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Professional Service – Fast Nationwide Shipping

1-866-455-9900



Service Manual

ES8000





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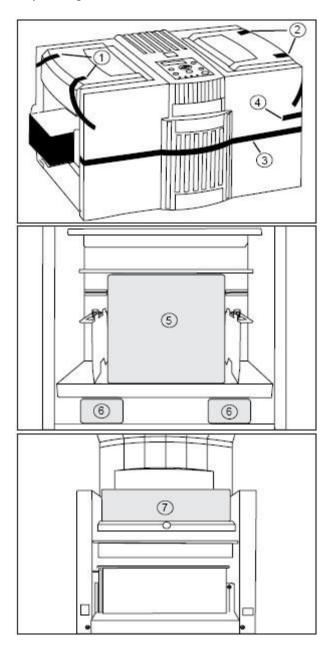




1. Introduction

The ES8000 produces folded and sealed documents with cut-sheet pressure seal forms. Pressure activated adhesive applied forms provide and instantly secure seal on all sides of the form, whether use a "C", "V", "Z" or "Double" fold.

2. Unpacking



- ① Safety Cover of feeding unit (2ea)
- ② Safety cover of upper cassette (2ea)
- 3 Lower cassette cover (2ea)
- 4 Upper cassette (1ea)

- 5 Paper tray (upper/1ea)
- 6 Paper tray (lower/2ea)

Paper tray (lower/2ea)





3. Features

1) Specifications

Processing Speed 8,000 forms per hour

No adjustment required for varying paper thickness

Fold plate setting can be changed in seconds

Folding plates slide out for easy access and maintenance

Form Size: A4/Letter/Legal Size

Fold Type: Z, EZ, C, EC, V & double parallel

Paper Weights: 60-120gsm

Infeed Type: Friction Reverse Roller

Batch Counter: Auto start for job separation

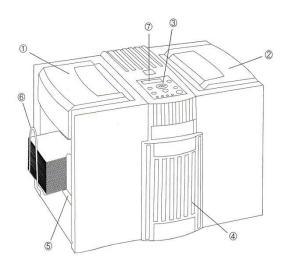
Double Detection: Automatically detects double feed

Stacker: 600 sheets (optional slide conveyor)

Printer Interface: Dual-purpose (in-line & stand-alone)

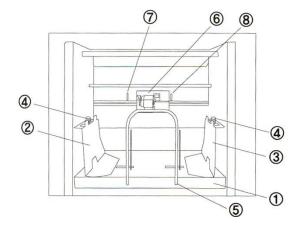
Duty Cycle: 130,000 forms per month

2) Names of each part

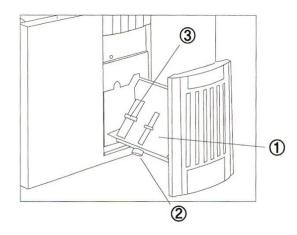


- ① Safety cover of feeding unit
- ② Safety cover of upper folding cassette
- ③ Operator panel
- 4 Lower cassette cover
- ⑤ Paper tray
- 6 Feeding guide
- ⑦ Operator panel

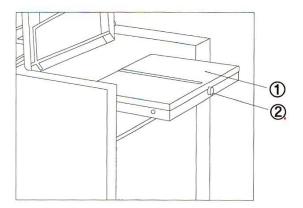




- ① Paper tray
- ② Feeding guide (left)
- 3 Feeding guide (right)
- 4 Feeding guide knob
- 5 Feeding guide6 Feed roller assembly (Pick-up, feed, separate roller)
- 7 Control sensor for paper detection
- 8 Control sensor for tray height



- ① Lower cassette
- ② Lower cassette stopper adjustment knob
- ③ Lower cassette stopper

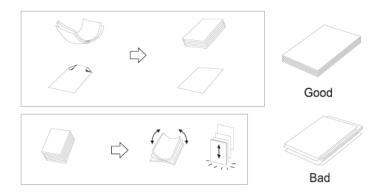


- ① Upper cassette
- ② Upper cassette stopper adjustment knob



4. How to Operate

1) Form Preparation: Forms must be fanned properly on both sides to separate and eliminate any static that may have been induced by the laser printer.

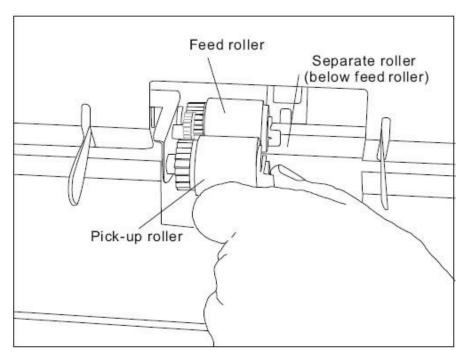


2) Loading forms

- ① Open the safety cover of feeding unit.
- ② Loosen the both sides of guide knobs and stack the forms on the tray properly.
- 3 Tighten the knobs and adjust the feeding guide according to the size of the paper.
- 4 Close the safety cover, then, the feeding tray will go up automatically.

5. Maintenance

1) Cleaning FRR



- ① Remove the snap ring in the roller shafts
- ② Remove the pickup roller Feed roller Separate roller
- ③ Give them a good clean with a cleaning solution
- 4 Reverse the steps to put them back



2) Cleaning Fold Rollers

- ① Open the top left safety cover and pull out the upper fold cassette
- ② Put some alcohol on soft cloth and press jam free button as shown in the pictures below

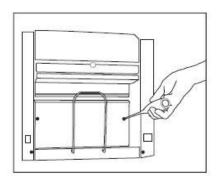




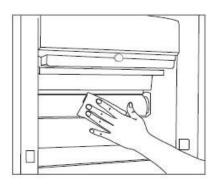
③ Please be careful with cloth not to go into the roller.

3) Cleaning Press Rollers

- ① Turn the power off
- ② Remove the safety cover & clean the press rollers as shown in the pictures below



 a) Turn off the power and remove the safety cover



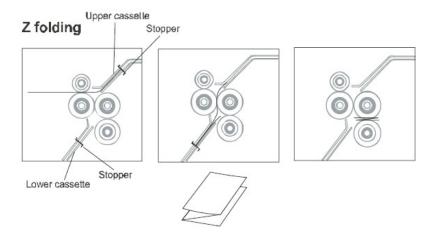
 b) Clean the roller with soft cloth and you can use jam free tool to turn around the roller.

4) Paper Dust

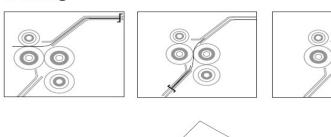
Use air cleaners or general dust removing solutions



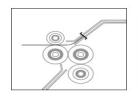
6. Understanding Folding Mechanism

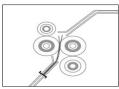


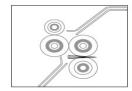
C folding









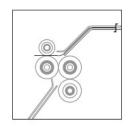




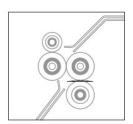




Window folding

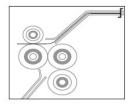




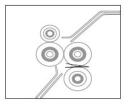




C folding











7. Trouble Shooting

1) General Trouble Shooting

Causatio	Symptoms	Miss feeding	Double feeding	Paper skew	Jam at in- feed (error code #5)	Thickness Checking
1.	Contamination of in-feed roller	0	0		0	
2.	Wear out of in-feed roller	0	0		0	
3.	In-feed clutch malfunctioning	0				
4.	excessively curled paper	0		0	0	
5.	Too sticky paper	0	0		0	
6.	Very thick paper more than 100 GSM	0				Δ
7.	Legal type form	0	0			
8.	Sloped paper tray			0		
9.	Too dark security pattern of form					0
10.	Not horizontally positioned in-feed roller			0		

2) Error Code

ERR CODE "NO"	DESCRIPTIONS	Remark
Error code "0"	Tray level detect time over	
Error code "1"	Tray home position detect time over	
Error code "2"	Upper cassette home position detect time over	
Error code "3"	Lower cassette home position detect time over	
Error code "5"	Paper thickness detect (double paper)	
Error code "6"	Feeding sensor paper starting point detect time over	Feeding unit paper jam
Error code "7"	Feeding sensor paper ending point detect time over	Feeding unit paper jam
Error code "8"	CPU ERROR	
Error code "9"	Press roller sensor detect time over	Folding unit paper jam
Error code "A"	Press roller sensor detect time over	
Error code "B"	Press roller paper jam (sensor)	





3) Diagnosis & Suggestion

Please fully understand the following stated symptoms for respective troubles.

The symptoms of feeding trouble due to the paper bent at the front of the Feeding unit

Symptoms: The corner of the page is dog-eared Suggestion: Straighten the corner of the page and

Symptoms: The feeding is not proper due to the contamination of roller. Suggestion: Replace the feeding roller or remove the contamination.

Symptoms: The feeding tray is not even

Suggestion: Do release and re-assemble both of the running belt fixed bracket.

Paper feeding is not available nevertheless pick-up roller is working

Symptoms: The feeding is not proper due to the contamination of roller. Suggestion: Replace the feeding roller or remove the contamination

When the feed tray does not stop down and display error message with clapping

Symptoms: The control sensor of the feeing tray doesn't seem to be working.

Suggestion: Check the connector of the sensor.

Check the wires between the sensor & main board.

Check whether the sensor is working or not.

Check whether there is any problem on the main board.

When the feeding tray is fell down during going up

Symptoms: an occasion of the function of LCT drive latchet gear weakened. Suggestion: Do check the assembly and operation condition for LCT running

Do replace latchet gear

The message, "Out of paper", is displayed on the operating panel even though the paper is on the feeding tray.

Symptoms: an occasion of that paper detecting sensor is not working

Suggestion: Do check the condition of sensor connector

Do check the condition of sensor Do check wiring connection Do check the main board

The symptoms of that the message of paper is in even if there is no paper

Symptoms: the actuators of paper detecting sensor is not working properly.

Suggestion: Do replace the sensor

The symptom of that feed tray does not stop moving when it goes up

Symptoms: an occasion of that feed tray height control sensor is not working

Suggestion: Do check the connection of sensor Do check the condition of sensor

Do check the wiring condition

Do check the main board

Symptoms: an occasion of that the operation of height control actuator is not good

Suggestion: an occasion of that the connector of thickness sensor is missed

The symptom of that more than 1 sheet is fed frequently

Symptoms: an occasion of that feed roller assembly is worn

Suggestion: Do align the paper in order to separate smoothly when paper is

Do check the condition of feed roller

Do replace the feed roller set

When the paper stops at FRR

Symptoms: FOL-0008 belt is worn out and not able to transfer

Suggestion: Do replace the worn belt

Do check the operation and condition of the sensor of feeding unit

Symptoms: Suggestion: when the sensor of feeding unit does not operate Suggestion: an occasion of that the thickness sensor does out of order



The symptom of that the noise occurs at the upper, lower folding cassette when folding position is set

Symptoms: when the movable stopper screw is over-loaded Symptoms: an occasion of that the gearing of the gear is not proper Symptoms: an

occasion of that the position of sensor is not correct

Symptoms: an occasion of that the assembly of the case(APP-0009) is not good (lower cassette)

Suggestion: re-adjust the connection point of the lower cassette door

The message, "the lower cassette missing" is displayed even though the lower cassette is in the right position

> Symptoms: when the assembly of the case(APP-0009) is not good Suggestion: re-adjust the connection point of the lower cassette door

Symptoms: an occasion of that different type of the magnetic bolt for fixing the lower cassette was used.

Symptoms: an occasion of that the lower cassette sensor does not working

Suggestion: Do check the connection of the sensor and wiring condition

In case the value of thickness sensor is displayed with high figures.

Symptoms: an occasion of that the paper is too thick or dark color printed on the area where the sensor detects

Suggestion: Do feed the reversed paper or not use the function of

thickness sensor

Do check the pollution of the thickness sensor, the condition or the wiring condition

Do operate without the function of thickness sensor when

paper is too thick or dark color printed on the area where the sensor

detect.

The symptom of that the pickup roller does not work

Symptoms: an occasion of that the electronic clutch does not operated

Suggestion: Do check the connection and operation condition of the electronic clutch / the control board

In case the folded paper is skewed

Symptoms: an occasion of that the setting of the paper is not good at feed tray

Suggestion: Do re-set the paper in order to match feeding direction Symptoms: the symptom of that the feed roller is worn partially

Suggestion: Do replace the feed roller and check the horizontal condition of the feed tray.

Symptoms: an occasion of that the feed tray is not even

Symptoms: an occasion of that the folding roller worn out or contaminated

Suggestion: an occasion of that the elastic spring of fold roller does not assembled

The symptom of that the paper does not go down from the upper cassette to the lower cassette

Symptoms: an occasion of that paper is too thick or slippery

Symptoms: an occasion of that folding roller is contaminated or worn out Symptoms: an occasion of that the fold roller is separated from bracket Symptoms; an occasion of that v-belt is damaged or not able to transfer running Suggestion: Do replace belt or maintain tension

Symptoms: an occasion of that the fold roller assembly is not good

The symptom of that the surface of sealed paper is contaminated

Symptoms: an occasion of that the press roller is polluted

The symptom of that the paper jam occurs frequently at press unit

Symptoms: an occasion of that too thick paper used or the press rollers

assembled giving too strong pressure.

Symptoms: The press roller is contaminated seriously.



8. Replacement & Assemblies

1) Side Covers

Side Cover (Left)



1. Remove 4 screws on the cover



2. Remove 1 screw from front/back side of the cover and remove the Left Side Cover

Side Cover (Right)



1. Remove 1 screw from the inside



2. Remove 1 screw from the inside



3. Remove 1 screw after pulling out the Lower Fold Cassette



4. Remove 3 screws indicated above, then Remove the side cover



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2) Control Board & & SMPS



1. Remove 2 screws



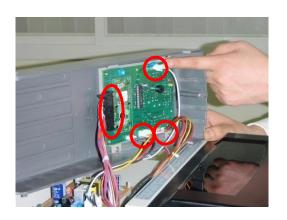
2. Remove 1 screw from the top of the bracket



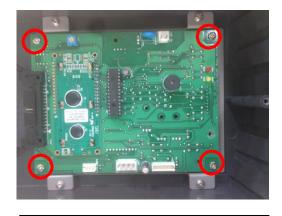
3. Squeeze the side of the top cover & pull it up



4. Pivot



5. Disconnect all the cables to separate the cover $% \left(1\right) =\left(1\right) \left(1\right) \left($



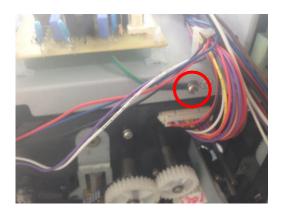
6. Remove 4 screws



SMPS



1. Disconnect the cables from the SMPS



2. Remove 1 screw from the grounding cable



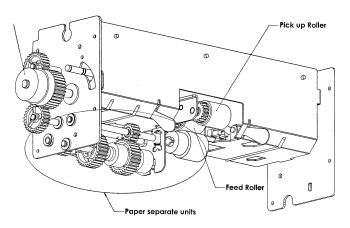
3. Squeeze the plastic nails (4 points) and separate the SMPS by pulling

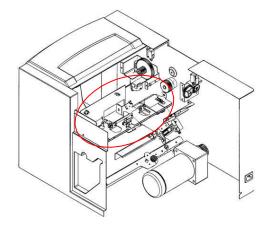




3) FRR & FRR Unit

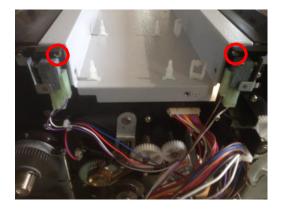
-Pick up timing control units





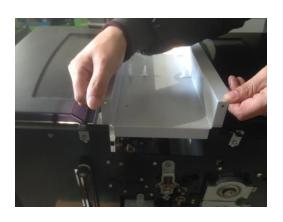
FRR Unit





1. Unscrew 4 points and remove Bracket

2. Unscrew 2 points

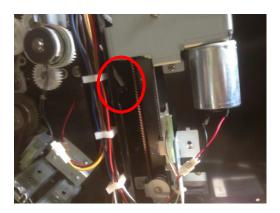




3. Remove the Top Cover

4. Disconnect the Connector

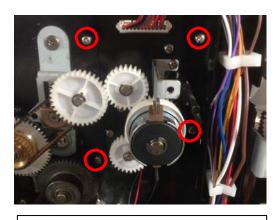




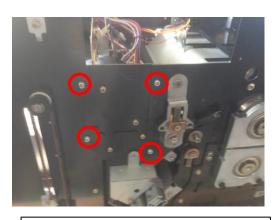
5. Unhook FRR Spring



6. Disconnect 2 Connectors



7. Remove 4 screws from each side



8. Remove 4 screws from each side



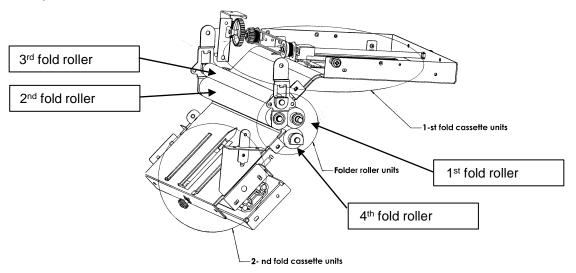
9. Grasp the FRR & take out the FRR unit upward



 * You need to put up In-Feed Roller as picture while taking out the FRR



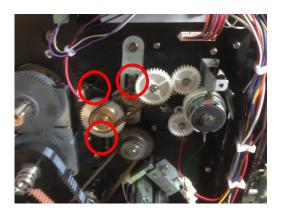
4) Fold Rollers



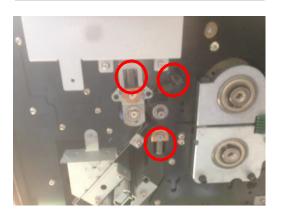
Fold Roller



1. Loosen timing belt



2. Remove Springs

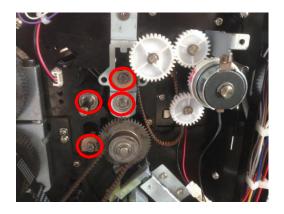


3. Remove Springs



4. Remove E-Ring and V-Pulley, spring, wsher





5. Remove the E-Rings



6. Remove the E-Rings



7. Remove the Bushing in both side



8. Open Top Cover and UCA, then remove $3^{\rm rd}$ fold roller



9. Pull out LCA and pull out the bracket



10. Remove 2nd fold roller





11. Remove the Bearing in both side



13. Remove the Bushing in both side



12. Remove 1st fold roller



14. Remove 4th fold roller

5) Clutch





3. Remove the clutch



2. Disconnect the clutch cable