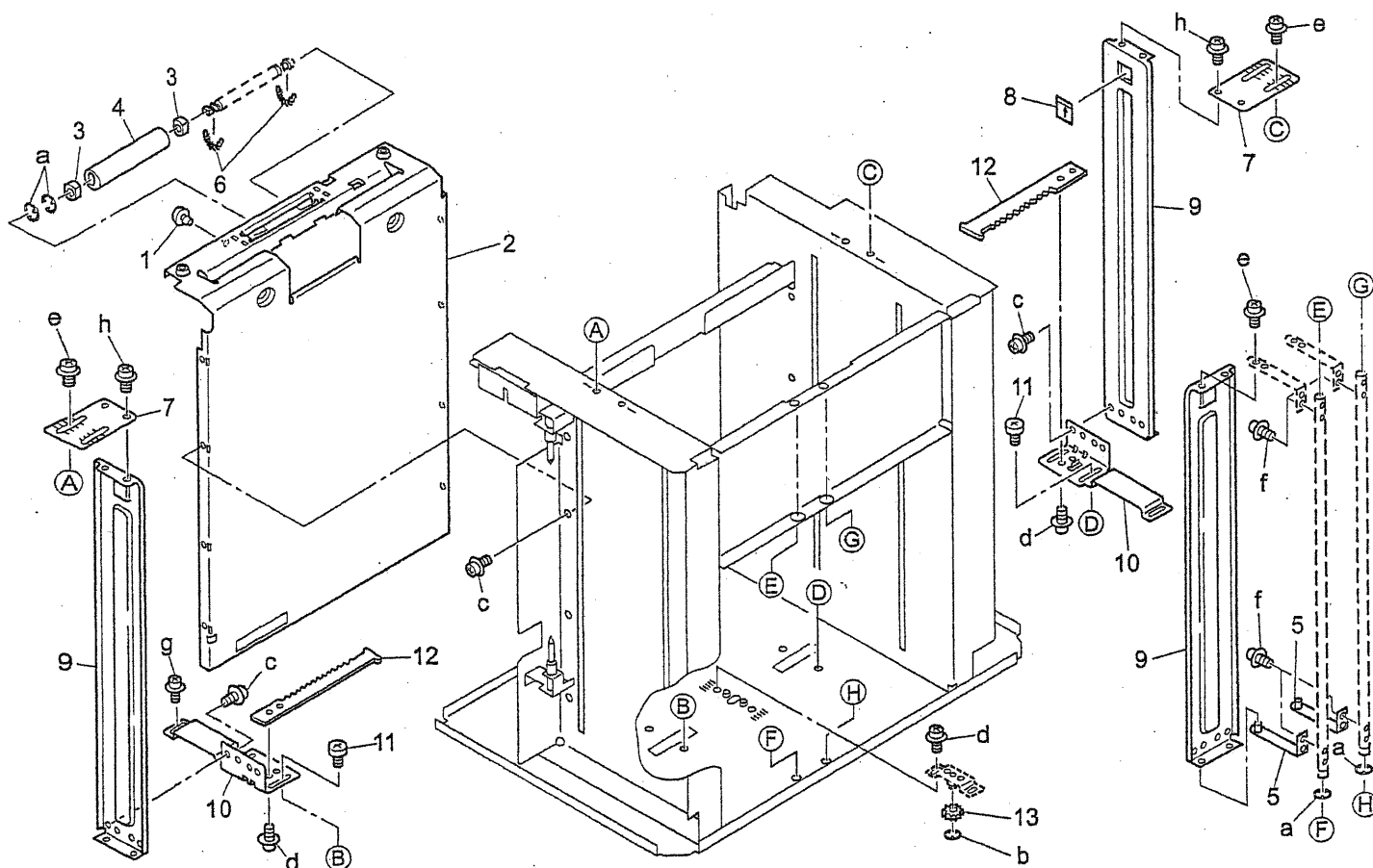
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REF. LTR.	PART NUMBER
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b	00Z183101
c	00Z163061
d	00Z193061
e	00Z193251
f	00Z194061
g	00Z183062





REF. NO.	PART NUMBER	DESCRIPTION
1	55VA41220	Paper Feed Standard Actuator
2	396040681	Snap Ring
3	55VA40260	Paper Feeding Shaft Holder
4	13GG40181	Paper Feed Holder Plate
5	13GG-4231	Feeding Shaft
6	396078020	Pin (B)
7	55VA-4830	Feeding Roller Assembly/B
8	13GG40130	Lever Spring
9	55VA40150	Double Feed Feeding Roller
10	197545110	Roller Collar
11	25SA77561	Paper Driving Belt (L=126)
12	059076510	Pulley/1
13	55VA40230	Paper Feed Lift-Up Lever
14	55VA40990	Lever Auxiliary Plate
15	55VA40130	Paper Feeding Roller/A
16	55VA-4840	Feeding Roller Assembly/A
17	131075510	Bushing/A
18	13GG40070	Entrance Guide Plate/Front
19	55VA-4600	Pick-Up Solenoid
20	466076020	Paper Feeding Shaft Holder
21	55VA42111	Solenoid Stopper Sheet
22	25AA40870	Switch Lever/1
23	55VA42220	Positioning Screw
24	25AA40742	Connecting Part/A
25	55VA40440	Pressure Plate/B
26	13GG40160	Pressure Plate/L

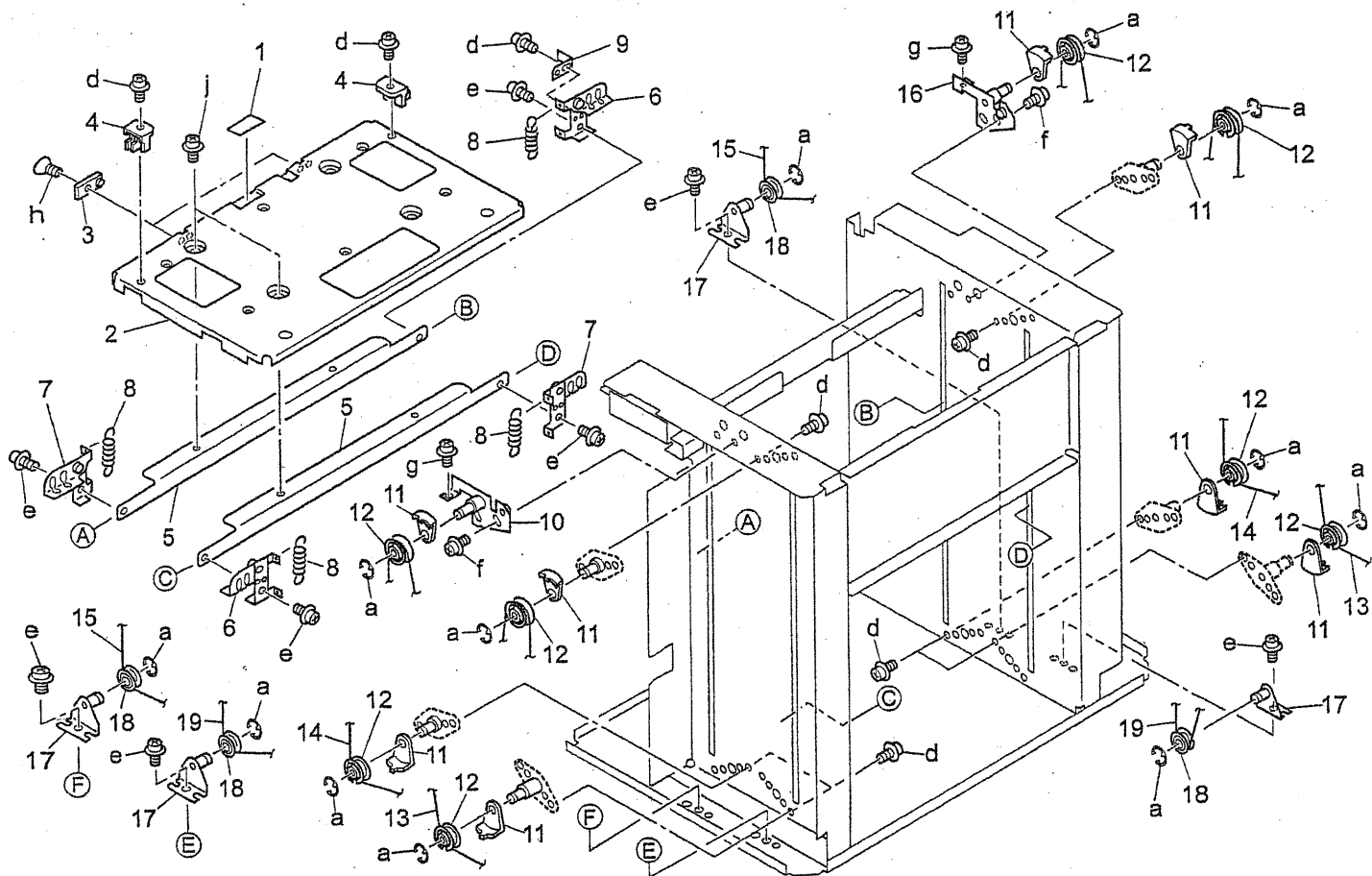
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b	00Z670406
c	00Z183041
d	00Z163061
e	00Z193061



REF. NO.	PART NUMBER	DESCRIPTION
1	12AJ45850	Stopper Rubber
2	13GG42011	Paper Stopper Plate
3	25AA75530	Slide Shaft Holder
4	55VA40170	Conveyance Driven Roller
5	13GG-4100	Rear Guide Arm
6	55VA46490	Resist Pressure Spring
7	13GG42070	Paper Positioning Plate
8	25AA97320	Paper Guide Seal
9	13GG42042	Paper Supply Side Plate
10	13GG42082	Side Fixed Plate
11	197510290	Shoulder Screw
12	25BA47230	Rack (Front)
13	25BA77301	Cassette Pinion (Z=14)

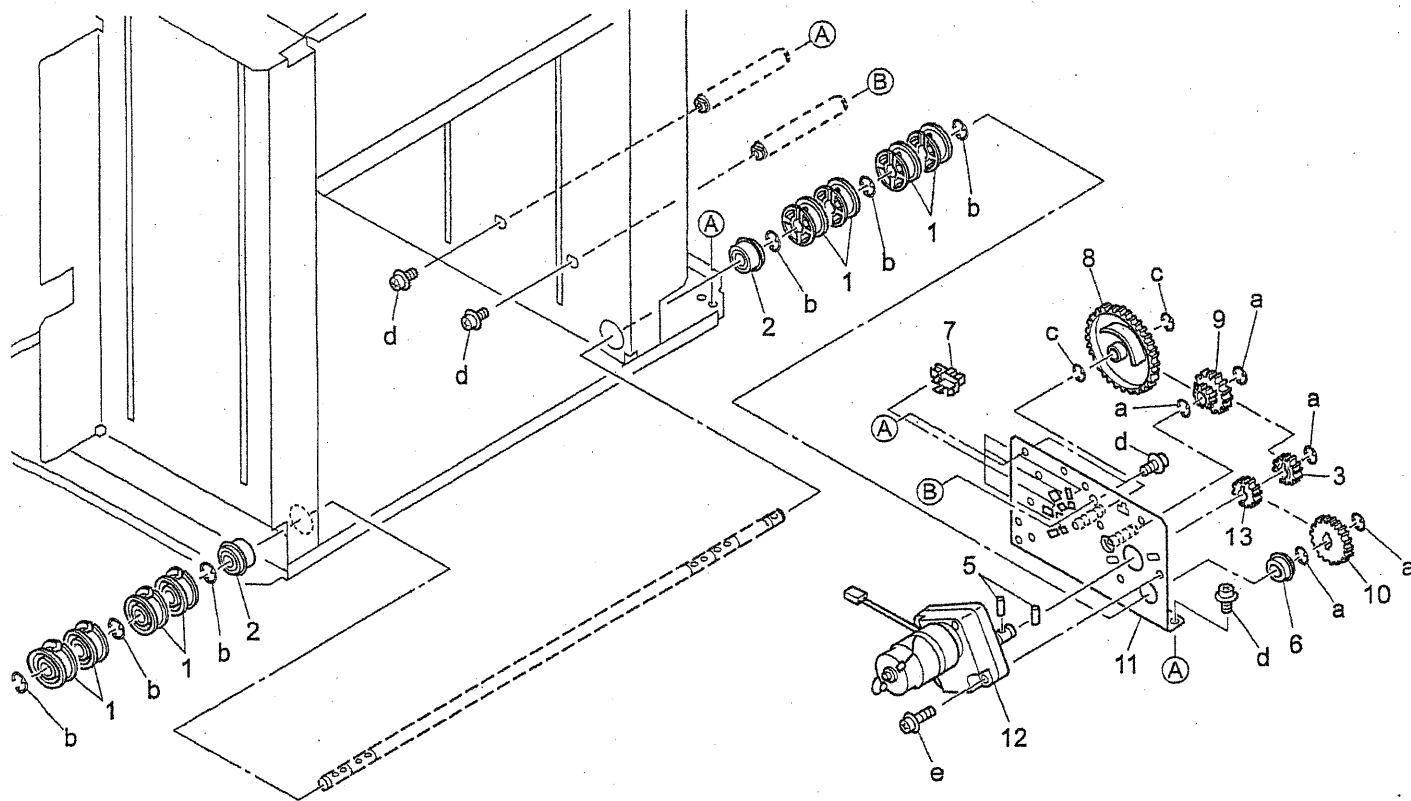
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b	00Z670306
c	00Z194061
d	00Z193061
e	00Z144062
f	00Z193081
g	00Z164061
h	00Z164082



REF. NO.	PART NUMBER	DESCRIPTION
1	55VA40930	Double Feed Preventive Plate
2	13GG42020	Paper Up-Down Plate
3	067642850	Spacer Plate
4	13GG42141	Board Positioning Block
5	13GG42060	Up-Down Stay
6	25AA-4760	Wire Fixed Plate/A Assembly
7	25AA-4780	Wire Fixed Plate/B Assembly
8	25AA42800	Up-Down Spring
9	55VA44140	Detecting Plate
10	13GG-4190	Tension Plate Assembly/Front
11	25AA41180	Wire Holder/A
12	25AA41120	Driven Pulley
13	13GG15120	Driving Up-Down Wire/A
14	13GG15130	Driving Up-Down Wire/B
15	13GG15140	Driving Up-Down Wire/C
16	13GG-4200	Tension Plate Assembly/Rear
17	25AA-4730	Wire Mount Plate Assembly
18	25AA42570	Wire Pulley
19	13GG15150	Driving Up-Down Wire/D

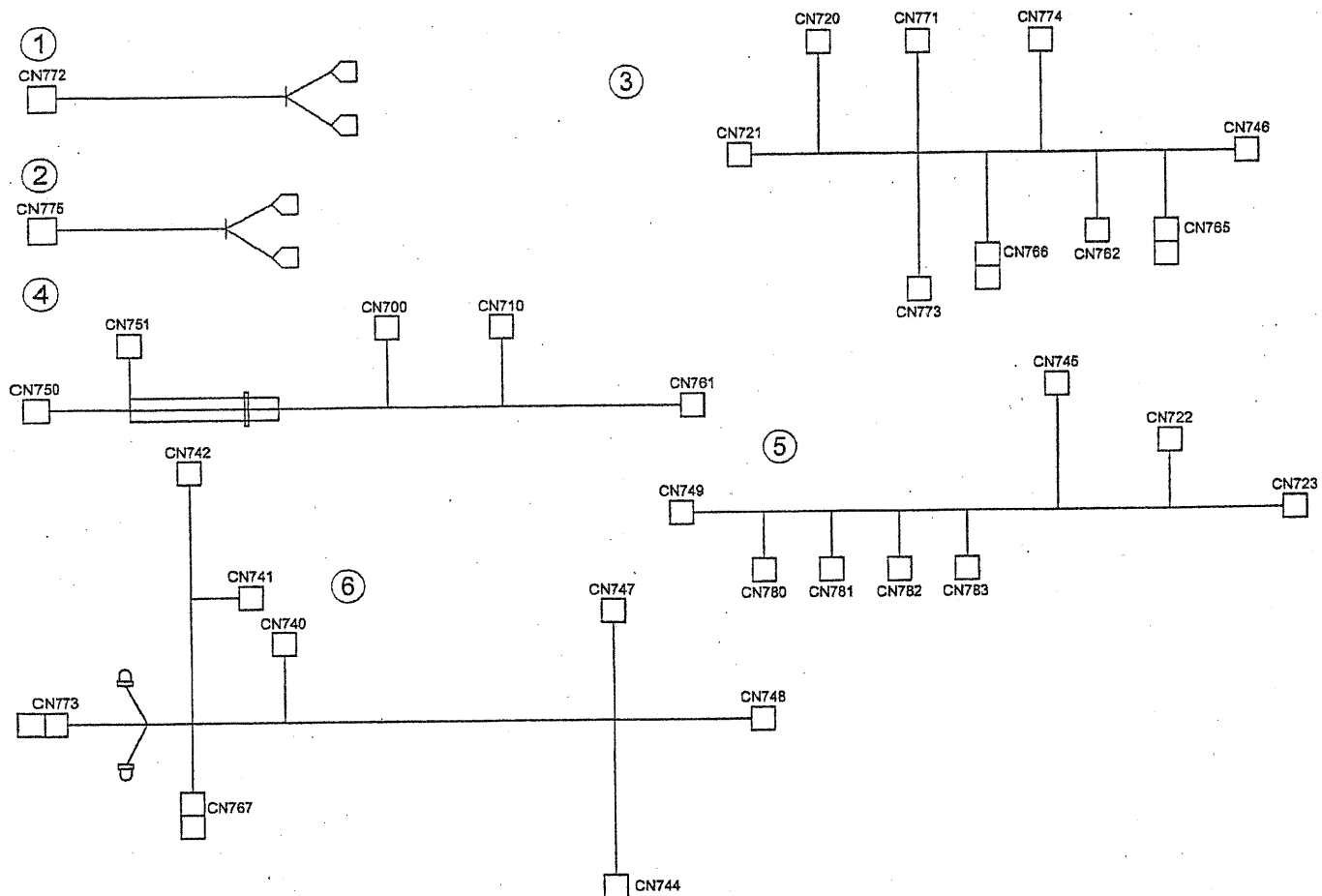
HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670606
d	00Z193061
e	00Z194061
f	00Z163061
g	00Z184301
h	00Z123061
j	00Z144062



REF. NO.	PART NUMBER	DESCRIPTION
1	13GG15111	Driving Up-Down Pulley
2	066077010	Shaft Holder (A)
3	13GG77020	Driving Gear (Z=22)
5	300078030	Pin (B)
6	540076050	Driving Shaft Holder
7	08AA85510	Photosensor
8	13GG77010	Detecting Gear (Z=92)
9	098030260	Slow Down Gear
10	25AA77981	Toner Supply Agitate Gear
11	13GG-1581	Driving Up-Down Plate Assembly
12	13GG80020	Transfer Paper Supply Motor
13	13GG77030	Motor Driving Gear

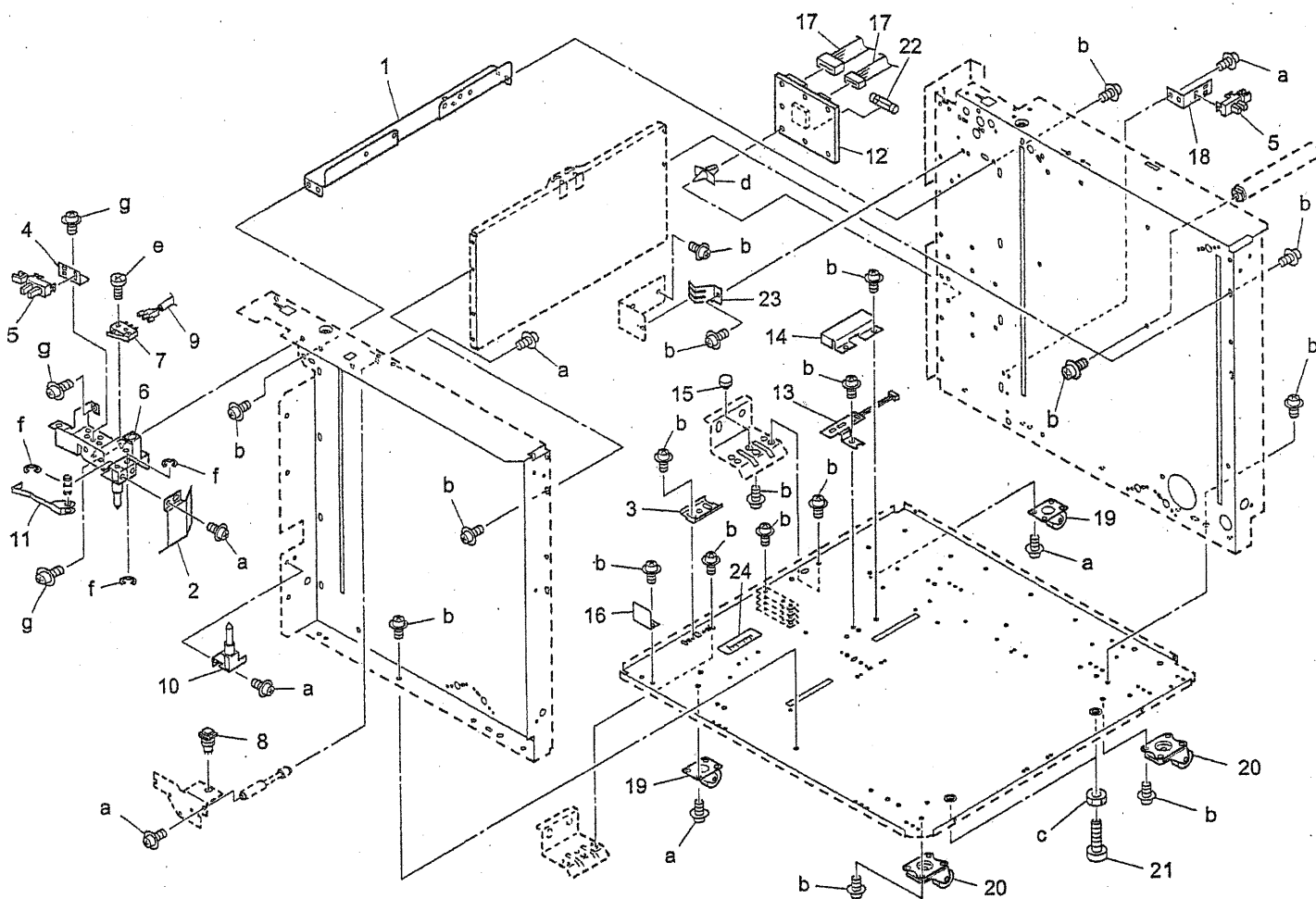
HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670606
b	00Z670806
c	00Z670406
d	00Z194061
e	00Z163251

# Wiring





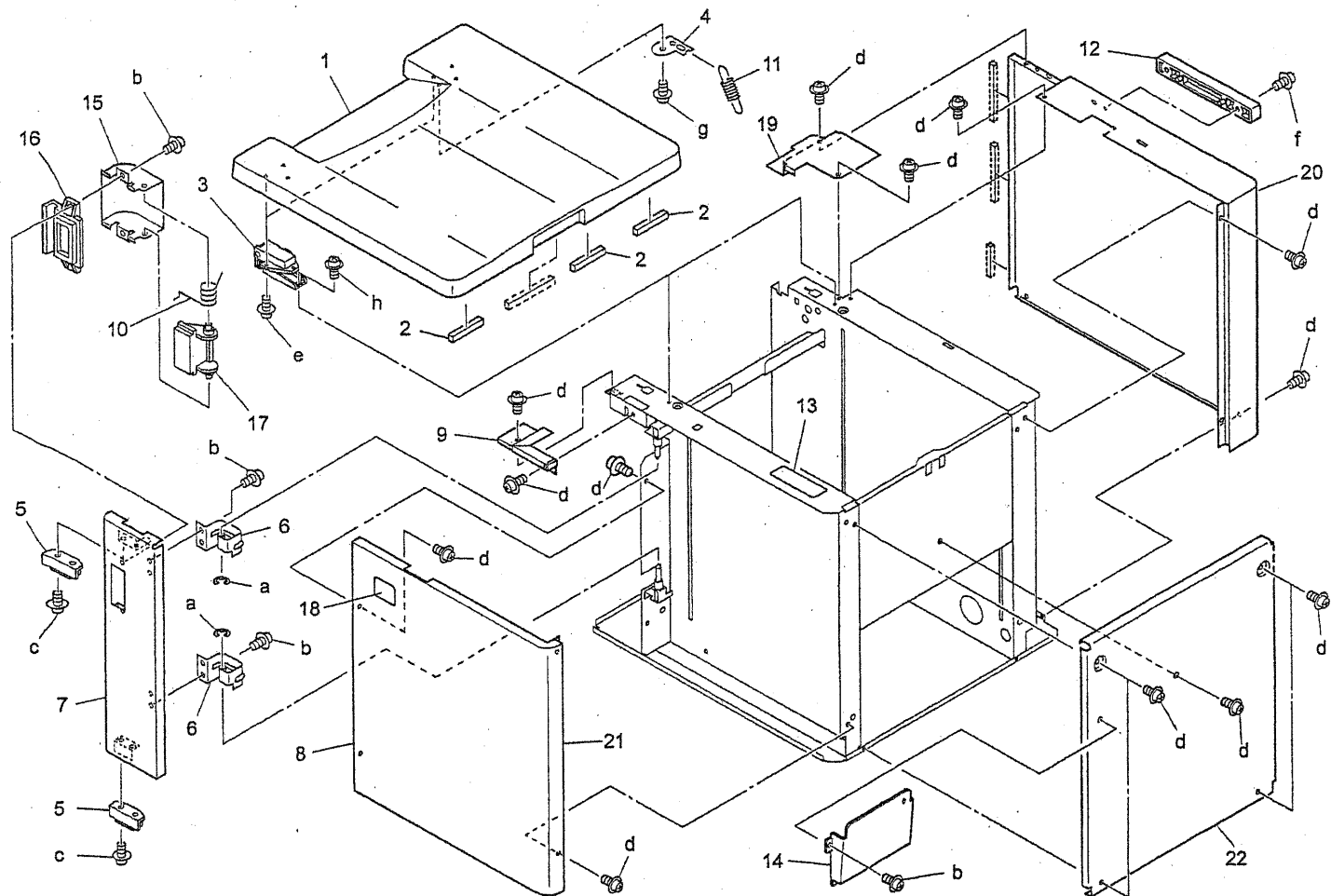
REF. NO.	PART NUMBER	DESCRIPTION
1	13GG90011	LCT Signal Wiring/Front
2	13GG90030	LCT Driving Wiring
3	13RJ90020	LCT Signal Wiring/1
4	13RJ90040	LCT Control Wiring
5	13RJ90050	LCT Signal Wiring/Lower
6	13RJ90060	LCT Signal Wiring/Upper



REF. NO.	PART NUMBER	DESCRIPTION
1	13GG10051	Board Connecting Stay/Left
2	13GG10190	Driving Protect Cover
3	13GG10110	Main Positioning Plate
4	13GG10120	Fixed Plate
5	08AA85510	Photosensor
6	13GG-1070	Door Plate Assembly
7	12QR86010	Interlock Switch
8	25AA85010	Switch/1
9	13GG90011	LCT Signal Wiring/Front
10	13GG-1090	Jam Door Hinge/Lower Assembly
11	12AR45611	Actuator
12	13RE-9010	LCT Driving Board Assembly
13	25AA83061	Paper Feed Heater
14	55VA42260	Heater Cover
15	13RJ10130	Main Fixed Pin
16	12AR10361	Magnet Pressure Plate
17	13RJ90040	LCT Control Wiring
18	13GG10140	Support Plate/Lower
19	12UM10090	LCT Setting Roller/Left
20	12TR10110	LCT Support Part/Left
21	13GG10150	Bottom Plate Support Part
22	963003200	Fuse
23	129R10210	Main Fixed Plate/1
24	13LT97111	Paper Base Label

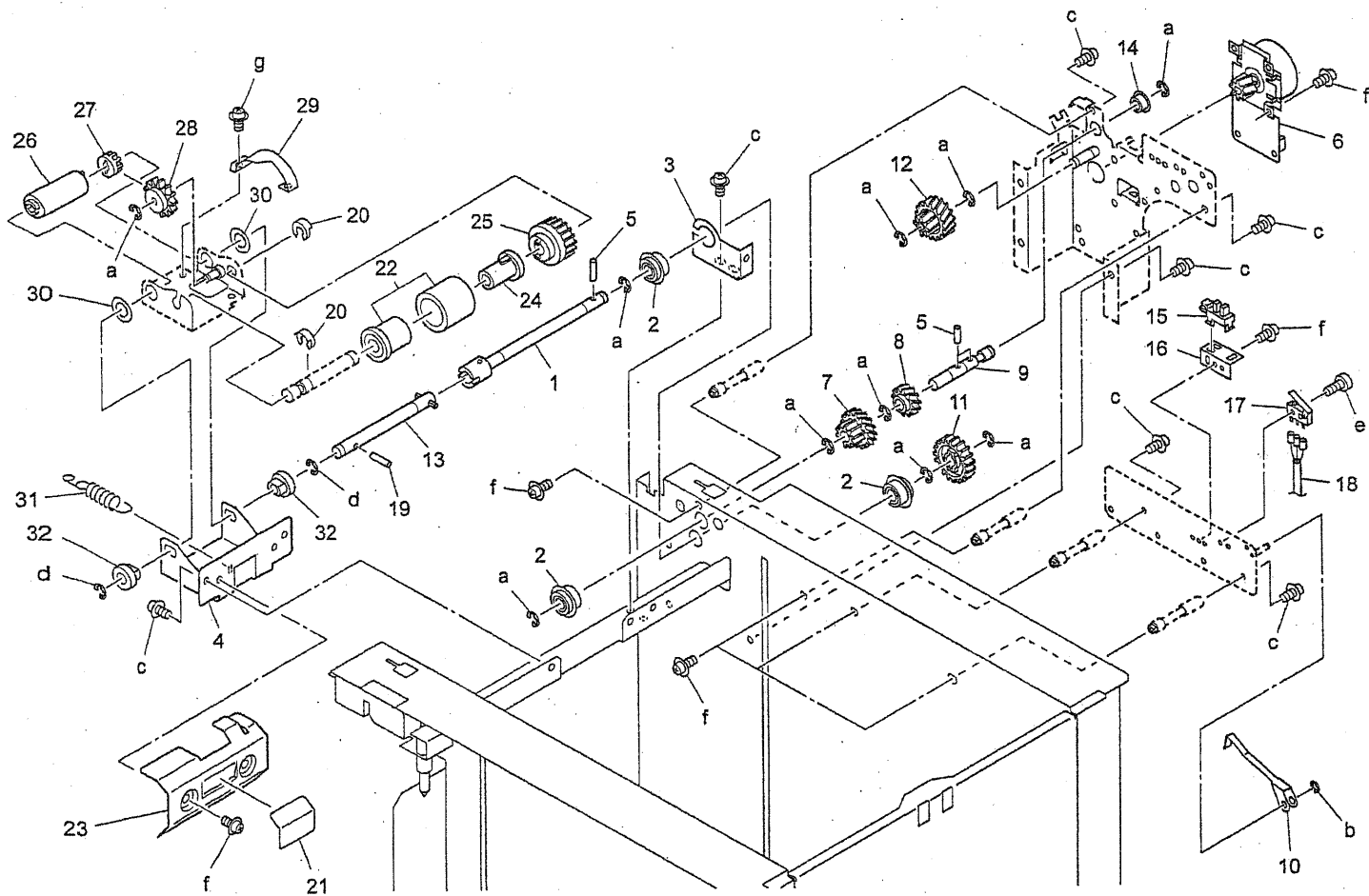
HARDWARE	
REF. LTR.	PART NUMBER
a	00Z193061
b	00Z194061
c	00Z511001
d	00Z925106
e	00Z182101
f	00Z670206
g	00Z193041



REF. NO.	PART NUMBER	DESCRIPTION
1	13LS12011	Paper Supply Cover
2	12UM12100	Stopper Part
3	13LS12111	Open/Shut Hinge
4	25SA50530	Spring Mount Plate
5	050011160	Magnet Catch
6	12AJ12110	Hinge Plate/A
7	13GG12050	Jam Open-Close Door
9	13GG12060	Paper Feed Auxiliary Cover/Front
10	12AJ12270	Open-Close Spring
11	12UM40220	Lift-Up Spring
12	13GG12130	Paper Guide Knob
13	13LS97010	Paper Supply Label
14	55VA12401	Accessories Installing Cover
15	12AJ12240	Mount Cover/A
16	12AJ12251	Mount Cover/B
17	12AJ12261	Open-Close Knob
18	13RJ97060	Paper Feed Indicating Label/L
19	13RJ12090	Clutch Exchanging Cover
20	13RE12040	Rear Cover
21	13RE12020	Front Cover
22	13RJ12030	Side Cover/Right

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670306
b	00Z194061
c	00Z114061
d	00Z144062
e	00Z254081
f	00Z144082
g	00Z253061
h	00Z164083



REF. NO.	PART NUMBER	DESCRIPTION
1	13GG-1640	Fanning Drive Shaft
2	540076050	Driving Shaft Holder
3	55VA42060	Shaft Support Plate
4	55VA40190	Paper Feed Holder Plate/Lower
5	304078040	Pin (B)
6	56AA80080	DC Brushless Motor/15
7	13RJ79070	Paper Feed Driving Gear/B (Z=22/30)
8	13RJ79080	Paper Feed Driving Gear/C (Z=22)
9	13GG16051	Paper Feed Input Shaft/1
10	12AR45611	Actuator
11	55VA79010	Paper Feed Reversal Gear/A (Z=60)
12	13RJ77770	Resist Idler Gear (Z=66/27)
13	13GG-4240	Toque Drive Shaft Assembly
14	25AA75090	Paper Feed Rolling Shaft Holde
15	08AA85510	Photosensor
16	13GG10120	Fixed Plate
17	12QR86010	Interlock Switch
18	13GG90030	LCT Driving Wiring
19	098030300	Pin
20	396040681	Snap Ring
21	55VA41411	Entrance Guide Sheet
22	55VA-4830	Feeding Roller Assembly/B
23	13GG40060	Entrance Guide Plate
24	50BA40220	Reversal Roller
25	55VA79140	Paper Feed Reversal Gear/D (Z=19)
26	55FA58190	Toque Limiter
27	55VA79030	Paper Feed Reversal Gear/C (Z=14)
28	55VA79050	Idler Gear/B (Z=24)
29	55VA42250	Paper Feed Driving Cover/2
30	25AA40120	Spacer
31	55VA40310	Reversal Spring/B
32	008478610	Bushing

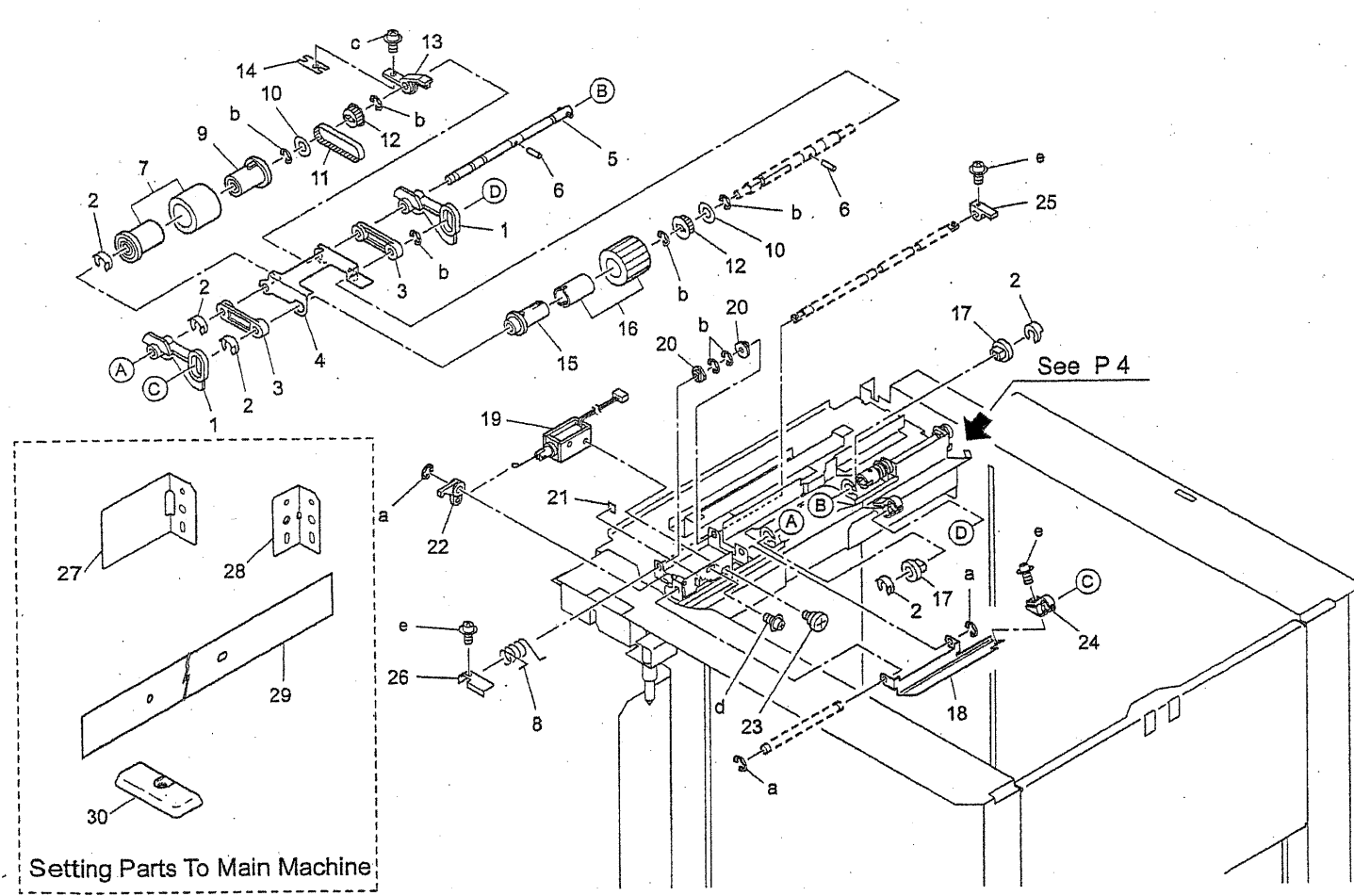
HARDWARE	
REF. LTR.	PART NUMBER
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b	00Z670206
c	00Z194061
d	00Z670406
e	00Z182101
f	00Z193061
g	00Z193041





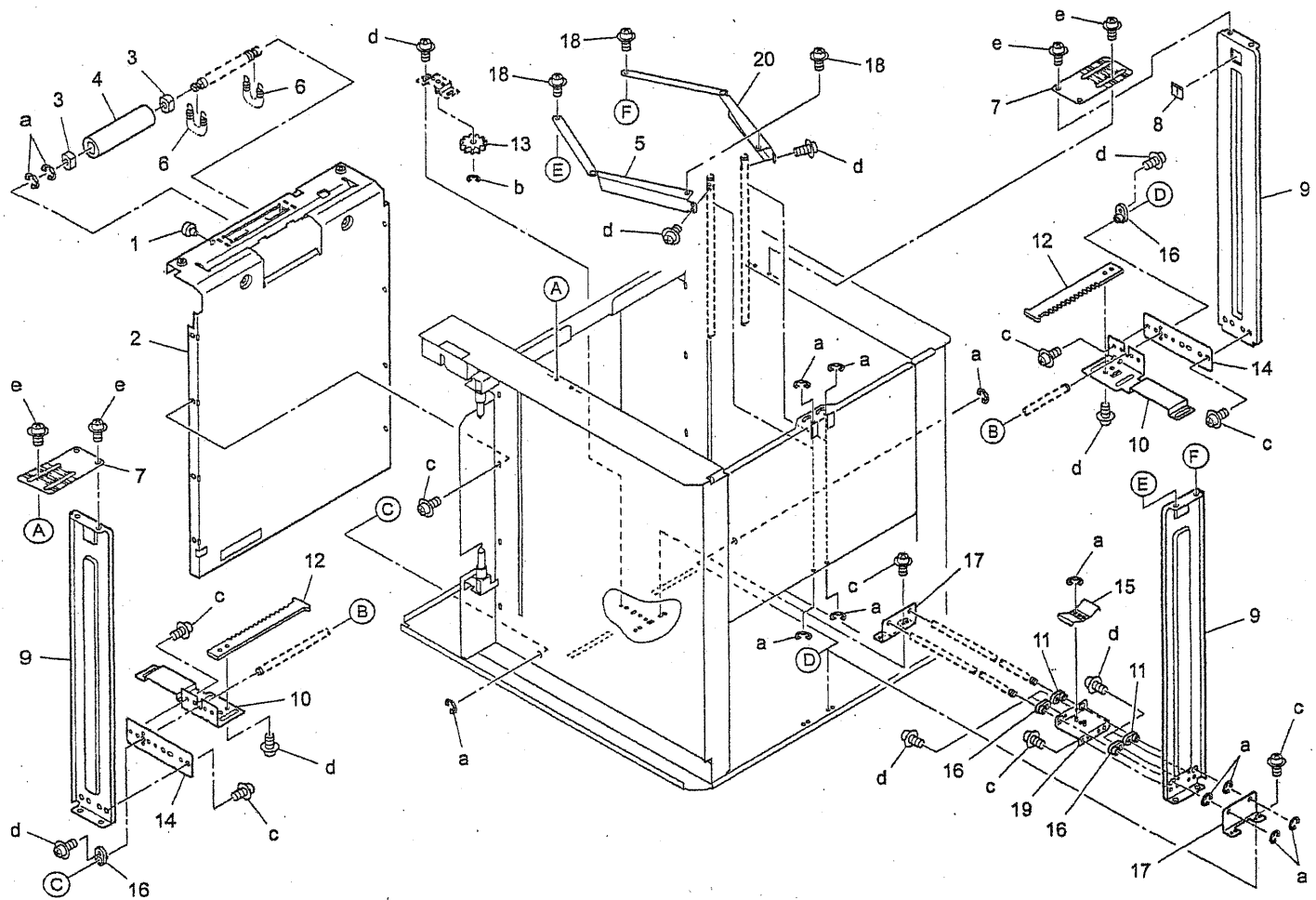
REF. NO.	PART NUMBER	DESCRIPTION
1	55VA-4550	Paper Dust Scraper
2	55VA43360	Lock Shaft Holder
3	25AA40742	Connecting Part/A
4	13RJ-1240	Feeding Cover Assembly
5	55VA42120	Shaft Stopper
6	13GG40041	Exit Guide Plate/Lower
7	048645260	Stopper Rubber
8	25AA48900	Open-Close Lever
9	25AA47700	Spring Guide Part
10	13GG40150	Paper Feed Pressure Spring/Front
11	13GG40140	Paper Feed Pressure Spring/Rear
12	13GG40080	Entrance Guide Plate/Rear
13	56AA82010	Paper Feed Clutch
14	13GG40200	Mount Plate/A
15	08AA85510	Photosensor
16	13GG-1650	Paper Feed Driving Shaft/A
17	090075530	Bearing
18	13RE90060	LCT Signal Wiring/Upper
19	56AA85520	Conveyance Photosensor
20	13GG40050	Paper Conveyance Roller
21	55VA75540	Paper Feed Shaft Holder/B

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670606
b	00Z183101
c	00Z163061
d	00Z193061
e	00Z193251
f	00Z194061
g	00Z183062



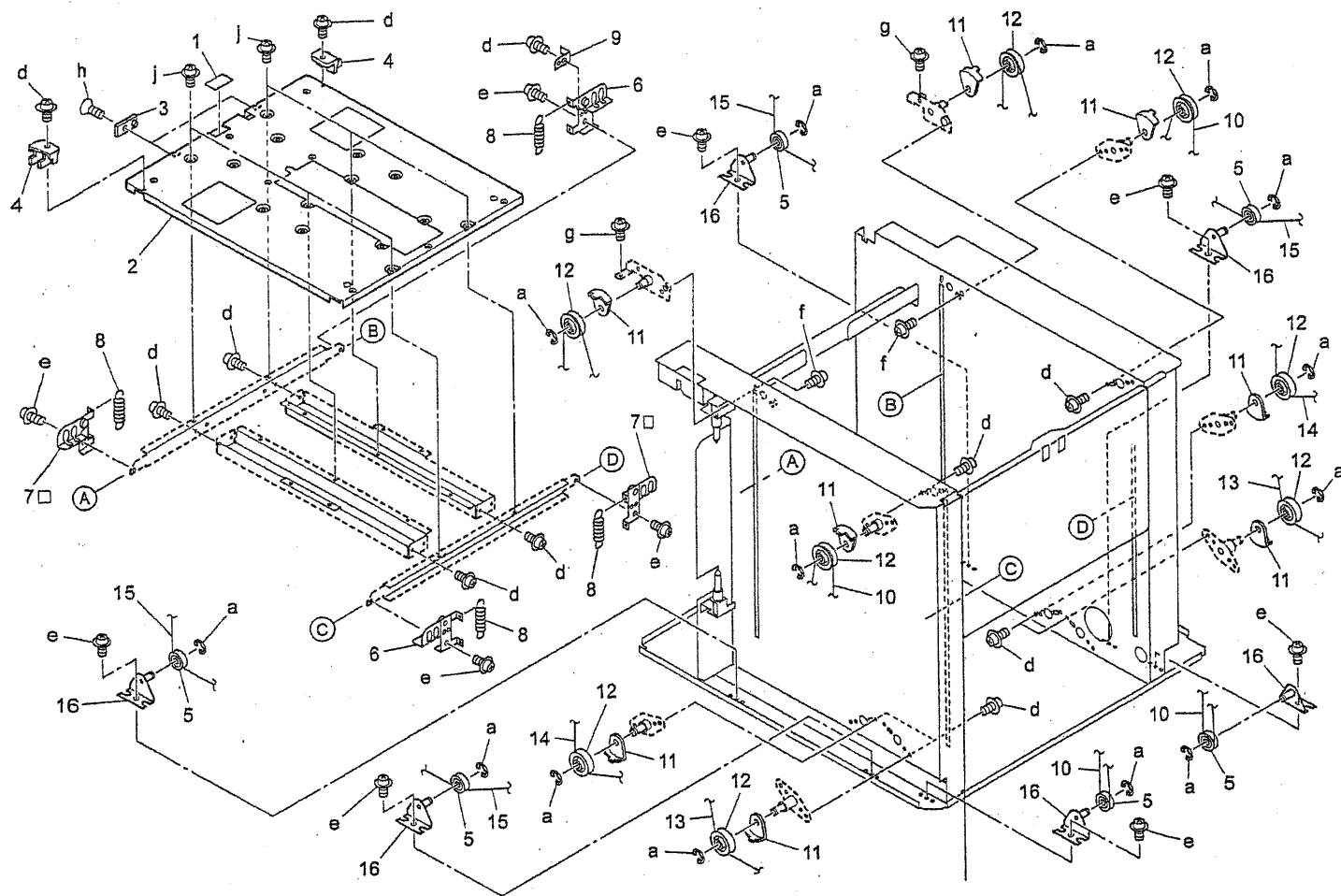
REF. NO.	PART NUMBER	DESCRIPTION
1	55VA41220	Paper Feed Standard Actuator
2	396040681	Snap Ring
3	55VA40260	Paper Feeding Shaft Holder
4	13GG40181	Paper Feed Holder Plate
5	13GG-4231	Feeding Shaft
6	396078020	Pin (B)
7	55VA-4830	Feeding Roller Assembly/B
8	13GG40130	Lever Spring
9	55VA40150	Double Feed Feeding Roller
10	197545110	Roller Collar
11	25SA77561	Paper Driving Belt (L=126)
12	059076510	Pulley/1
13	55VA40230	Paper Feed Lift-Up Lever
14	55VA40990	Lever Auxiliary Plate
15	55VA40130	Paper Feeding Roller/A
16	55VA-4840	Feeding Roller Assembly/A
17	131075510	Bushing/A
18	13GG40070	Entrance Guide Plate/Front
19	55VA-4600	Pick-Up Solenoid
20	466076020	Paper Feeding Shaft Holder
21	55VA42111	Solenoid Stopper Sheet
22	25AA40870	Switch Lever/1
23	55VA42220	Positioning Screw
24	25AA40742	Connecting Part/A
25	55VA40440	Pressure Plate/B
26	13GG40160	Pressure Plate/L
27	13RJ10310	Ground Plate/1
28	13RJ10320	Ground Plate/2
29	13RJ10330	Ground Plate/3
30	13RJ10340	Cover/A

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670306
b	00Z670406
c	00Z183041
d	00Z163061
e	00Z193061



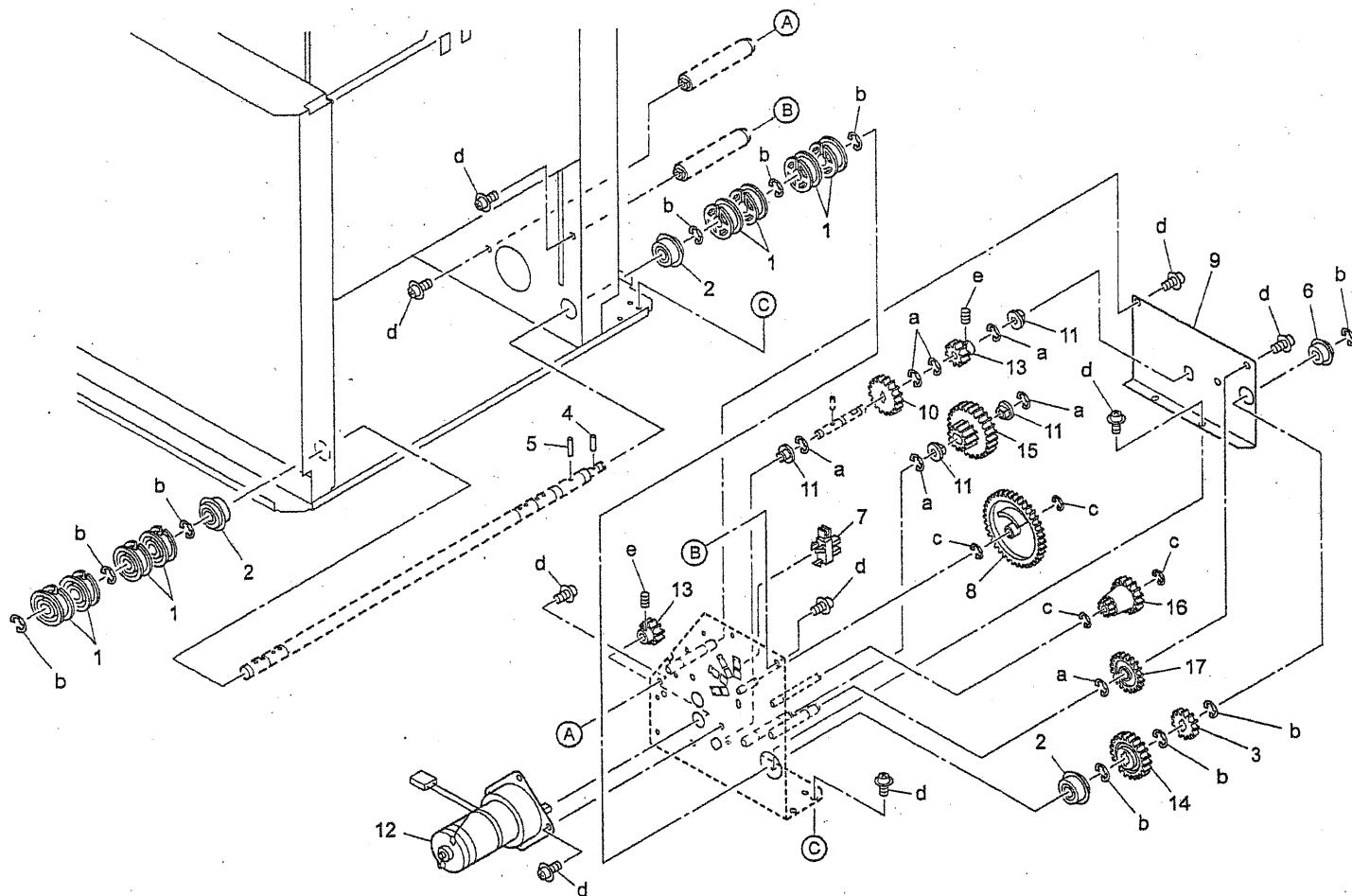
REF. NO.	PART NUMBER	DESCRIPTION
1	12AJ45850	Stopper Rubber
2	13GG42011	Paper Stopper Plate
3	25AA75530	Slide Shaft Holder
4	55VA40170	Conveyance Driven Roller
5	13LS-4100	Rear Guide Arm/Front Assembly
6	55VA46490	Resist Pressure Spring
7	13LS42070	Paper Positioning Plate
8	25AA97320	Paper Guide Seal
9	13GG42042	Paper Supply Side Plate
10	13GG42082	Side Fixed Plate
11	129X48350	Guide Shaft Holder/A
12	25BA47230	Rack (Front)
13	25BA77301	Cassette Pinion(Z=14)
14	13LS42260	Side Connecting Plate
15	13LS42270	Bottom Plate Locking Plate
16	129X48360	Guide Shaft Holder/B
17	13LS42201	Shaft Support Plate /A
18	190040921	Scale Plate Fixed Screw
19	13LS-4310	Rear Slide Plate
20	13LS-4090	Rear Guide Arm /Rear Assembly

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670406
b	00Z670306
c	00Z194061
d	00Z193061
e	00Z144062



REF. NO.	PART NUMBER	DESCRIPTION
1	55VA40930	Double Feed Preventive Plate
2	13LS42020	Paper Up/Down Plate
3	067642850	Spacer Plate
4	13GG42141	Board Positioning Block
5	25AA42570	Wire Pulley
6	25AA-4760	Wire Fixed Plate/A Assembly
7	25AA-4780	Wire Fixed Plate/B Assembly
8	25AA42800	Up-Down Spring
9	55VA44140	Detecting Plate
10	13LS15150	Driving Up-Down Wire/D
11	25AA41180	Wire Holder/A
12	25AA41120	Driven Pulley
13	13LS15120	Drive Up/Down Wire /A
14	13LS15130	Drive Up/Down Wire /B
15	13LS15140	Drive Up/Down Wire /C
16	25AA-4730	Wire Mount Plate Assembly

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670606
d	00Z193061
e	00Z194061
f	00Z163061
g	00Z184301
h	00Z123061
j	00Z144062



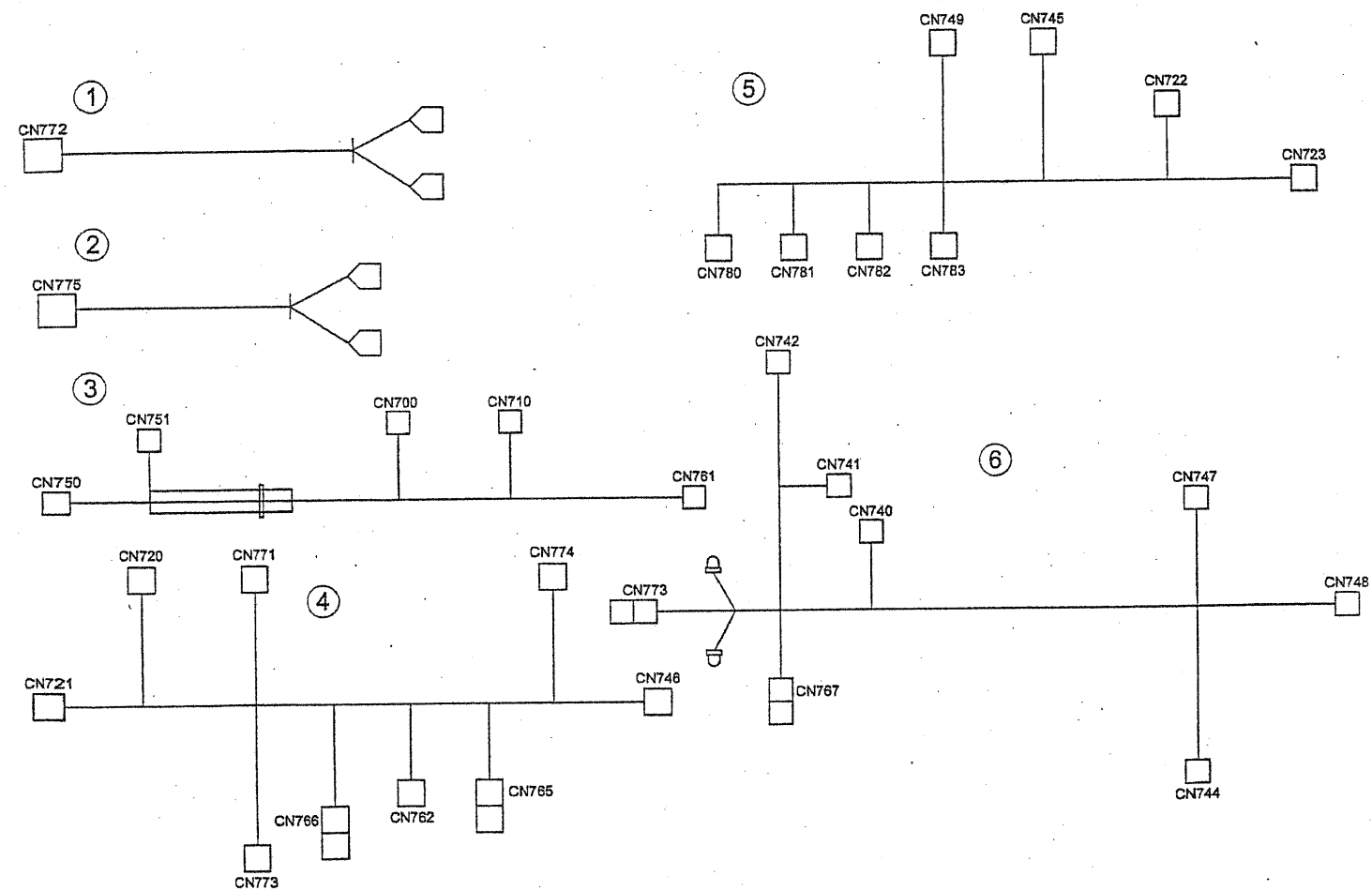


REF. NO.	PART NUMBER	DESCRIPTION
1	13GG15111	Driving Up-Down Pulley
2	066077010	Shaft Holder (A)
3	192143020	Delivery Gear
4	304078040	Pin (B)
5	304078070	Pin (C)
6	540076050	Driving Shaft Holder
7	08AA85510	Photosensor
8	13GG77010	Detecting Gear (Z=92)
9	13LS15030	Driving Up-Down Plate/Front
10	25AA77981	Toner Supply Agitate Gear
11	090075530	Bearing
12	25AA80172	Paper Feed Unit Motor
13	13LS77030	Motor Driving Gear /B
14	12QR77060	Up/Down Gear/C (Z=30)
15	12QR77050	Up/Down Gear/B (Z=52/15)
16	192143060	Gear (B)
17	55GA77150	Paper Feed Driving Gear/3

HARDWARE	
REF. LTR.	PART NUMBER
a	00Z670606
b	00Z670806
c	00Z670406
d	00Z194061
e	00Z474043

# Wiring



REF. NO.	PART NUMBER	DESCRIPTION
1	13GG90011	LCT Signal Wiring/Front
2	13GG90030	LCT Driving Wiring
3	13RJ90040	LCT Control Wiring
4	13RE90020	LCT Signal Wiring/1
5	13RE90050	LCT Signal Wiring/Lower
6	13RE90060	LCT Signal Wiring/Upper

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