RISO MZ870 / MZ890 MZ1070 / MZ1090

TECHNICAL MANUAL

Differential information compared to the existing MZ7 & MZ9 Series.

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INTRODUCTION

The existing MZ7 & MZ9 Series machines are based on RZ Series.

The new MZ870, MZ890, MZ1070 and MZ1090 Models are based on EZ Series.

Many of the parts used on the new MZ models are those of EZ machines.

It is therefore important to use the Spare Parts List for MZ870, MZ890, MZ1070 and MZ1090 Models in ordering the parts for these new MZ models.

Though the parts are replaced from RZ type to EZ type, the removal of parts, etc. remains very similar.

This technical manual covers the major differences between the existing MZ (MZ7 & MZ9) and the new MZ (MZ8 & MZ10) models.

The information on the small changes, such as replacement of RZ based parts to EZ based parts are omitted in this manual.

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CHAPTER 2: MACHINE SUMMARY

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MEMO

Machine Specifications

Optional Accessories

A variety of optional accessories are available to enhance the capabilities of the machine. For details about the optional accessories, see your dealer (or authorized service representative).

Auto Document Feeder AF-VI:II

Feed up to 50 sheets of originals automatically.

◆ Auto Document Feeder DX-1

Feed up to 50 sheets of originals automatically. Both sides of original can be scanned automatically.

Color Drum (Cylinder)

Simply change the Drum (Cylinder) to print in multiple colors (colours). (Case included)

Key Card Counter

With a single button press, shows the numbers of printed copies and consumed masters within a given period of time. This can help you manage costs.

♦ Job Separator

With the Programed Printing function, allows the machine to print and sort into groups separated by tape.

RISO Network Card

Use to directly connect the machine to the network. This comes with the RISO-MONITOR software that allows you to check the status of the machine from computers.

Document Storage Card DM-128CF

A Storage Card for using the Storage Memory function.

RISO Controller IS300

A custom controller enabling the machine to be used as a network-connected PostScript 3 printer.

- RISO Stand D type (II)
- ◆ RISO Stand N type (II)
- Wide Stacking Tray

Paper Receiving Tray for sizes A6 - A3/Ledger 340 mm × 555 mm (133/8" × 2113/16").

- Cover Kit: Paper Feed/Ejection
- Card Feed Kit
- Envelope Feed Kit

Machine Specifications

RISO MZ870

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	
Original Paper Weight	When using the Auto Document Feeder AF-VI:II (option) : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond) When using Auto Document Feeder DX-1 (option) : Single-sided feeding : 40 g/m ² (11-lb bond) - 128 g/m ² (34-lb bond) Duplex-sided feeding : 52 g/m ² (14-lb bond) - 105 g/m ² (28-lb bond))
Print Paper Size (max./min.)	 Maximum size 320 mm × 432 mm (12⁹/₁₆" × 17")* *Up to 555 mm (21¹³/₁₆") of vertical paper dimension may be used. If Print Drum (Cylinder) 1 is removed, and perform 1-Color (Colour) print- ing with Drum (Cylinder) 2 with print speed of "150 ppm", up to 364 mm (14⁵/₁₆") of vertical paper dimension may be used. Minimum size Dual-Color (Colour) Print 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5) 1-Color (Colour) Print (with Print Drum (Cylinder) 1) 100 mm × 148 mm (215/w" × 5¹³/w")
	 100 mm × 148 mm (3¹⁹/₁₆" × 5¹³/₁₆") 1-Color (Colour) Print (with Print Drum (Cylinder) 2) 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5)
Paper Supply Capacity	1000 sheets (64 g/m² (17-lb bond))
Print Paper Weight	46 g/m² (13-lb bond) - 210 g/m² (110-lb index)
Image Processing mode	Line, Photo (Standard/Portrait/Group), Duo (Line/Photo/Shadow off), Pencil (Darker/Lighter)
Master-making Time (for A4/portrait/100% reproduction ratio)	Approx. 57 seconds (for Dual-Color print) Approx. 24 seconds (for single-color print (Drum (Cylinder) 1)) Approx. 34 seconds (for single-color print (Drum (Cylinder) 2)) (when only single Print Drum (Cylinder) is set)
Printing Area (max.)	291 mm × 413 mm (11 ⁷ / ₁₆ " × 16 ¹ / ₄ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 163%, 141%, 122%, 116% Standard reproduction ratio (reduction) : 87%, 82%, 71%, 61% Margin+ : 90 - 99%
Print Speed	Approx. 60 - 150 sheets per minute (Control panel: five steps variable, touch panel: 150 ppm)
Print Position Adjustment	Vertical : ±15 mm (± ^{19/} ₃₂ ") Horizontal : ±10 mm (± ³ / ₈ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 220 sheets per roll)
Master Disposal Capacity	80 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation

Optional Accessories	Auto Document Feeder AF-VI:II, Auto Document Feeder DX-1, Color Drum (Cylinder), Key Card Counter, Job Separator, RISO Network Card, Document Storage Card DM-128CF, RISO Controller IS300, RISO Stand D type (II), RISO Stand N type (II), Wide Stacking Tray, Cover Kit: Paper Feed/Ejection, Card Feed Kit, Envelope Feed Kit
Power Source	MZ870A : 100-240V~, 50/60Hz <7.3/3.0A>
Dimensions	When in use : 1625 mm (W) × 735 mm (D) × 740 mm (H) ($63^{31}/_{32}$ " (W) × 28 ¹⁵ / ₁₆ " (D) × 29 ¹ / ₈ " (H)) When in storage : 1005 mm (W) × 735 mm (D) × 740 mm (H) ($39^{9}/_{16}$ " (W) × 28 ¹⁵ / ₁₆ " (D) × 29 ¹ / ₈ " (H))
Weight*1	Approx. 171 kg (376 ⁵ / ₈ lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*2, At altitudes of 2000m or lower

Note:

- Please note that due to improvements and changes to the machine, some images and explanations in this manual may not correspond to your machine.
- The specifications are subject to change without prior notice.

*1 The weight does not include Ink and Master.

*² The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

Machine Specifications

RISO MZ890

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	
Original Paper Weight	When using the Auto Document Feeder AF-VI:II (option) : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond) When using Auto Document Feeder DX-1 (option) : Single-sided feeding : 40 g/m ² (11-lb bond) - 128 g/m ² (34-lb bond) Duplex-sided feeding : 52 g/m ² (14-lb bond) - 105 g/m ² (28-lb bond))
Print Paper Size (max./min.)	 Maximum size 320 mm × 432 mm (12⁹/₁₆" × 17")* *Up to 555 mm (21¹³/₁₆") of vertical paper dimension may be used. If Print Drum (Cylinder) 1 is removed, and perform 1-Color (Colour) print- ing with Drum (Cylinder) 2 with print speed of "150 ppm", up to 364 mm (14⁵/₁₆") of vertical paper dimension may be used. Minimum size Dual-Color (Colour) Print 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5) 1-Color (Colour) Print (with Print Drum (Cylinder) 1) 100 mm × 148 mm (3¹⁵/₁₆" × 5¹³/₁₆") 1-Color (Colour) Print (with Print Drum (Cylinder) 2) 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5)
Paper Supply Capacity	1000 sheets (64 g/m² (17-lb bond))
Print Paper Weight	46 g/m² (13-lb bond) - 210 g/m² (110-lb index)
Image Processing mode	Line, Photo (Standard/Portrait/Group), Duo (Line/Photo/Shadow off), Pencil (Darker/Lighter)
Master-making Time (for A4/portrait/100% reproduction ratio)	Approx. 57 seconds (for Dual-Color print) Approx. 24 seconds (for single-color print (Drum (Cylinder) 1)) Approx. 34 seconds (for single-color print (Drum (Cylinder) 2)) (when only single Print Drum (Cylinder) is set)
Printing Area (max.)	291 mm × 425 mm (11 ⁷ / ₁₆ " × 16 ³ / ₄ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 200%, 154%, 129%, 121% Standard reproduction ratio (reduction) : 78%, 65%, 61%, 50% Margin+ : 90 - 99%
Print Speed	Approx. 60 - 150 sheets per minute (Control panel: five steps variable, touch panel: 150 ppm)
Print Position Adjustment	Vertical : ±15 mm (± ^{19/} ₃₂ ") Horizontal : ±10 mm (± ^{3/} ₈ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 215 sheets per roll)
Master Disposal Capacity	80 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation

Optional Accessories	Auto Document Feeder AF-VI:II, Auto Document Feeder DX-1, Color Drum (Cylinder), Key Card Counter, Job Separator, RISO Network Card, Document Storage Card DM-128CF, RISO Controller IS300, RISO Stand D type (II), RISO Stand N type (II), Wide Stacking Tray, Cover Kit: Paper Feed/Ejection, Card Feed Kit, Envelope Feed Kit
Power Source	MZ890U : 100-240V~, 50/60Hz <7.3/3.0A>
Dimensions	When in use : 1625 mm (W) × 735 mm (D) × 740 mm (H) ($63^{31}/_{32}$ " (W) × $28^{15}/_{16}$ " (D) × $29^{1}/_{8}$ " (H)) When in storage : 1005 mm (W) × 735 mm (D) × 740 mm (H) ($39^{9}/_{16}$ " (W) × $28^{15}/_{16}$ " (D) × $29^{1}/_{8}$ " (H))
Weight*1	Approx. 171 kg (376 ⁵ / ₈ lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*2, At altitudes of 2000m or lower

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Machine Specifications

RISO MZ1070

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	
Original Paper Weight	When using the Auto Document Feeder AF-VI:II (option) : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond) When using Auto Document Feeder DX-1 (option) : Single-sided feeding : 40 g/m ² (11-lb bond) - 128 g/m ² (34-lb bond) Duplex-sided feeding : 52 g/m ² (14-lb bond) - 105 g/m ² (28-lb bond))
Print Paper Size (max./min.)	 Maximum size 320 mm × 432 mm (12⁹/₁₆" × 17")* *Up to 555 mm (21¹³/₁₆") of vertical paper dimension may be used. If Print Drum (Cylinder) 1 is removed, and perform 1-Color (Colour) printing with Drum (Cylinder) 2 with print speed of "150 ppm", up to 364 mm (14⁵/₁₆") of vertical paper dimension may be used. Minimum size
	 Dual-Color (Colour) Print 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5) 1-Color (Colour) Print (with Print Drum (Cylinder) 1) 100 mm × 148 mm (3¹⁵/₁₆" × 5¹³/₁₆") 1-Color (Colour) Print (with Print Drum (Cylinder) 2) 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5)
Paper Supply Capacity	1000 sheets (64 g/m² (17-lb bond))
Print Paper Weight	46 g/m² (13-lb bond) - 210 g/m² (110-lb index)
Image Processing mode	Line, Photo (Standard/Portrait/Group), Duo (Line/Photo/Shadow off), Pencil (Darker/Lighter)
Master-making Time (for A4/portrait/100% reproduction ratio)	Approx. 57 seconds (for Dual-Color print) Approx. 24 seconds (for single-color print (Drum (Cylinder) 1)) Approx. 34 seconds (for single-color print (Drum (Cylinder) 2)) (when only single Print Drum (Cylinder) is set)
Printing Area (max.)	291 mm \times 413 mm (11 ⁷ / ₁₆ " \times 16 ¹ / ₄ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 163%, 141%, 122%, 116% Standard reproduction ratio (reduction) : 87%, 82%, 71%, 61% Margin+ : 90 - 99%
Print Speed	Approx. 60 - 150 sheets per minute (Control panel: five steps variable, touch panel: 150 ppm)
Print Position Adjustment	Vertical : ±15 mm (± ^{19/} ₃₂ ") Horizontal : ±10 mm (± ³ / ₈ ")
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 220 sheets per roll)
Master Disposal Capacity	80 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation

Optional Accessories	Auto Document Feeder AF-VI:II, Auto Document Feeder DX-1, Color Drum (Cylinder), Key Card Counter, Job Separator, RISO Network Card, Document Storage Card DM-128CF, RISO Controller IS300, RISO Stand D type (II), RISO Stand N type (II), Wide Stacking Tray, Cover Kit: Paper Feed/Ejection, Card Feed Kit, Envelope Feed Kit
Power Source	MZ1070E : 220-240V~, 50/60Hz <3.0A> MZ1070A : 100-240V~, 50/60Hz <7.3/3.0A>
Dimensions	When in use : 1625 mm (W) × 735 mm (D) × 740 mm (H) ($63^{31}/_{32}$ " (W) × $28^{15}/_{16}$ " (D) × $29^{1}/_{8}$ " (H)) When in storage : 1005 mm (W) × 735 mm (D) × 740 mm (H) ($39^{9}/_{16}$ " (W) × $28^{15}/_{16}$ " (D) × $29^{1}/_{8}$ " (H))
Weight*1	Approx. 171 kg (376 ⁵ / ₈ lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*2, At altitudes of 2000m or lower

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Machine Specifications

Specifications

RISO MZ1090

Master-making/printing methods	High-speed digital master-making/full automatic stencil printing
Original Type	Book (10 kg (22 lb) or less), sheet
Original Size (max./min.)	
Original Paper Weight	When using the Auto Document Feeder AF-VI:II : 50 g/m ² (13-lb bond) - 128 g/m ² (34-lb bond) When using Auto Document Feeder DX-1 : Single-sided feeding : 40 g/m ² (11-lb bond) - 128 g/m ² (34-lb bond) Duplex-sided feeding : 52 g/m ² (14-lb bond) - 105 g/m ² (28-lb bond)
Print Paper Size (max./min.)	 Maximum size 320 mm × 432 mm (12⁹/₁₆" × 17")* *Up to 555 mm (21¹³/₁₆") of vertical paper dimension may be used. If Print Drum (Cylinder) 1 is removed, and perform 1-Color (Colour) print- ing with Drum (Cylinder) 2 with print speed of "150 ppm", up to 364 mm (14⁵/₁₆") of vertical paper dimension may be used. Minimum size Dual-Color (Colour) Print 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5) 1-Color (Colour) Print (with Print Drum (Cylinder) 1) 100 mm × 148 mm (3¹⁵/₁₆" × 5¹³/₁₆") 1-Color (Colour) Print (with Print Drum (Cylinder) 2) 182 mm × 257 mm (7³/₁₆" × 10¹/₈") (B5)
Paper Supply Capacity	1000 sheets (64 g/m ² (17-lb bond))
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Printing Area (max.)	291 mm × 425 mm (11 ⁷ / ₁₆ " × 16 ³ / ₄ ")
Print Reproduction Ratio	Zoom : 50 - 200% Standard reproduction ratio (enlargement) : 200%, 154%, 129%, 121% Standard reproduction ratio (reduction) : 78%, 65%, 61%, 50% Margin+ : 90 - 99%
Print Speed	Approx. 60 - 150 sheets per minute (Control panel: five steps variable, touch panel: 150 ppm)
Print Position Adjustment	Vertical : $\pm 15 \text{ mm} (\pm^{19}_{32}")$ Horizontal : $\pm 10 \text{ mm} (\pm^{3}_{8}")$
Ink Supply	Full automatic (1000 ml per cartridge)
Master Supply/Disposal	Full automatic (approx. 215 sheets per roll)

Master Disposal Capacity	80 sheets
User Interface	LCD Touch Panel with Progress Arrow indicators, front-side operation
Optional Accessories	Auto Document Feeder AF-VI:II, Auto Document Feeder DX-1, Color Drum (Cylinder), Key Card Counter, Job Separator, RISO Network Card, Document Storage Card DM-128CF, RISO Controller IS300, RISO Stand D type (II), RISO Stand N type (II), Wide Stacking Tray, Cover Kit: Paper Feed/Ejection, Card Feed Kit, Envelope Feed Kit
Power Source	MZ1090U : 100-240V~, 50/60Hz <7.3/3.0A>
Dimensions	
Weight*1	Approx. 171 kg (376 ⁵ / ₈ lb)
Safety Standard	IEC-60950-1 compliant, Indoor, pollution degree 2*2, At altitudes of 2000m or lower

Note:

• Please note that due to improvements and changes to the machine, some images and explanations in this manual may not correspond to your machine.

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*² The pollution degree of the usage environment due to dirt and dust in the air. Degree "2" corresponds to a general indoor environment.

MEMO

CHAPTER $\mathbf{3}$: MAIN DRIVE SECTION

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Main Motor Belt Drive

The Main motor drive is changed from Gear drive to Belt drive.

This is to reduce the noise during the printing.



Main motor Gear drive on the existing MZ7 & MZ9 series.

Main motor Belt drive on the new MZ8 & MZ10 series.

B-Position of No. 1 Print Drum Air Pump Gear Assembly

The B-Position of the Air pump gear assembly for the N.1 Print drum is changed due to the modification on the Main motor drive transmission from existing Gear drive to Timing belt drive.

B-Position on the existing MZ7 & MZ9 series.



B-Position on the new MZ8 & MZ10 series.



New MZ Models < MZ 8 & MZ10 >

4 mm diameter Jig shaft

Removing the Main Motor Assembly

- 1. Turn OFF the machine power and disconnect the power cord from the machine.
- 2. Remove the rear left and rear right covers and open the Mechanical control PCB.
- 3. Remove the two Pressure springs, one for the No.1 Print drum and the other for the No.2 Print drum.
- 4. Remove the mounting screws (4 pcs) from the Pressure control unit and push the unit away to the left to make working space.

Pressure spring of Print drum No.1

Remove also that for Print drum No. 2



Pressure control unit

5. Remove the Main belt tensioner plate assembly. (2 screws & 2 cap screws) Caution:

Before loosening the screws and cap screws, make sure to memo down the belt tension scale setting. The tension should be made a little tighter after the assembly.





Main belt tensioner plate

- 6. Remove the Main motor shaft bracket. (4 screws)
- 7. Remove the Belt load reinforce plate. (4 screws)



View after the two parts shown on the left are removed.

8. Remove the Tensioner base plate. (4 screws)





- 9. Remove the Rear cover mounting bracket. (2 screws)
- 10. Disconnect the connector and remove the Main motor assembly from the machine. (4 screws)



Caution in assembly

Main motor parameter acquisition test mode must be activated after the Main motor is replaced with a new one.

- 1. Start up the test mode and enter 9874 to access into the protected area test mode.
- 2. Insert both No.1 and No.2 Print drums in the machine.
- Run test mode No.1105 (Main motor parameter acquisition)
 The Print drums will rotate and the machine acquires the parameter automatically.
- 4. The operation panel displays END when the test mode is completed.

Removing the Main Belt

< Following steps No.1 through No.8 are the steps taken in removing the Main motor assembly.>

- 1. Turn OFF the machine power and disconnect the power cord from the machine.
- 2. Remove the rear left and rear right covers and open the Mechanical control PCB.
- 3. Remove the two Pressure springs, one for the No.1 Print drum and the other for the No.2 Print drum.
- 4. Remove the mounting screws (4 pcs) from the Pressure control unit and push the unit away to the left to make working space.
- 5. Remove the Main belt tensioner plate assembly. (2 screws & 2 cap screws)
 Caution: Before loosening the screws and cap screws, make sure to memo down the belt tension scale setting.

The tension should be made a little tighter after the assembly.

- 6. Remove the Main motor shaft bracket. (4 screws)
- 7. Remove the Belt load reinforce plate. (4 screws)
- 8. Remove the Tensioner base plate. (4 screws)
- 9. Remove the Main cover. (7 screws)
- 10. Remove the Pressure cam assembly for the No.1 Print drum. (3 screws)
- 11. Remove the Main belt.





MEMO

CHAPTER 4: FIRST PAPER FEED SECTION

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Initial Paper Feed Operation

At the start of a print job, the main motor switches ON and rotates the print drum via Timing belt and drives the Print drum pulley.

The paper feed clutch gear rotates continuously when the main motor is ON.

When the print drum rotates from position-B to a certain angle (angle set by adjusting the paper feed clutch ON angle during test mode or by the custom paper feed ON timing), the paper feed clutch switches ON, turning the scraper and pickup roller and transporting paper from the paper feed tray into the machine.

When the print drum rotates through a certain angle (angle set by adjusting the paper feed clutch OFF angle in test mode or by the amount of slack set during custom paper feed adjustment) after the paper is fed into the machine and the paper sensor senses light, the paper feed clutch switches OFF, and the first paper feed operation stops.

In this process, the leading edge of the paper contacts the guide roller and timing roller. When paper transport stops, some slack is left in the paper.

Additionally, when the print drum rotates to the paper feed jam detection angle/IN angle after the paper feed clutch switches ON, the machine polls the paper sensor for a paper failure feed error.

The scraper and pickup roller are equipped with a one-way clutch to enable free rotation and to keep the first paper feed section from halting or slowing paper feeding after the paper is fed to the second paper feed section.



CHAPTER 5: SECOND PAPER FEED SECTION

CONTENTS

Removing the Timing Roller.....5-2

Removing the Timing Roller

8 mm Jig shaft

- 1. Remove Print drum No.1, turn oFF the machine power and disconnect the Power cable from the machine.
- 2. Remove the rear left and rear right covers and open the Mechanical control PCB.
- 3. Remove the Paper sensor (send).
- 4. Insert 8 mm Jig shaft through the Main cover, Pressure cam and machine frame on the Print drum No.1 side.

IMPORTANT !

This is to **prevent injury** from the sudden movements of the gears when working on the drive area, especially when the Pressure springs are hooked on the Pressure lever assembly.

B-position 8 mm Jig shaft inserting hole



5. Remove the 5 mounting screws of the Air pump drive cover for the Print drum No.1, pull the Air pump drive cover and swing the cover to the right, as shown on the photograph below, to access to the second paper feed drive area.



Swing the Cover to the right.

- 6. Remove the second idler spring, loosen the two mounting screws, slide the second idler assembly, then loosen the tension of the second paper feed drive belt and remove the second paper feed drive belt.
- 7. Remove the E-ring and bearing on the front side.





8. Remove the T-roller bracket mounting screws (3 screws) and pull the timing roller towards the front through the larger end of the keyhole-shaped opening in the machine frame.



T-roller bracket



Timing roller



< Timing Roller >

MEMO

CHAPTER 11: MASTER REMOVAL SECTION

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Master Disposal Box

The Master disposal unit is changed to that of EZ type.

Small parts on the Master disposal box is different from the EZ unit, so as a unit, the Master disposal box on MZ8 & MZ10 Series differs from that of EZ machine.

With the change on the Master disposal box, the Master disposal box is changed to that of EZ type. The No.1 Print drum master disposal box is identical to the EZ.

The No.2 Print drum master disposal box is also EZ type, but is new, as the master throw away direction is opposite from the No.1 print drum master disposal box.

Existing MZ7 & MZ9 Series Master disposal box.



CHAPTER 14: MASTER MAKING SECTION

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Removing the Master Making Upper Cover Safety Switch

Master making unit upper cover set sensor, located on the Cutter cover assembly is changed from an interrupt sensor to a Micro switch, as it is on the EZ machines.

Removal Procedure

- 1. Pull out the Master making unit from the machine, turn OFF the machine power and disconnect the power cord from the machine.
- 2. Open the Master making upper unit and remove the Cutter cover assembly.
- 3. Disconnect the connector and remove the Master making upper cover safety switch together with the switch bracket. (1 screw)


Removing the Master Positioning Sensor

- 1. Pull out the Master making unit from the machine, turn OFF the machine power and disconnect the power cord from the machine.
- 2. Open the Master making upper unit and remove the Cutter cover assembly.
- 3. Remove the Master positioning sensor cover. (1 screw)
- 4. Disconnect the connector, and remove the Master positioning sensor.



Master positioning sensor bracket The mounting screw on this bracket must not be loosened. The mounting position is set by a JIG at the factory.

MEMO

CHAPTER 15: TEST MODE

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 6) Data set 3. System Panel Test Mode	15-4 15-5 15-14 15-18 15-23
 Data set	15-4 15-5 15-14 15-18 15-23 15-29
 Data set	15-4 15-5 15-14 15-18 15-23 15-29 15-38
 6) Data set	15-4 15-5 15-14 15-18 15-23 15-29 15-38 15-42
 6) Data set	15-4 15-14 15-18 15-23 15-29 15-38 15-42 15-45
 Data set	15-4 15-14 15-18 15-23 15-29 15-38 15-42 15-45 15-46

MEMO

1. Operating Method

1) Launching Test Mode

To start Test Mode, switch on power while simultaneously pressing the < 4 > and < > > keys for first print drum position adjustment on the operation panel. This sets the machine in Test Mode standby status.

2) Operation

A Test Mode No. can be entered (selected) via keys or by selecting from the menu.

a) Using keys

- (1) When the machine is in standby status, enter a desired Test Mode No. using the ten-key pad. To correct input, press the < C > key and press the desired key.
- (2) Press the Start key to start Test Mode operations.
- (3) Press the Stop or Start key to exit Test Mode operations and to set the machine in non-operating or standby status.
- * When parameters are being set, pressing the Start key after changing data registers the input data and sets the machine in standby status. Pressing the Stop key cancels the setting and places the machine in standby.

b) Selecting from the menu

- (1) When the machine is in the standby status, select a unit from the Test Mode menu that includes the test item to be executed.
- * Press with a finger on the name of a desired unit on the LCD screen. (This highlights the selected unit name.)
- * The screen displays the Test Mode sub-menu.
- (2) Select the test item to be executed from the Test Mode sub-menu.
- * Press with a finger on Test Mode operations on the LCD screen. (This highlights the selected test name.)
- (3) Press the Start key to start the Test Mode operations.
- (4) Press the Stop or Start key to exit Test Mode and set the machine in non-operating or standby status.
- * When parameters are being set, pressing the Start key after changing data registers the data and sets the machine in standby status. Pressing the Stop key cancels the setting and places the machine in standby.

3) Ending Test Mode

When the machine is in Test Mode standby status or in Test Mode non-operating status, depress the Reset key for 1 or more seconds to exit Test Mode.

2. Testing Methods

1) Sensor/switch check

The statuses of the sensors and switches are indicated by a buzzer.

- Detecting condition: The buzzer beeps at intervals of 0.1 seconds (quick successive beeps)
- Non-detecting condition: The buzzer beeps at intervals of 0.5 seconds (slightly-prolonged successive beeps)

2) Motor/solenoid check

Pressing the Start key switches the motor/solenoid ON. Pressing the Start or Stop keys halts the motor/ solenoid.

* Note that since error checks are not performed during operations, the moving section may become locked at a limit position if one is set.

3) Unit operation check

- (1) Press the Start key to operate the unit. In general, ordinary error checks will be performed. Some units will stop after completing a series of operations, while others continue operating until a key (Stop key or Start key) is pressed.
- (2) An error will result in a continuous buzzer sound. Press the Reset key to clear the error.

4) Data clear

Press the Start key to start the operation. The screen will display <In Action>. After a brief period during which this indication is displayed, the operation halts automatically, and the screen displays <End>.

5) Data check

Press the Start key to display settings and parameters.

* Set values are displayed but cannot be changed during data check operation.

6) Data set

- (1) Pressing the Start key to change the currently displayed settings and parameters.
- (2) Change the data using the ten-key pad. Use the < * > key to switch between +/- indications.
- (3) After changing a set value, press the Start key to register the data. The machine will enter standby status. Pressing the Stop key cancels the setting and places the machine in standby.
- * Entering a value outside the permissible range will return the setting to the default value. Entering a value incompatible with the setting unit will return the setting to the default value.

3. System Panel Test Mode

No.	Sensor/Switch	Detecting Condition	Print drum changeover	
0001	Wake-up Key	The key pressed.	-	
0002	Solenoid Counter Connection Signal	The solenoid counter is connected.	-	
0003	24V A output signal	24V-A ON (there is a 24V output)	-	
0004	24V B output signal	24V-B ON (there is a 24V output)	-	
0005	Rear Cover Safety SW	Switch ON (main unit rear cover is installed)	-	
No.	Motor/Solenoid	Remarks	Print drum changeover	
0062	Wake-up LED	The LED illuminates.	-	
No.	Unit	Check	Print drum changeover	
0080	Test Print A (Checkered)		^	
0080	Creates a master with Test Pattern 1 (Check	kered).	A	
0081	Test Print B (Crossed Lines)		٨	
0081	Creates a master with Test Pattern 2 (Cross	ed Lines).		
0082	Test Print C (Dot 1)			
0082	Creates a master with Test Pattern 4 (Dot 1)).	A	
0083	Test Print D (Dot 2)		Δ	
0000	Creates a master with Test Pattern 5 (Dot 2)).	~	
0084	Test Print E (Dot 1 + Crossed Lines)		Δ	
0004	Creates a master with Test Pattern 6 (Dot 1 + Crossed Lines).			
0085	Test Print F (Dot 2 + Crossed Lines)			
	Creates a master with Test Pattern 7 (Dot 2	+ Crossed Lines).		
0086	Test Print G (Dot 3 + Crossed Lines)		Δ	
	Creates a master with Test Pattern 8 (Dot 3	+ Crossed Lines).		
	Paper-Feed Test (continuous feeding)			
	Prints continuously.			
0087	* The Speed key is enabled.			
	* If the rear cover safety switch is OFF, the operation begins when the rear cover safety			
	switch is turned ON within 10 seconds after the START key is turned ON.			
0088	Low-Speed Printing Operation		А	
	Prints continuously at 15 rpm.			
0090	Machine Firmware Download			
	Pressing the START Key starts the Firmware download.			
	Unit Initialization			
0094	Returns mechanical moving units to their home positions. (scanner, thermal print head,			
	compression plate, clamp units, vertical prin	t position, printing pressure)		

(Note) Meaning of symbols used in the **<Print drum changeover>** column in the Test Mode chart.

- A : <First print drum side>, <second print drum side>, or <both first and second print drums> can be selected.
- B : <First print drum side> or <second print drum side> can be selected.
- -: Irrelevant for print drum.

No.		Unit Check	Print drum changeover		
0095	System Configuration Data Output		В		
0000	Creates a master for CI system of	lata.	5		
	System Parameter & Error Record Print				
0097	Creates a master of the list of data setting changes and error history.				
	^ The master is created by the first print drum.				
	Machine Clock Activation				
0101	Writes the time information set in	lest No. 01/1 to No. 01/3 to the RIC and starts the	-		
	seconds.				
	DSP Download (Main, Secondary)				
0102	Pressing the Start key begins do	wnload of the DSP program for controlling the main motor	-		
	and second paper feed.				
	Machine Test-Mode Data Recording	1			
0103	Stores the maine Test Mode setti	ng in NeoROSA PCB into CF card.	-		
	<excludes du<="" for="" modes="" td="" test="" the=""><td>plex Scanner Unit TM2760-TM2999.></td><td></td></excludes>	plex Scanner Unit TM2760-TM2999.>			
	Print Drum Test-Mode Data Record	ng			
0104	Stores the print-drum Test Mode	Settings now in the EEPROM of the Print Drum into CF	В		
	card. <this b="" di<="" is="" mode="" not="" test=""></this>	splayed on the Operation Panel.>			
0105	Machine Test-Mode Data Re-store				
	Writes the test mode settings ret	rieved in CF card by test-mode No.0103 into the SH PCB.			
	Print Drum Test-Mode Data Re-store				
0106	Writes the test mode settings retr	rieved in CF card by test-mode No.0104 into the Print Drum	В		
	PCB EEPROM. <this mode<="" td="" test=""><td>e is not displayed on the Operation Panel.></td><td></td></this>	e is not displayed on the Operation Panel.>			
	Test Mode Data Back-up				
0107	Stores all the test mode numbers and settings, which are changed from the program default,				
	are stored in CF card for record keeping purpose.				
	<this display<="" is="" mode="" not="" test="" th=""><th>ed on the Operation Panel.></th><th>Duint days</th></this>	ed on the Operation Panel.>	Duint days		
No.	Data Clear	Details	changeover		
		Normally, when a paper jam occurs, the error can be			
		cleared only by following the jam reset procedure and			
0110	Clearing Jam Status Data	removing the cause of the jam. However, this setting will	-		
		force an error caused by jamming to be cleared. Note that			
		errors involving consumables cannot be cleared.			
		Clears data (memory function, programs, properties			
		settings, etc.) in the user area (data returned to default			
		values).			
0111	Clearing User Memory	* Be sure to record all data before	-		
		executing this function.			
		cleared <tm118 be="" needs="" to="" used=""></tm118>			
		Boturne all pottings stored in the main writ EDAM and			
		main unit FEPROM in the Test Mode to their default			
	Clearing Normal Area Test-Mode	values.			
0112	Data	<this displayed="" is="" mode="" not="" on="" operation="" panel.="" test="" the=""></this>	-		
	Memory (Machine)	* Does not clear data in protected areas.			
		* Be sure to record all data before			
		executing this function.			

No.	Data Clear	Details	Print drum changeover
0113	Maintenance Count Clear (master making)	Resets the maintenance master counter in maintenance call message.	-
0114	Maintenance Count Clear (printing)	Resets the maintenance copy counter in maintenance call message.	-
0115	Maintenance Count Clear (print drum)	Resets the maintenance print-drum print counter in maintenance call message.	В
0116	Setup Wizard Initialize	Initializes the user business type setting, basic screen setting, and mode transition system selection. (There is no need to reset the clock.)	-
0117	Clearing Normal Area Test-Mode Data Memory (Print Drum)	Returns all settings stored in the print drum EEPROM in the Test Mode to their default values. * Does not clear data in protected areas. * Be sure to record all the data before executing this function.	В
0118	Clearing Authentication Settings	Initializes registered users and authentication setting. * This test mode is not displayed on the Operation Panel.	-
No.	Data Check	Content of Display	Print drum changeover
0120	System Parameter Adjustment Record	Displays a list of Test Mode Nos. and settings for non- default items in the values set. * Items with Nos. from 1200 to 1299, and 5480 to 5484 are not displayed.	-
0121	SW Action Record	Displays the error codes (D**) for the switches causing operation shutdown. * Displays the 64 most recent error codes.	-
0122	Error Record	Displays a list of error codes for errors (error type: T, A, B) previously generated in normal mode. * Displays the 64 most recent error codes.	-
0123	Maintenance Count	Displays the values for all maintenance counters.	-
0126	Optional Configuration Check	Displays a list of all connected peripherals or optional equipment.	-
0132	Downloading File Information	Displays the following: File name, Firmware type, Firmware version number, File date, Media type (U=USB, C=CF card).	-

No.		Data Check	Content of	of Display	Print drum changeover	
0135	Paper size of numbers.	n feed tray is displayed by ID	Identifies and displays based on information f potentiometer and pap sensor. * Paper IDs and paper 00: No paper 01: A3 03: A4 05: B5 07: A5 09: B6 11: Postcard 13: Ledger 15: Letter 17: Statement 18: Statement landsca 19: Foolscap 30: Chinese paper K10 31: Chinese paper K10 32: Chinese paper K10 32: Chinese paper K8 50: Paper size undefin detection sensor: C	a paper ID determined rom the paper width er size detection sizes 02: B4 04: A4 landscape 06: B5 landscape 08: A5 landscape 10: B6 landscape 12: Postcard landscape 14: Legal 16: Letter landscape pe 6 6 Landscape ed 1 (paper size DN) ed 2 (paper size DFF)	-	
No.		Data S	Setting		Print drum changeover	
	Counter Display Control					
0141	Description	Selection to display or not displa	y the counter.		-	
	Setting Setting range: 0: (Not displayed) 1: (Displayed) - default.					
	Test Mode Language					
0142	Description	escription Selects the language for the Test Mode display.				
0142	Setting	Setting range: 0: (Normal) 1: (Japanese) 2: (English) 3: (Chinese). Default: 0: (Normal)				
	Maintenance-Master Count Entry					
0142	Description Sets the number of masters at which the maintenance call message is displayed.					
0145		Setting range: 0 to 9999 (x 100)	masters		-	
	Setting	Setting unit: 1 (x 100) masters				
		Default: 0 master <does disp<="" not="" td=""><td>lay maintenance call me</td><td>essage>.</td><td></td></does>	lay maintenance call me	essage>.		
	Maintenance	-Copy Count Entry				
	Description	Sets the number of prints at which	ch the maintenance call	message is displayed.		
0144	0.00	Setting range: 0 to 9999 (x 1000) sheets		-	
	Setting	Setting unit: 1 (x 1000) sheets				
	•••	Default: 0 sheet <does displa<="" not="" td=""><td>ay maintenance call mes</td><td>sage>.</td><td></td></does>	ay maintenance call mes	sage>.		
	Maintenance	-Drum Meter Entry		L. (I		
	Description	Sets the number of print-drum pi	ressurizing times at whic	in the maintenance call		
0145		Sotting range: 0 to 0000 (v 1000) shoots		В	
	Setting	Setting unit: 1 (x 1000) sheets	1 3110013			
		Default: 0 sheet <does displa<="" not="" td=""><td>ay maintenance call mes</td><td>sage>.</td></does>	ay maintenance call mes	sage>.		

No.		Data Setting	Print drum changeover
	Scan First		
0146	Description	Selects whether scanning is done before master-removal, or do the scanning and master-removal at the same time.	-
	Setting	Setting range: 0 (Inactive - both done at the same time) - default 1 (Active - scanning is done before master-making)	
	Authenticatio	n Enable/Disable Selection	
0149	Description	Selects whether to enable or disable the authentication function. This test mode is not displayed on the Operation Panel.	-
	Setting	Setting range: 0 (Disable) 1 (Enable) - default.	
	Print Quantit	y Reset Setting	
0150	Description	Sets whether the print count value is reset or not when continuous print is set to OFF.	-
	Setting	Setting range: 0 (Reset disabled), 1 (Reset enabled) Default: 0 (Reset disabled)	
	Print Speed	After Short Interval	
0151	Description	Enables/disables the gradual print speed acceleration operation.	
0151	Setting	Setting range: 0 (Disabled), 1 (Enabled) Default: 0 (Disabled)	_
	Lighten Print	Display Selection [Only on MZ9/MV9 Series]	
0150	Description	Enables/disables the Lighten Print display in the Function tab.	
0152	Setting	Setting range: 0 (Hide), 1 (Display) Default: 0 (Hide)	-
	Special Pape	er Control Basic Display Selection	
0150	Description	Selects whether to display the Special Paper Control button in the Admin. Tab.	
0153	Setting	Setting range: 0 (Hide), 1 (Display) Default: 0 (Hide)	-
	Minimum Pri	nt Quantity Control	
0154	Description	Enables/disables the Minimum Print Quantity setting in the Admin. tab.	
0154	Setting	Setting range: 0 (Setting change disabled), 1 (Setting change enabled) Default: 0 (Setting change enabled)	-

No.		Data setting			
	Counter Acti	on Control			
0155	Description	Enables/disables the counters (solenoid counter, software counter). This setting is effective until the power switch is turned OFF. Once the power switch is turned OFF, the setting returns to default (enabled).	-		
	Setting	Setting range: 0 (Disabled), 1 (Enabled) Default: 1 (Enabled)			
	<warning> [</warning>	Display Control			
0159	Description	Enables/disables the display of <wrong size=""> warning (F02, F10, F43) at the start of master-making or printing.</wrong>	-		
	Setting	Setting range: 0 (Warning display disabled), 1 (Warning display enabled) Default: 1 (Warning display enabled)			
	Multi-Up Rep	peat Setting			
0160	Description	Sets whether the Multi-Up repeat setting is turned OFF or automatically reset at the end of Multi-Up printing job.	-		
	Setting	Setting range: 0 (Off), 1 (Reset) Default: 0 (Off)			
	Program Pri	nting (1 original) repeat setting.			
0161	Description	Enables/disables the reset of the Program Printing when the Auto Printing setting is turned OFF.	_		
	Setting	Setting range: 0 (Reset disabled), 1 (Reset enabled) Default: 0 (Reset disabled)			
	Master-Maki	ng stand-by time adjustment			
	Description	Sets the stand-by time of the master-making in which the initial movement does			
0162	Description	not take place.	-		
	Setting	Setting range: 0 (No stand-by), 1 to 180 (1 second to 180 seconds) Default: 180 (180 seconds)			
	RLP Mode S	Switch Timing Control			
	Description	Adjusts screen switching time in RLP automatic allocation.			
0165	0.11	Setting range: -5 to +5 (0 to 2.5 sec)			
	Setting	Setting Setting unit: 1 (0.25 sec) Default: 0 (1.25 sec)			
	Max. Print Q	uantity Control			
0166	Description	Enables/disables the maximum print quantity setting; sets maximum print quantity.			
0100		Setting range: 0 to 9999 (0 to 9999 sheets)	_		
	Setting	Setting unit: 1 (1 sheet) Default: 0 (0 sheet) Maximum quantity restriction not set			
	Paper ID Aut	to-Repeat Control			
		Selects whether the paper size setting reverts to the default setting or the			
0167	Description	previous setting is maintained when the power is turned ON or the all-reset operation is initiated.	_		
		Setting range: 0 (Paper size setting is maintained.)			
	Setting	1 (Paper size setting reverts to default value.)			
	Ũ	Default: 0 (Paper size setting is maintained.)			

No.			Data setting	Print drum changeover
	Fine Adjustn	nent Button Disp	lay Control	
	Description	Used to displa	y or hide the fine adjustment button.	
0168		Setting range:	0 (Hidden)	-
	Setting		1 (Display)	
		Default: 0 (Hid	den)	
	<properties></properties>	Tab Display Co	ntrol	
	Description	Display or hide	the properties setting tab.	
0169		Setting range:	0 (Hidden)	_
	Setting		1 (Display)	
		Default: 1 (Dis	play)	
	Stock Manag	gement		
	Description	Display or hide	the Stock Management display in Admin. Tab.	
0170		Setting range:	0 (Hide)	—
	Setting		1 (Display)	
		Default: 0 (Hid	e)	
	Machine Clo	ck Setting (YEA	R)	
	Sets the <ye< td=""><td>ar> in the <year< td=""><td>/month/date> setting in the RTC.</td><td></td></year<></td></ye<>	ar> in the <year< td=""><td>/month/date> setting in the RTC.</td><td></td></year<>	/month/date> setting in the RTC.	
	* Test Mode	No. 0101 must b	be activated after values are entered in Test Mode No. 0171	
	through No. 0173. Executing Test No. 0101 registers the values set in			
0171	Setting range: 2000 to 2199 (Year 2000 to 2199)			
	Setting	Setting unit: 1	(1 year)	
		Default:	2000 before RTC is set (before Test No. 0101 is executed).	
			RTC measured value at the time of test activation after RTC is	
			set (after Test No. 0101 is executed).	
	Machine Clo	ck Setting (MON	NTH & DATE)	
	Sets the <month date=""> in the <year date="" month=""> setting in the RTC.</year></month>			
	* Test Mode No. 0101 must be activated after values are entered in Test Mode No. 0171			
	through No. 0173. Executing Test No. 0101 registers the values set in			
0172		0101 before R	IC is set (before Test No. 0101 is executed)	_
0172		RIC measured	d value at the time of test activation after RIC is set (after lest No.	
	Setting	0101 is execut		
	Octarig	Default:	0101 before RTC is set (before Test No. 0101 is executed)	
			RIC measured value at the time of test activation after RIC is	
			set (after Test No. 0101 is executed)	
	Machine Clo	ck Setting (HOL	IR & MINUTE)	
	Sets <hour r<="" td=""><td>ninute> in the R</td><td>TC.</td><td></td></hour>	ninute> in the R	TC.	
	* Test Mode	No. 0101 must k	be activated after values are entered in Test Mode No. 0171	
	through No. 0173. Executing Test No. 0101 registers the values set in Test Mode No. 0171			
	through No.	0173 into the RT	TC.	
0173		Setting range:	Two upper digits: 00 to 23 (0 to 23 o'clock), two lower digits: 00 to	-
		59 (00 to 59 m	inutes)	
	Sotting	Setting unit: 1		
	Seung	Default:	0000 before RTC is set (before Test No. 0101 is executed)	
			RTC measured value at the time of test activation after RTC is	
			set (after Test No. 0101 is executed)	

No.		Data setting	Print drum changeover		
	Chinese Pap	per No.16 (Width data setting)			
0174	Description	Sets paper width data.			
		Setting range: 191 to 199 (191mm to 199mm)	_		
	Setting	Setting unit: 1 = 1mm			
		Default: 195 (195mm)			
	Chinese Pap	per No.8 (Width data setting)			
	Description	Sets paper width data.			
0175		Setting range: 266 to 276 (266mm to 276mm)	_		
	Setting	Setting unit: 1 = 1mm			
		Default: 271 (271mm)			
	Chinese Pap	per No.8 (Length data setting)			
	Description	Sets paper length data.			
0176		Setting range: 385 to 395 (385mm to 395mm)	_		
	Setting	Setting unit: 1 = 1mm			
		Default: 390 (390mm)			
	Proof Print Quantity Selection				
	Description	Selects proof print quantity in two color printing			
	Setting	Setting range: 0 (1st proof print for No.1 drum & 2nd proof print for No.1 and N	0.2		
0190		overlapped).			
0100		1 (1st for No.1 drum, 2nd for No.2 drum & 3rd for No.1 and No.2	_		
		overlapped).			
		Default: 0 (1st proof print for No.1 drum & 2nd proof print for No.1 and			
		No.2 overlapped).			
	Service Info.	File Mail Control <this available="" china="" is="" mode="" models.="" not="" on="" test=""></this>			
	Description	Enable or disables the service information mail sending.			
0181		<net-d;gii be="" card="" enable.="" installed="" must="" network="" to=""></net-d;gii>			
	Setting	Setting range: 0 (Disable) 1 (Enable)			
	ootang	Default: 0 (Disable)			
	Supply Stock	k Mail Transfer (NET-D;GII)			
	Description	Enable or disable the supply stock information by e-mail (NET-D;GII)			
0182	Description	<net-d;gii be="" card="" enable.="" installed="" must="" network="" to=""></net-d;gii>			
	Setting	Setting range: 0 (Disable) 1 (Enable)			
	Octang	Default: 0 (Disable)			
	Count Charg	je Display Selection			
	Description	Selects whether to display the [COUNT CHARGE] button on the User Mode			
0183	Beschption	display.			
	Setting	Setting range: 0 (Disable) 1 (Enable)			
	Setting	Default: 0 (Disable)			

No.		Data setting	Print drum changeover
	Count Charge Mail Transmit Date Selection		
0184	Description	Sets the Warning display date to indicate the Count Charge information mail sending.	
		Setting range: 0 to 31 (191mm to 199mm) Setting unit: 1 = First date of each month	-
	Setting	Default: 0 <no display.="" warning=""></no>	
	Coung	If the date selected is 29, 30 or 31, and if particular month does not include the selected date, the warning appears on the last day of the month.	
	Counter Info	Mail Setting <not available="" china="" model="" on="" the=""></not>	
		Selects whether to enable of disable the counter mail sending function.	
		Both this test mode and Test Mode No. 149 must be set to [1]. Net-D:G;G2 or RISO Network Card must be connected.	
0185	Description	[E-Mail] button will appear on the Count Display in the Functions Tab.	_
		<counter e-mail="" report="" sending=""> Both this test mode and Test Mode No. 183 must be set to [1]. Net-D:G;G2 or RISO Network Card must be connected. [Send Mail] button will appear on the Count Charge display in the Functions Tab.</counter>	
		Setting range: 0 (Disable) 1 (Enable)	
	Setting	Default: 0 (Disable)	
	Private MIB	Function Setting (MIB = Management Information Base)	
	Description	Selects whether to enable or disable the RISO Private MIB Function.	
0186	Setting	Setting range: 0 (Disable) 1 (Enable) Default: 1 (Enable)	_
	D to P lob R		
		Selection between Spool or Delete of the printing job when the Printer cannot receive the print job data via LAN or USB.	
0187	Description	When [0: Job Spool] is selected, the job stays even though the Printer cannot receive the data from PC. The print data is not deleted, but the PC may give time-out error, in which case some image may be lost in the printing when the Printer becomes able to receive the print job.	_
		When [1: Delete] is selected, the job is deleted when the Printer is unable to receive the data from PC. This prevents the possibility of lost image in the prints when the PC gives time-out error.	
	0.111.0.1	Setting range: 0 (Job Spool) 1 (Job Delete)	
	Setting	Default: 0 (Job Spool)	
	150 ppm Pri	nting Speed Button	
0190	Description	Selects whether to display the 150 ppm fast speed printing button.	_
	Setting	Setting range: 0 (No Display) 1 (Display) Default: 1 (Display)	
	Software On	tion Enable Control (Soft Digitizer)	<u></u>
	Description	The software option is enabled when the key code (8 digits) is entered and the	
0199		Start key is pressed. [For Japanese Machines Only]	_
	Setting	Setting range: 00000000 to 99999999 Setting unit: 1 Default: 00000000	_

4. Imaging/Scanning Test Mode

No.		Sensor/Switch Detecting Condition			
0200	FB/AF Carria	age HP sensor	The scanner is at the home position.	-	
0201	Flatbed Orig	inal Det. Sensor	Light received (original present)	-	
0202	Flat Bed Ori	ginal Size Detection Sensor 1	Light received (original present)	-	
0203	Flat Bed Ori	ginal Size Detection Sensor 2	Light received (original present)	-	
0204	Flat Bed Ori	ginal Size Detection Sensor 3	Light received (original present)	-	
0205	Flat Bed Ori	ginal Size Detection Sensor 4	Light received (original present)	-	
0206	Flat Bed Ori	Flat Bed Original Size Detection Sensor 5 Light received (original present)			
0207	Flat Bed Ori	ginal Size Detection Sensor 6	Light received (original present)	-	
0208	Flat Bed Ori	ginal Size Detection Sensor 7	Light received (original present)	-	
0209	Compressio	n plate open/shut sensor	The original stage cover is closed.	-	
No.		Motor/solenoid	Remarks	Print drum changeover	
0260	Scanner lam	р	Switches scanner lamp ON/OFF.	-	
No.		Unit	check	Print drum changeover	
0281	Carriage Ho	me Action		_	
0201	Returns the	scanner to the home position.			
0284	Scanner Cyc	le Continuous Action		_	
0204	Repeats the	scanner operation (A3 scanning,	ABC enabled).		
0287	Scanner Lar	np Replace Positioning			
0201	Moves the s	canner to the lamp replacement p	position.		
0289	Scanner <st< td=""><td>hipping> Positioning</td><td></td><td></td></st<>	hipping> Positioning			
0200	Moves the s	canner to the machine transport p	position.		
No.		Data	setting	changeover	
No.	Line-Copy S	Data lice Level Adjustment	setting	changeover	
No.	Line-Copy S Description	Data lice Level Adjustment Adjusts the slice level for text m	ode (scanning density 3).	changeover	
No. 0340	Line-Copy S Description	Data lice Level Adjustment Adjusts the slice level for text m Setting range: –16 to +16	ode (scanning density 3). * (<+> for reduced density)	changeover	
No. 0340	Line-Copy S Description Setting	Data lice Level Adjustment Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1	vode (scanning density 3). * (<+> for reduced density)	changeover	
NO. 0340	Line-Copy S Description Setting	Data lice Level Adjustment Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0	a setting node (scanning density 3). * (<+> for reduced density)	changeover	
0340	Line-Copy S Description Setting Auto Base C	Data lice Level Adjustment Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm	<pre>n setting node (scanning density 3). * (<+> for reduced density) ent</pre>	-	
NO. 0340	Line-Copy S Description Setting Auto Base C Description	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m	<pre>n setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density).</pre>		
No. 0340 0341	Line-Copy S Description Setting Auto Base C Description	Data lice Level Adjustment Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16	<pre>n setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density)</pre>		
No. 0340 0341	Line-Copy S Description Setting Auto Base C Description Setting	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density)		
No. 0340 0341	Line-Copy S Description Setting Auto Base C Description Setting	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0	ent inde (scanning density 3). * (<+> for reduced density) ent inde (auto scanning density). * (<+> for reduced density)		
No. 0340 0341	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 befault Setting	<pre>node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density)</pre>		
NO. 0340 0341	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 befault Setting Image processing selection whe	ent inde (scanning density 3). * (<+> for reduced density) ent inde (auto scanning density). * (<+> for reduced density) en Photo or Duo is selected in master-making.		
NO. 0340 0341 0345	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 Default: 0 Default Setting Image processing selection whe Applies to both the master-mak	ent ent ent (<+> for reduced density) (<+> for reduced density) (<+> for reduced density). (<+> for reduced density) (<+> for reduced density)		
No. 0340 0341 0345	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 Default Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2)		
NO. 0340 0341 0345	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 Default: 0 Default Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-scree	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2) en 4).		
No. 0340 0341 0345	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 refault Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-screen Default: 0 (Error-diffusion)	<pre>n setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) node (auto scanning to linked printer.</pre>		
NO. 0340 0341 0345	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting Halftone Cur	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 refault Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-scree Default: 0 (Error-diffusion) ve Selection (Photo)	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2) en 4).		
No. 0340 0341 0345	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting Halftone Cur Description	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 Default: 0 Default Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-screet Default: 0 (Error-diffusion) ve Selection (Photo) Selects the matrix used as the basis	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2) en 4).		
NO. 0340 0341 0345 0350	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting Halftone Cur Description	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 Pefault Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-screen Default: 0 (Error-diffusion) ve Selection (Photo) Selects the matrix used as the to mode.	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2) en 4).		
NO. 0340 0341 0345 0350	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting Halftone Cur Description	Data Adjusts the slice level for text m Setting range: -16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: -16 to +16 Setting unit: 1 Default: 0 refault Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-screet Default: 0 (Error-diffusion) ve Selection (Photo) Selects the matrix used as the to mode. Setting range: 0 to 8	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2) en 4).		
No. 0340 0341 0345 0350	Line-Copy S Description Setting Auto Base C Description Setting Photo/Duo D Description Setting Halftone Cur Description Setting	Data Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 ontrol (ABC) Slice Level Adjustm Adjusts the slice level for text m Setting range: –16 to +16 Setting unit: 1 Default: 0 refault Setting Image processing selection whe Applies to both the master-mak Setting range: 0 (Error-diffusion 3 (Dot-screen 3) 4 (Dot-screet Default: 0 (Error-diffusion) ve Selection (Photo) Selects the matrix used as the the mode. Setting unit: 1 Default: 1 Default: 0 Setting range: 0 to 8 Setting unit: 1 Page in the state in the stat	a setting node (scanning density 3). * (<+> for reduced density) ent node (auto scanning density). * (<+> for reduced density) en Photo or Duo is selected in master-making. ing and printing to linked printer.) 1 (Dot-screen 1) 2 (Dot-screen 2) en 4).		

No.		Data setting			
	Halftone Cur	ve Selection (Dot Photo)			
0254	Description	Selects the matrix used as the basis for selecting halftone curves in photo & dot mode.			
0351	Setting	Setting range: 0 to 8 Setting unit: 1 Default: 4			
	Halftone Cur	ve Selection (Duo)			
0252	Description	Selects the matrix used as the basis for selecting halftone curves in Duo mode.			
0352	Setting	Setting range: 0 to 8 Setting unit: 1 Default: 4	_		
	Halftone Cur	ve Selection (Dot Duo)			
0252	Description	Selects the matrix used as the basis for selecting halftone curves in Duo & dot mode.			
0353	Setting	Setting range: 0 to 8 Setting unit: 1 Default: 4	_		
	Trimming Slice Level Adjustment				
	Description	Sets the slice level for the trimming.			
0359	Setting	Setting range: –16 to +16 * (<+> for reduced density) Setting unit: 1 Default: –2	_		
	Edge Empha	asis Weak Mode			
0361	Description	In using recycled paper originals, this function reduces picking up the dark spots on the paper in scanning by reducing the edge emphasis.	_		
	Setting	Setting range: 0: Inactive 1: Active Default: 0: Inactive			
	Inside-borde	r Paint Range Setting			
0362	Description	Sets the number of dots on the inside of the area designating border which are included in the area specifying border for deletion from the master data in specified area separation. * Actual change takes place in the unit of <setting 8="" dots="" value="" x="">. Increasing this value increases the border area to be deleted.</setting>	_		
	Setting	0 (0 dot on the inside of border) 1 (1 dot on the inside of border) 2 (2 dots on the inside of border) 3 (3 dots on the inside of border) Default: 1 (1 dot on the inside of border)			

No.		Data setting		Print drum changeover
	Outside-bord	der Paint Range Setting		0
0363	Description	Sets the number of dots on the outside of the are are included in the area specifying border for dele specified area separation. * Actual change takes place in the unit of <setting Increasing this value increases the border area to Sets the number of dots on the outside of the are used as a separation border (range) in traced col</setting 	a designating border which etion from the master data in g value x 8 dots>. b be deleted. a designating border which are or separation.	_
	Setting	Actual change takes place in the unit of <setting< td=""> Increasing this value broadens the border range Setting range: 0 (0 dot on the outside of borde 1 (1 dot on the outside of borde 2 (2 dots on the outside of borde 3 (3 dots on the outside of border)</setting<>	(area to be separated). r) r) er) er)	
	Carriage Ho	me Position Selection		
0368	Description	Selects the Home Position of the Scanner Carriag * If the setting is selected to [1], the quick-start-up	ge. o becomes inactive.	-
	Setting	Setting range: 0: HP 1: 2nd HP		
	EB Horizont:	al Scan Position Adjust		
	Description	Adjusts the original horizontal scan position on th required for AF.	e flatbed. A separate setting is	
0300	Setting	Setting range: –30 to +30 (–3.0 mm to +3.0 mm) Setting unit: 5 (0.5 mm) Default: 0 mm	*(<+> for adjustment left)	_
	FB Scan Sta	Scan Start Position Adjust		
	Description	Adjusts the original scanning start position (amou	int of scan skip) on the flatbed.	
0381	Setting	Setting range: -40 to +40 (-4.0 mm to +4.0 mm) Setting unit: 1 (0.1 mm) Default: 0 mm	*(<+> for adjustment up)	_
	FB Scanning	g Speed Adjustment		
	Description	Adjusts the original scanning speed on the flatbe	d. (Elongation/Shrinkage)	
0382	Setting	Setting range: –50 to +50 (–5.0 % to +5.0 %) Setting unit: 1 (0.1 %) Default: 0 %	*(<+> to elongate)	_
	Activates or	deactivates center black dot setting		
0386	Description	Adds a thin black line at the center of image data on the scanned image during printing in normal master-making and RLP output. * The thin center black line is added only when using image data scanned by the scanner. <returns back="" default="" is="" off.="" power="" setting="" the="" to="" turned="" when=""></returns>		
	Setting	Setting range: 0 (Without thin center black line 1 (With thin center black line))	
		Default: 0 (Without thin center black line)		
	Hand-writter	Color Separation Pen Extraction Lower-limit Dens	sity	
0389	Description	Sets the pen extraction lower-limit density used in written color separation.	n image processing for hand-	_
0389	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 100 (Unspecified)		

No.		Data setting	Print drum changeover
	Hand-writter	Color Separation Pen Extraction Upper-limit Density	
0390	Description	Sets the pen extraction upper-limit density used in image processing for hand- written color separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 220	
	Hand-writter	Color Separation (Ink) Pen Extraction Lower-limit Density	
0391	Description	Sets the pen extraction lower-limit density used in image processing for hand- written color separation (ink).	_
0001	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 90	
	Hand-writter	Color Separation (Ink) Pen Extraction Upper-limit Density	
0392	Description	Sets the pen extraction upper-limit density used in image processing for hand- written color separation (ink).	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 180	
	Red-color Se	eparation Pen Extraction Lower-limit Density	
0393	Description	Sets the pen extraction lower-limit density used in image processing for red-color separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 100	
	Red-color Se	eparation Pen Extraction Upper-limit Density	
0394	Description	Sets the pen extraction upper-limit density used in image processing for red- color separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 220	
	Specified Are	ea Separation Density Extraction Threshold (Lower-limit Value)	
0395	Description	Sets the pen extraction lower-limit density used in image processing for specified area separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 125	
	Specified Are	ea Separation Density Extraction Threshold (Upper-limit Value)	
0396	Description	Sets the pen extraction upper-limit density used in image processing for specified area separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 220	
	Traced Colo	r Separation Density Extraction Threshold (Lower-limit Value)	
0397	Description	Sets the pen extraction lower-limit density used in image processing for traced color separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 100	
	Traced Colo	r Separation Density Extraction Threshold (Upper-limit Value)	
0398	Description	Sets the pen extraction upper-limit density used in image processing for traced color separation.	_
	Setting	Setting range: 0 to 255 Setting unit: 1 Default: 255	
	Edge Empha	asis Threshold Offset	
0000	Description	Sets the offset for the following Test Mode setting value.	
0399	Setting	Setting range: –128 to 127 Setting unit: 1 Default: 0	_

5. Master-making/Master-disposal Test Mode

0400 Master-positioning sensor Light received (master det	condition	Print drum changeover
	tected)	_
0401 Master detection sensor Light path blocked (maste	er detected)	_
0402 Master end sensor Light path blocked (maste	er end mark detected)	_
0403 Cutter HP SW Switch OFF (cutter at hom	ne position)	_
0406 TPH pressure sensor Light path blocked (blocke	ed by shield plate)	_
0407 Master-making-unit top cover safety switch Switch ON (master making	g unit top cover closed)	_
0410 Master-making-unit releasing button Switch ON (button depres	ssed)	-
0411 Master-making Unit Position Sensor Light path blocked (blocke	ed by shield plate)	В
0412 Master-making Unit Pull-out Position Sensor Light path blocked (blocke	ed by shield plate)	-
0413 Master-making Unit Drawer Cover Safety Switch Switch ON (master making * The rear cover safety SW procedure.	unit cover closed) must be ON during this	_
0420 Master-disposal Jam Sensor Light received (master det	tected)	В
0421 Master-compression HP Sensor Light path blocked (master oposition)	compression plate at home	В
0423 Master-disposal box safety SW Switch ON (master dispos rear cover safety switch and drawer cover safety switch procedure. * For inspections of the se rear cover safety switch, the drawer cover safety switch disposal box safety switch procedure.	sal box set in machine) st print drum side, the nd the master-making unit h must be ON during this econd print drum side, the he master-making unit h, and the first master n must be ON during this	В
0424 Master disposal box set sensor Light path blocked (dispos	sal bix is set in place)	В
0425 Master compression mater EC concer	ed by shield plate)	В
		_
0425 Master-compression motor FG sensor Light path blocked (blocked) 0426 Master-removal motor FG sensor Light path blocked (blocked)	ed by shield plate)	B
0425 Master-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remain	arks	B Print drum changeover
0425 Master-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remained 0460 Thermal-pressure motor (CW) Rotates clockwise (CW).	arks	B Print drum changeover
0425 Master-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remain the sensor 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates counterclockwise	arks	B Print drum changeover –
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remains 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates counterclockwise 0462 Write pulse motor (CW) Rotates clockwise (master	arks (CCW). r feeding).	B Print drum changeover – – –
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remain the sensor 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates clockwise (master clockwise) 0462 Write pulse motor (CW) Rotates clockwise (master clockwise) 0463 Write pulse motor (CCW) Rotates counterclockwise)	arks (CCW). (master returning).	B Print drum changeover – – – –
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remain and the sensor 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates clockwise (master 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates counterclockwise 0464 Load pulse motor (CW) Rotates clockwise (master	arks (CCW). r feeding). (master returning). r feeding).	B Print drum changeover - - - - - -
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Remain 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates counterclockwise 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates counterclockwise 0464 Load pulse motor (CW) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise	arks (CCW). r feeding). (master returning). (master returning).	B Print drum changeover – – – – – –
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Rem 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates clockwise (master 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates clockwise (master 0464 Load pulse motor (CW) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise motor	arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor	B Print drum changeover - - - - - - - - - -
0425Master-compression motor PG sensorLight path blocked (blocked0426Master-removal motor FG sensorLight path blocked (blockedNo.Motor/solenoidRem0460Thermal-pressure motor (CW)Rotates clockwise (CW).0461Thermal-pressure motor (CCW)Rotates counterclockwise0462Write pulse motor (CW)Rotates clockwise (master0463Write pulse motor (CCW)Rotates counterclockwise0463Load pulse motor (CCW)Rotates clockwise (master0464Load pulse motor (CW)Rotates counterclockwise0465Load Pulse Motor CCW (Reverse)Rotates counterclockwise0466Write pulse motor + Load pulse motor (CW)Rotate both write pulse motor in master-feed direction.0467Master-making-unit release button LEDThe LED of the master-matilluminates.	arks arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button	B Print drum changeover - - - - - - - - - - - - - -
0425Master-compression motor PG sensorLight path blocked (blocked0426Master-removal motor FG sensorLight path blocked (blockedNo.Motor/solenoidRem0460Thermal-pressure motor (CW)Rotates clockwise (CW).0461Thermal-pressure motor (CCW)Rotates counterclockwise0462Write pulse motor (CW)Rotates clockwise (master0463Write pulse motor (CCW)Rotates clockwise (master0464Load pulse motor (CW)Rotates clockwise (master0465Load Pulse Motor CCW (Reverse)Rotates counterclockwise0466Write pulse motor + Load pulse motor (CW)Rotate both write pulse motor.0467Master-making-unit release button LEDThe LED of the master-matilluminates.0468Master Stocker FanON & OFF <stop key="O</td"></stop>	arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF>	B Print drum changeover - - - - - - - - - -
0425Master-compression motor PG sensorLight path blocked (blocked0426Master-removal motor FG sensorLight path blocked (blockedNo.Motor/solenoidRem0460Thermal-pressure motor (CW)Rotates clockwise (CW).0461Thermal-pressure motor (CCW)Rotates clockwise (CW).0462Write pulse motor (CW)Rotates clockwise (master0463Write pulse motor (CCW)Rotates clockwise (master0464Load pulse motor (CW)Rotates clockwise (master0465Load Pulse Motor CCW (Reverse)Rotates counterclockwise0466Write pulse motor + Load pulse motor (CW)Rotates counterclockwise master-feed direction.0467Master-making-unit release button LEDThe LED of the master-ma illuminates.0468Master Stocker FanON & OFF <stop key="O</td">0470Master removal motor (CW)Rotates to feed master int</stop>	arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Rem 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates clockwise (CW). 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates clockwise (master 0464 Load pulse motor (CW) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise 0467 Master-making-unit release button LED The LED of the master-mailluminates. 0468 Master Stocker Fan ON & OFF <stop key="O</td"> 0470 Master removal motor (CW) Rotates to feed master int No. Unit check Unit check</stop>	arks arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0425 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Rem 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates counterclockwise 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates clockwise (master 0464 Load pulse motor (CW) Rotates counterclockwise 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotate both write pulse motor 0466 Write pulse motor + Load pulse motor (CW) Rotate both write pulse motor 0467 Master-making-unit release button LED The LED of the master-matiluminates. 0468 Master Stocker Fan ON & OFF <stop key="O</td"> 0470 Master removal motor (CW) Rotates to feed master int No. Unit check 0480</stop>	arks arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0425 Master-compression motor FG sensor Light path blocked (blocked) 0426 Master-removal motor FG sensor Light path blocked (blocked) No. Motor/solenoid Rem 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates counterclockwise 0462 Write pulse motor (CCW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates clockwise (master 0464 Load pulse motor (CCW) Rotates counterclockwise 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise master-feed direction. 0467 Master-making-unit release button LED The LED of the master-maxilluminates. 0468 Master Stocker Fan ON & OFF <stop key="O</td"> 0470 Master removal motor (CW) Rotates to feed master int No. Unit check 0480 Cutter motor 1 cycle motion 0480 Cutter motor 1 cycle motion</stop>	arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0420 Master-compression motor PG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked No. Motor/solenoid Rem 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates clockwise (CW). 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CCW) Rotates clockwise (master 0464 Load pulse motor (CW) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise master-feed direction. 0467 Master-making-unit release button LED The LED of the master-mailluminates. 0468 Master Stocker Fan ON & OFF <stop key="O</th"> 0470 Master removal motor (CW) Rotates to feed master int No. Unit check 0480 Cutter motor 1 cycle motion Outs the master. 0481 Thermal pressure motor action (TPH down) Moves the TPH to the pressure application position. <td>arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.</td><td>B Print drum changeover - - - - - - - - - - - - - - - - - - -</td></stop>	arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -
042.5 Master-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CW) Rotates clockwise (CW). 0462 Write pulse motor (CW) Rotates clockwise (master 0463 Write pulse motor (CW) Rotates clockwise (master 0464 Load pulse motor (CW) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates clockwise (master 0466 Write pulse motor + Load pulse motor (CW) Rotates clockwise (master 0464 Load Pulse Motor CCW (Reverse) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates clockwise (master 0466 Write pulse motor + Load pulse motor (CW) Rotates clockwise master 0467 Master-making-unit release button LED The LED of the master-mailluminates. 0468 Master Stocker Fan ON & OFF <stop key="O</th"> 0470 Master removal motor (CW) Rotates to feed master int No. Unit check 0480 Cutter motor 1 cycle motion Otic</stop>	arks (CCW). (CCW). (master returning). (master returning). (master returning). otor and load pulse motor aking unit release button FF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0425 Master-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CCW) Rotates counterclockwise 0462 Write pulse motor (CW) Rotates counterclockwise (master 0463 Write pulse motor (CCW) Rotates counterclockwise (master 0464 Load pulse motor (CW) Rotates counterclockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise (master 0466 Write pulse motor + Load pulse motor (CW) Rotate both write pulse motor. 0467 Master-making-unit release button LED The LED of the master-feed direction. 0468 Master Stocker Fan ON & OFF <stop key="O</th"> 0470 Master removal motor (CW) Rotates to feed master int 0480 Cutter motor 1 cycle motion Unit check 0481 Thermal pressure motor action (TPH down) Moves the TPH to the pressure application position. 048</stop>	arks (CCW). (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box. noves it out of the way).	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0425 Induster-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CW) Rotates counterclockwise 0462 Write pulse motor (CW) Rotates counterclockwise (master 0463 Write pulse motor (CW) Rotates counterclockwise (master 0464 Load pulse motor (CW) Rotates counterclockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise (master 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise (master 0466 Write pulse motor + Load pulse motor (CW) Rotate both write pulse motor 0467 Master-making-unit release button LED The LED of the master-mailluminates. 0468 Master removal motor (CW) Rotates to feed master int 0467 Master removal motor (CW) Rotates to feed master int 0468 Master removal motor (CW) Rotates to feed master int <t< td=""><td>arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box. noves it out of the way). second print drum side</td><td>B Print drum changeover - - - - - - - - - - - - - - - - - - -</td></t<>	arks (CCW). r feeding). (master returning). r feeding). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box. noves it out of the way). second print drum side	B Print drum changeover - - - - - - - - - - - - - - - - - - -
0425 Induster-compression motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0426 Master-removal motor FG sensor Light path blocked (blocked 0460 Thermal-pressure motor (CW) Rotates clockwise (CW). 0461 Thermal-pressure motor (CW) Rotates counterclockwise 0462 Write pulse motor (CW) Rotates counterclockwise (master 0463 Write pulse motor (CW) Rotates clockwise (master 0464 Load pulse motor (CW) Rotates clockwise (master 0465 Load Pulse Motor CCW (Reverse) Rotates counterclockwise 0466 Write pulse motor + Load pulse motor (CW) Rotates counterclockwise 0467 Master-making-unit release button LED The LED of the master-mailluminates. 0468 Master removal motor (CW) Rotates to feed master int 0460 Cutter motor 1 cycle motion ON & OFF <stop key="O</th"> 0470 Master removal motor (CW) Rotates to feed master int 0480 Cutter motor 1 cycle motion Out the check 0481 Thermal pressure motor action (TPH dow</stop>	arks (CCW). (CCW). (master returning). (master returning). (master returning). (master returning). otor and load pulse motor aking unit release button DFF> to the master disposal box.	B Print drum changeover - - - - - - - - - - - - - - - - - - -

No.		Unit check		
0490	Master comp	ression-plate h	ome positioning	В
0400	Returns the c	compression pla	ate to the home position.	
0491	Master compression-plate protection positioning Moves the master compression-plate to the Protection Mode position, when the Protection Mode is enabled		В	
	Master compression-pla		continuous movement	
0493	Repeats the A cycle cons	removed mas isting of comp	ter compacting operation. acting cycle action -> 3-second standby is repeated.	В
	Cutter motor	ON action (cu	It direction)	
0494	Rotates the Caution: D	cutter motor in isconnect the ode, or the n	the cutting direction. (maximum time: 10 sec) • Cutter motor from the machine before activating this test • achine will be damaged.	-
No.	Data	clear	Details	Print drum changeover
0510	Master remo count clear	val software	Resets the master removal software count. (Resets the count to 0)	В
No.	Data	check	Content of display	Print drum changeover
0521	TPH thermis temperature	tor data	Displays the temperature value (Degrees Celsius) of the TPH thermistor.	-
0524	TPH power voltage		Displays the voltage (x 100) applied to the thermal print head immediately after power is supplied to the thermal print head. (Example: 1000 = 10V)	_
0527	Master usage start date		Displays the master start date (year/month/date) stored in the master tag. * For example, <2010/2/28> is displayed by alternating indications of <2010> and <0228>.	_
0528	Master removal software count		Displays the master removal software count.	В
No.		Data setting		
	Master Front-End Position Adjust			
0540	Description	Adjusts the opositioning s following the	distance of the slight return movement activated after the master ensor switches OFF to perform the incremental movement required master cutting operation during master setting.	_
	SettingSetting range: 0 to +100 (0 mm to +10.0 mm) * (<+> for return direction)Setting unit: 1 (0.1 mm)Default: 50 (5.0 mm)			
	Write start-p	osition adjustn	nent	
0541	Description	Adjusts the master-making start position. (Adjusts the master stop position immediately before write start operation by modifying the distance of the return movement from the master positioning sensor.)		_
	Setting	Setting unit: 1 (0.1 mm) Default: 0 (0 mm)		
	Master-maki	ng length adju	stment	
	Description	Adjusts the r	naster-making area (length).	
0542	Setting	Setting rang * (<+> to Setting unit: Default: 0 (0	e: –100 to +100 (–10.0 mm to +10.0 mm) increase length) 1 (0.1 mm) mm)	-

No.		Data setting	Print drum changeover	
	Master-clam	p-range adjustment		
0543	Description	Adjusts the master clamp range during master-loading.		
		Setting range: -100 to +100 (-10.0 mm to +10.0 mm) * (<+> to increase)	В	
	Setting	Setting unit: 1 (0.1 mm)		
		Default: 0 (0 mm)		
	Master cut length adjustment			
	Description	Adjusts the length of a single master (cutting timing).		
0544		Setting range: -100 to +100 (-10.0° to +10.0°)	В	
	Setting	Setting unit: 5 (0.5°) * (1°= approx. 1.5 mm, <+> for increased master length) Default: 0 (0°)		
	TPH Therma	al Power Adjustment		
	Description	Adjusts the TPH power.		
0545		Setting range: 0 to 8 * (Smaller the number the higher the TPH power)	—	
	Setting	Default: MZ8/MV8 = 2 MZ10/MV10 = 4		
No.		Data setting	Print drum changeover	
	Master-maki	ng speed adjustment		
	Description	Regulates the speed of the write pulse motor to adjust image stretching/	В	
0547	Description	shrinkage during master-making.		
0347	Setting	Setting range: -100 to +100 (-10.0% to +10.0%) * (<+> to elongate)		
		Setting unit: 1 (0.1%)		
		Default: 3 (0.3%)		
	Write Roller	Diameter Reference Adjustment		
	Description	Input the diameter of the Write roller to compensate the fluctuation in diameter		
		between the rollers.		
0548	Setting	Setting range:2305 (23.05mm) to 2315 (23.15mm)	_	
		* (input the diameter in millimeters x 100)		
		Setting unit: 1 (0.01mm)		
		Default: 2310 (23.10mm)		
	Master-maki	ng Unit Adjustment		
	Description	Adjusts the master-making unit stop position for master-making.		
0550		Setting range: -20 to +20 (-2.0 mm to +2.0 mm)	В	
	Setting	Setting unit: 1 (0.1 mm)		
		Default: 10 (1.0 mm)		
	Master-maki	ng Unit Pull-Out Position Adjustment		
	Description	Adjusts the master-making unit stop position for removal.		
0551		Setting range: -20 to +20 (-2.0 mm to +2.0 mm)	_	
	Setting	Setting unit: 1 (0.1 mm)		
		Default: 0 (0 mm)		
	MRmv. Rol	ler Stop Timing		
	Description	Sets the timing for vertical transport rollers to stop in relation to print drum angle.	_	
0570		Setting range: -50 to +50 (-50 degrees to +50 degrees)	В	
	Setting	Setting unit: 1 (1 degree)		
		Detault: No.1 Drum = 0 (0 degree) No.2 Drum = 30 (30 degrees)		

No.		Data setting	Print drum changeover
	Master Rem	oval Box Set-Motion	
0572	Description	Activates or deactivates the master removal box set-motion when the machine power is turned, when the machine wakes up from sleep mode or when the box is inserted.	_
	Setting	Setting range: 0 (Deactivated) 1 (Activated). Default: 0 (Deactivated)	
	Master com	pression-limit position (maximum end position)	
	Description	Sets the pulse count for the compacting limit position.	
0573	Setting	Setting range: 106 to 163 (106 to 163 pulses) (Compression plate angle from home position: 65° to 100°)	В
		Setting unit: 1 (1 pulse) Default: A3/Ledger = 155 / Other sizes = 147	
	Master com	pression duration adjustment	
0575	Description	Sets the time (time for single cycle of compacting FG) for the detection of compacting. * The compacting operation finishes when the one cycle time of the compacting FG exceeds the set time.	В
	Setting	Setting range: 500 to 7000 (5 msec to 70 msec) Setting unit: 25 (0.25 msec) Default: 4000 (40 msec)	
	Master disposal box full detection position adjustment		
	Description	Sets the pulse count for the full box compacting position.	
		Setting range: 100 to 162 (100 to 162 pulses)	
0576	Setting	Setting unit: 1 (1 pulse)	В
		Default: A3/Ledger Drum = 120 pulses <mz8 mv8=""></mz8>	
		A3/Ledger Drum = 110 pulses <mz10 mv10=""></mz10>	
		B4/Legal Drum = 146 pulses <mz8 &="" mv10="" mv8="" mz10=""></mz8>	
	Master Com	pression PROTECT Position Adjustment	
0577	Description	Adjusts the position of the Master compression plate when the PROTECT is ON.	P
0577		Setting range: -30 to +30 (-30 pulses to +30 pulses)	D
	Setting	Setting unit: 5 (5 pulses) Default: 0 <39.6° from the HP position.)	
	Master dispo	osal motor speed selection	
	Description	Selects the master disposal motor speed table relative to master removal print	
	Description	drum speed.	
0578	Setting	Setting range: 0 (0.9 times the speed) 1 (1.0 times the speed) 2 (1.1 times the speed) 3 (1.2 times the speed) 4 (1.3 times the speed)	В
		Default: No 1 Drum = 2 No 2 Drum = 1	

No.	Data setting		
	Master Com	pressing Completion Position Default Adjustment Selection	
0579	Description	Enables/disables automatic adjustment to correct the default value of the compacting completion position. * The setting value applies to both first print drum and second print drum sides.	_
	Sotting	Setting range: 0 (Disable) 1 (Enable)	
	Setting	Default: 1 (Enable)	
	Second Mas	ter Removal Print Drum Stop Angle Adjustment	
0500	Description	Sets the angle at which the print drum rotates in reverse and halts after the master is released by the first clamp to permit removal of the master by the second print drum.	
0580	Setting	Setting range: -15 to +15 (-15° to +15°) Setting unit: 1 (1°) default: 0 (0°) * This is the position rotated 16° in reverse from the B-position of the second print drum.	_
	Master Removal Software Counter FULL-Detection Selection		
	Description	Sets the master removal software counter FULL detection number.	
0584	Setting	Setting range: 50 to 100 (50 to 100 master removal) Setting unit: 10 (10 masters) Default: 80 (80 masters) <the by="" disabled="" enabled="" is="" mode="" no.0585.="" or="" setting="" test=""></the>	A
	Master Removal Software Count FULL-detection Enable/Disable		
0585	Description	Selects whether to use the software count to detect master removal box FULL, or use the conventional FG sensor mechanical method to detect master removal box FULL.	A
	Setting	Setting range: 0: Disable the software count FULL detection. 1: Enable the software count FULL detection. Default: 1: Enable the software count FULL detection.	
	TPH center	position adjustment <print drum=""></print>	
	Description	Adjusts the TPH center position <this each<br="" is="" mode="" on="" remembered="" setting="" test="">Drum - Drum PCB></this>	
0586	Setting	Setting range: -30 to +30 (-3.0 mm to +3.0 mm) + to the Rear of the Drum <to left="" on="" prints="" the="">. Setting unit: 1 (0.1 mm) Default: 0 (0 mm)</to>	В

6. Paper-feed/Paper-eject Test Mode

No.	Sensor/switch	Detecting condition	Print drum changeover
0600	Paper detection sensor	Light received (paper detected)	_
0601	Paper-length detection sensor	Light received (paper detected)	_
0602	Elevator upper-limit sensor A	Light path blocked (blocked by shield plate)	_
0603	Elevator upper-limit sensor B	Light path blocked (blocked by shield plate)	_
0604	Elevator lower-limit sensor	Light path blocked (blocked by shield plate)	_
0605	Paper sensor	Light path blocked (paper detected)	_
0606	Paper-ejection sensor	Light received (paper detected)	_
0607	Paper-feed-tray upper safety SW	ON (Safety switch not triggered.)	_
0608	Paper-feed-tray lower safety SW	ON (Safety switch not triggered.)	_
0609	Paper-feed tray elevation button	Switch ON (button depressed)	_
0610	Remaining Paper Volume Sensor A	Light path blocked (blocked by shield plate)	_
0611	Remaining Paper Volume Sensor B	Light path blocked (blocked by shield plate)	—
0612	Paper-ejection FG sensor	Light path blocked (blocked by shield plate)	—
0613	Card feeder (Option) attachment detection	Light path blocked (Card feeder detected)	
0614	Paper-feed pressure sensor	Light path blocked (Lever to the Card)	_
0615	Registration Sensor	Light path blocked (paper detected)	_
0616	Guide Roller Release Home Position Sensor	Light path blocked (blocked by shield plate)	_
0617	Central Transport Sensor	Light path blocked (paper detected)	_
0618	Paper Ejection Wing Home Position Sensor	Light path blocked (blocked by shield plate)	_
0619	Second Paper Feed Motor FG Sensor	Light path blocked (blocked by shield plate)	_
0620	Central Flap Home Position Sensor	Light path blocked (blocked by shield plate)	—
No.	Motor/solenoid	Remarks	Print drum changeover
0660	Paper ejection motor	ON & OFF <stop key="OFF"></stop>	—
0661	Suction fan	ON & OFF <stop key="OFF"></stop>	-
0662	Separation fan	ON & OFF <stop key="OFF"> (All safety SW must be ON)</stop>	—
0663	Second Paper Feed Motor	ON & OFF <stop key="OFF"></stop>	—
0664	Central Suction Fan	ON & OFF <stop key="OFF"></stop>	-
0665	First Separation Fan	ON & OFF <stop key="OFF"></stop>	-
0666	Paper Ejection Wing Pulse Motor (CW)	ON & OFF <stop key="OFF"></stop>	_
0667	Paper Ejection Wing Pulse Motor (CCW)	ON & OFF <stop key="OFF"></stop>	-
0668	Feed Tray Button LED	The LED illuminates.	- 1

No.			Unit check	Print drum changeover
0681	Paper feed tr	ay maximum up positionir	g	
0001	Raises the	e paper feed tray to the pa	per feed position when the Start key is pressed.	
0682	Paper feed tray elevation up & down			
0002	Repeats the	ne paper feed tray raising	and lowering operations.	
0683	Paper feed tr	ay maximum down positio	ning	_
	Lowers the	e paper feed tray to the low	wer-limit position when the Start key is pressed.	
	Separation P	ump Solenoid ON/OFF Ac	tion	
0684	Turns the OFF after	solenoid ON when the Sta 10 seconds.	rt key is pressed. The solenoid automatically switches	В
	Paper Feed F	Reverse-rotation Prevention	on Solenoid ON/OFF Action	
0687	Turns the	solenoid ON when the Sta	rt key is pressed. The solenoid automatically switches	_
	OFF after	10 seconds.		
	Paper-feed c	lutch ON/OFF action		
0688	Turns the	clutch ON when the Start	key is pressed. The clutch automatically switches OFF	-
	after 10 se	econds.		
0700	Guide Roller	Release Motor		
0702	Repeats n	ipping and releasing operation	ations when the Start key is pressed.	_
0702	Paper Ejectio	on Wing Home Action		
0703	Moves the	paper ejection wings to the	ne home positions.	_
0704	Paper Ejectio	on Wing Target Shift		
0704	Moves the	wings to the positions set	t in Test Mode No. 780.	_
	Multiple Pape	er Feed Detection Sensor	Sensitivity Automatic Adjustment	
0705	One sheet of thin RISO paper must be set at the multiple paper feed sensor position during			
	this procee	dure.		
	Central Flap Motor (Normal)			
0707	Repeats the flat movement between the up and down positions when the Start key is			-
	pressed.			
	Elevator moto	or ON action		
0708	Rotates the elevator motor for raising operation (maximum time: 10 sec).			
	Caution: Disconnect the Elevator motor from the machine before activating this test mode, or the machine will be damaged.			
	Registration	Sensor Sensitivity Automa	tic Adjustment	
0709	One sheet	of thin RISO paper must	be set at the registration sensor position during this	—
	procedure		r	
0721	Paper width	potentiometer data	Displays the paper width (mm) to the first decimal	_
			place after adjustment.	
0722	Multiple Pape	er Feed Sensor	Sensor (paper sensor)	-
0723	Registration	Sensor	Displays the A/D value of the registration sensor.	_
No			Data actting	Print drum
INO.			Data setting	changeover
	Elevator upp	er-limit position selection		
		Selects the paper feed to	ray stop position (paper feed position).	
	Description In the case of <auto>, the upper-limit position is linked to the paper feed</auto>		te upper-limit position is linked to the paper feed	
		Setting range:	The position is lived in settings <1/ timough <5/	
0740		(Auto Linked to n	aper feed pressure lever position)	_
		1 (Normal position)		
	Setting	2 (Card position)		
		3 (Custom position)		
		Default: 0 (Auto. Linked	to paper feed pressure lever position)	

No.		Data setting			
	Paper-feed-c	lutch ON angle			
	Description	Sets the activation angle for the paper feed clutch.			
0741		Setting range: -200 to +200 (-20.0° to +20.0°)			
		* (<+> for slower ON timing)	_		
	Setting	Setting unit: 5 (0.5°)			
		Default: 0 (0°)			
	Paper-feed-c	lutch OFF angle			
		Sets the deactivation angle for the paper feed clutch when the paper type is			
	Description	normal.			
0742		Setting range: –200 to +200 (–20.0° to +20.0°)	_		
	Cotting	* (<+> for slower OFF timing)			
	Setting	Setting unit: 5 (0.5°)			
		Default: 0 (0°)			
	Paper Feed (Clutch OFF Angle (card)			
	Description	Sets the deactivation angle for the paper feed clutch when the paper type is			
		<card>.</card>			
0744		Setting range: –200 to +200 (–20.0° to +20.0°)	_		
	Setting	* (<+> for slower OFF timing)			
		Setting unit: 5 (0.5°)			
	FP Paper Fe	ed Clutch ON Angle			
0740	Description	Sets the activation angle for the paper feed clutch for proof print.			
0749	0.111	Setting range: -100 to $+100$ (-10.0° to $+10.0^{\circ}$) * <+> for slower ON timing	_		
	Setting	Setting unit: $5(0.5^\circ)$			
	Paper feed re	everse-rotation prevention solenoid Activate/Deactivate selection.			
0750	Description	Activates of Deactivates the Paper feed reverse-rotation prevention solehold.			
0750	Setting	Setting range: U: Deactivates the solenoid. 1: Activates the solenoid.	_		
		Change Freed Pressure Lever must be selected to Card to activate the solenoid >			
	Paper food is	Traper recurressure Lever must be selected to Card to activate the solenou.			
		Sets the detection angle for paper feed iam (paper feed IN)			
	Description				
0751		Setting range. -200 to $+200$ (-20.0 to $+20.0$)	-		
	Setting	Setting unit: 5 (0.5°)			
		Default: 0 (0°)			
	Paper feed ja	am detection angle. (Paper OUT)			
	Description	Sets the detection angle for paper feed jam (paper feed OUT).			
0752		Setting range: -200 to +200 (-20.0° to +20.0°) * <+> for slower detection	_		
	Settina	timing			
		Setting unit: $5(0.5^{\circ})$			
	Deper receive	Default. 0 (0)			
	Description	Sets the detection angle for paper election iam (paper election IN)			
		Sets the detection angle for paper ejection jant (paper ejection in).			
0753		setting range 500 to +500 (-50.0 to +50.0) (<+> for slower detection	_		
	Setting	Setting unit: $5(0.5^{\circ})$			
		Default: 0 (0°)			

No.	Data setting		
	Paper receiving jam detection angle. (Paper OUT)		
	Description	Sets the detection angle for paper ejection jam (paper ejection OUT).	
		Setting range: -500 to +500 (-50.0° to +50.0°)	
0754		* <+> for slower detection timing	-
	Setting	Setting unit: 5 (0.5°)	
		Default: 0 (0°)	
	Paper-ejection	motor speed adjustment (Proof-Print)	
	Description	Sets the speed of the paper ejection motor for proof print.	
		Setting range:	
		0 (3.0 times the print drum circumferential speed).	
		1 (3.0 times the print drum circumferential speed).	
0755		2 (3.0 times the print drum circumferential speed).	-
	Setting	3 (3.4 times the print drum circumferential speed).	
		4 (3.7 times the print drum circumferential speed).	
		5 (4.0 times the print drum circumferential speed).	
		6 (4.5 times the print drum circumferential speed).	
		Default: 3 (3.4 times the print drum circumferential speed).	
	Paper-ejection	motor speed adjustment (Print speed No.1)	
	Description	Sets the speed of the paper ejection motor for print speed No. 1.	
		Setting range:	
		0 (1.5 times the print drum circumferential speed).	
		1 (1.5 times the print drum circumferential speed).	
0756		2 (1.5 times the print drum circumferential speed).	-
	Setting	3 (1.7 times the print drum circumferential speed).	
		4 (1.8 times the print drum circumferential speed).	
		5 (1.9 times the print drum circumferential speed).	
		6 (2.0 times the print drum circumferential speed).	
		Default: 3 (1.7 times the print drum circumferential speed).	
	Paper-ejection	motor speed adjustment (Print speed No.2)	
	Description	Sets the speed of the paper ejection motor for print speed No. 2.	
		Setting range:	
		0 (1.3 times the print drum circumferential speed).	
		1 (1.3 times the print drum circumferential speed).	
0757		2 (1.3 times the print drum circumferential speed).	-
	Setting	3 (1.5 times the print drum circumferential speed).	
		4 (1.6 times the print drum circumferential speed).	
		5 (1.7 times the print drum circumferential speed).	
		6 (1.8 times the print drum circumferential speed).	
		Default: 3 (1.5 times the print drum circumferential speed).	
	Paper-ejection	motor speed adjustment (Print speed No.3)	
	Description	Sets the speed of the paper ejection motor for print speed No. 3.	
		Setting range:	
		0 (0.9 times the print drum circumferential speed),	
0750		1 (0.95 times the print drum circumferential speed).	
0758		2 (1.1 times the print drum circumferential speed),	-
	Setting	3 (1.3 times the print drum circumferential speed).	
		4 (1.4 times the print drum circumferential speed).	
		5 (1.5 times the print drum circumferential speed).	
		o (1.0 times the print drum circumterential speed).	
		Detault: 1 (1.3 times the circumferential speed)	

No.		Data setting	Print drum changeover
	Paper-ejection	motor speed adjustment (Print speed No.4)	
	Description	Sets the speed of the paper ejection motor for print speed No. 4.]
		Setting range:]
		0 (0.9 times the print drum circumferential speed).	
		1 (0.9 times the print drum circumferential speed).	
0759		2 (1.0 times the print drum circumferential speed).	-
	Setting	3 (1.1 times the print drum circumferential speed).	
		4 (1.2 times the print drum circumferential speed).	
		5 (1.3 times the print drum circumferential speed).	
		6 (1.4 times the print drum circumferential speed).	
		Default: 4 (1.2 times the print drum circumferential speed).	
	Paper-ejection	motor speed adjustment (Print speed No.5)	
	Description	Sets the speed of the paper ejection motor for print speed No. 5.	
		Setting range:	
		0 (0.9 times the print drum circumferential speed).	
		1 (0.95 times the print drum circumferential speed).	
0760		2 (1.0 times the print drum circumferential speed).	_
	Setting	3 (1.1 times the print drum circumferential speed).	
		4 (1.2 times the print drum circumferential speed).	
		5 (1.3 times the print drum circumferential speed).	
		6 (1.4 times the print drum circumferential speed).	
		Default: 4 (1.2 times the print drum circumferential speed).	-
	High-speed pri	nting paper ejection motor speed selection.	
	Description	Sets the speed of the paper ejection motor for high-speed printing.]
		Setting range:]
		0 (0.9 times the print drum circumferential speed).	
		1 (0.95 times the print drum circumferential speed).	
0761		2 (1.0 times the print drum circumferential speed).	-
	Setting	3 (1.1 times the print drum circumferential speed).	
		4 (1.2 times the print drum circumferential speed).	
		5 (1.3 times the print drum circumferential speed).	
		6 (1.4 times the print drum circumferential speed).	
		Default: 3 (1.1 times the print drum circumferential speed).	
	Print drum acc	eleration control selection	
		Selection of the print drum acceleration when the printing starts.	
0777	Description	The choice of 10 rpm acceleration per one drum rotation, or stepless	-
		acceleration.	
	Setting	Setting range: 0: Accelerates in steps 1: Stepless acceleration	
	Paper Ejection	Wing Position Adjustment	
	Description	Sets the adjustment value for the amount of paper ejection wing motion.	
0779		Setting range: -20 to +20 (-20 to +20 pulses)	_
	Setting	Setting unit: 1 (1 pulse)	
		Default: 0 (0 pulse)	

No.	Data setting				
	Paper Ejection Wing Target Position				
0780	DescriptionSets the positions of the paper ejection wings when the custom paper ejection position is selected.				
		This setting is reflected in the operation set in Test Mode No. 704.	_		
	Setting	Setting range: 0 to 2150 (0 to 2150 pulses)			
		Setting unit: 1 (1 pulse)			
		Default: 1434 (1434 pulses)			
	Central Transport Jam Angle/IN				
	Description	sensor.			
0781		Setting range: –200 to +200 (–20.0° to +20.0°)	_		
	Setting	* (<+> for slower detection timing)			
	Cotting	Setting unit: 5 (0.5°)			
		Default: 0 (0°)			
	Central Transpo	ort Jam Angle/OUT			
	Description	Adjusts the detection angle for paper output jams for the central transport sensor.			
0782		Setting range: –200 to +200 (–20.0° to +20.0°)	_		
	Setting	* (<+> for slower detection timing)			
	Setting	Setting unit: 5 (0.5°)			
		Default: 0 (0°)			
	Second Paper Feed Speed Ratio (for all area)				
	Description Changes the speed of the timing roller.				
0786	Setting	Setting range: -20 to +20 (-2.0% to +2.0%)	В		
		Setting unit: 2 (0.2%)			
		Default: 0 (0.0%)			
	Second Paper	Feed Speed Ratio (for first 160mm of the paper)			
	Description	Changes the speed of the timing roller fo the distance of 160mm from the			
0787		leading edge for each paper.			
		Setting range: -20 to +20 (-2.0% to +2.0%)			
	Setting	Setting unit: 2 (0.2%)			
		Default: 0 (0.0%)			
	Paper Feeder Active/Inactive Selection				
		Allows master making and printing action without Paper feed tray movement.			
0788	Description	The selected setting is not stored. The setting returns to the default once the			
0700		machine goes out of test mode.			
	Setting	Setting range: 0: Inactive 1: Active			
	Default: 0: Inactive				
	Second Separation Fan Control in Printing with No.1 Print Drum Only				
	Description	Selects whether to activate or deactivate the Separation fan for the No.2 print			
0793		drum when printing with only No1 print drum.			
	Setting	Setting range: 0: OFF (No.2 Separation fan stays OFF)			
		1: ON (No.2 Separation fan stays ON)			
		Default: 0: OFF (No.2 Separation fan stays OFF)			

7. Print Drum/ Print Adjustment Test Mode

No.	Sensor/switch Detecting condition				
0801	Position-B sensor Light path blocked (blocked by shield plate)				
0802	Main-motor FG sensor Light path blocked (blocked by shield plate)				
0803	Clamp sensor A Light path blocked (blocked by shield plate		В		
0804	Clamp sensor B Light path blocked (blocked by shield plate)		_		
0805	Print Drum FG Sensor	Light path blocked (blocked by shield plate)	В		
0806	Master loading sensor	Light received (master detected)	В		
0807	Print-drum lock-position sensor	Light path blocked (blocked by shield plate)	В		
0808	Drive Lock Release Sensor	Light path blocked (blocked by shield plate)	В		
0809	Ink sensor	In contact with ink	В		
0810	Overflow sensor	In contact with ink	В		
0811	Ink-cartridge set SW	Switch ON (button depressed)	В		
0812	Ink pump FG sensor	Light path blocked (blocked by shield plate)	В		
0816	Drum free rotation SW	Switch ON (button depressed)	_		
0818	Print-drum release button	Switch ON (button depressed)	_		
0819	Print-drum connection signal	The print drum is connected to the main unit drawer connector.	В		
0820	Print-drum safety switch	Switch ON (print drum set in machine)	В		
0821	Front Cover Safety SW	Switch ON (front cover closed)	_		
0830	Print-Pressure HP Sensor	Light path blocked (blocked by shield plate)	В		
0832	Horizontal Home Position Sensor	Light path blocked (blocked by shield plate)	В		
No.	Motor/solenoid Remarks		Print drum changeover		
0861	Main-motor action (30 rpm)	Main motor stops when STOP key is pressed.	—		
0863	Clamp-motor action (Normal direction)	CCW (counterclockwise rotation)	В		
0864	Clamp-motor action (Opposite direction)	CW (clockwise rotation)	В		
0866	Print-drum release SW (button)	The LED illuminates.	_		
0867	Print-drum brake fan ON / OFF <stop key="OFF"></stop>				
No.	Unit check				
0880	Variable print-drum rotation				
	Rotates the print drum with the Speed selection key enabled.				
0881	Position-A action of the print drum				
0001	Stops the print drum at position A.				
	Inking motor ON action				
0882	Operates the inking motor (maximum time: 1 sec).				
	Caution: Disconnect the inking motor from the machine before activating this test mode, or the machine will be damaged.				
0883	Clamp home positioning action		В		
	Returns the clamp unit to the home position.				
	Clamp unit cycle action (3 step cycle)				
	Caution: Prior to executing this test mode, bring the Print Drum to Position-A by Test Mode No. 881, and to Clamp home position by Test Mode No. 883, otherwise the machine will be damaged				
	Pressing the Start key once performs a single cycle of the following operations:				
0884	<< First clamp unit >> Step 1: Clamp home position -> Clamp open Step 2: Clamp open Position A adjustment Step 3: Position A adjustment -> Clamp closed (clamp at home position)				
	<< Second clamp unit >> Step 1: Clamp home position -> Clamp open Step 2: Clamp open -> Clamp closed (clamp at home position)				

No.	Unit check	Print drum changeover		
	Drum lock solenoid ON/OFF action			
0885	Pressing the Start key turns the solenoid ON. The solenoid automatically switches OFF after 10 seconds.			
	Pressure solenoid ON/OFF action			
0886	Pressing Start key turns the solenoid ON. The solenoid automatically switches OFF after 10 seconds.			
	Print drum inking action			
	Performs the following operations in the sequence indicated: 1) Ink is supplied while the print drum (until the inking sensor switches ON) rotates without			
0887	 2) Confidential operation is executed. 3) From the time the inking sensor switches ON, the print drum rotates 10 turns while pressure applied. 4) The print drum halts at position B. 			
	Print drum ink-drainage action			
0888	 Performs the ink drainage from the print drum in following sequence by one press of the START key: 1) Makes TPH test mode image on the master and wraps around the print drum. 2) Printing is started with no inking motion and with the ink sensor deactivated. 3) The printing is continued with until the STOP key is pressed. 4) The print drum stops at Position-B. 	A		
	Print drum ink-code copy			
0890	Copies information on the color and category used for ink cartridge and print drum compatibility from the ink cartridge tag to the print drum EEPROM. * Wait at least two seconds after setting the ink cartridge.			
	Machine Position-B stop (The position in which the print drum can be removed from the			
0892	machine.)			
	Stops the print drum at machine B position.			
	Print Drum Drive Lock Release Action			
0893	The horizontal pulse motor releases the print drum from the drive connected position.			
	Caution: Prior to activating the test mode, bring the specified print drum to Position-B by TM892.			
	Print Drum Drive Connection Action			
0894	drive connected position			
	Caution: Prior to activating the test mode, bring the specified print drum to Position-B by TM892.			
	Master Loading Step Action			
	Performs the following operations in the sequence indicated: 1) Press the Start key.			
	 2) The master-making unit moves to the master-loading position. (first and second master-loading positions) 			
	3) The drive motor halts.			
	4) The clamp unit descends.			
0895	5) The print drum moves to the position A.			
	7) Master making unit transfer-motor brake is released after one minute.			
	8) Press the Start key.			
	9) The clamp unit returns to the home position.			
	10) Master making unit transfer-motor brake is released.			
	 position. 12) Pressing the Start key repeats steps (1) through (10). 			

No.	Unit check				
	Print Drum Free Rotation				
0896	Rotates the print drum at 10 rpm. The rear cover safety SW must be pressed (buzzer will sound until the safety SW is pressed).				
	To stop the drum rotation, press the Stop	Key or release the Rear cover safety switch.			
0800	Master Making Unit Position-A Movement.				
0033	Press Start Key for each Master Making Unit movement.				
0900	Vertical-centering action		_		
0300	Brings the vertical print positioning motor to the HP position.				
	Vertical print position one cycle action				
0901	Operates the vertical print positioning motor to one extreme to the other and stops at HP				
	position				
0902	Print Drum Horizontal Home Action		В		
	Returns the print drum horizontal position to	o the center (nome position).			
0903	Print Drum Horizontal Cycle Action	1_	В		
	Performs a single norizontal movement cycl	le.			
0904	Print-pressure home positioning				
	Returns the pressure control unit to the non	ne position.			
0905	Print-pressure one cycle action				
	Performs a single print pressure control cyc	le.			
	Pressure Roller Maintenance Position	allar			
0906	Pressing the Start key raises the pressure roller.				
	and the front cover closed				
	Pressure Roller Maintenance Positioning	Maintenance Positioning			
	Pressing the Start key lowers the pressure roller				
0907	* This operation is activated only if the Start key is pressed with the print drum removed				
	and the front cover closed.				
	Print-pressure maintenance positioning				
0908	Operates the pressure control pulse motor until the pressure spring removal position (-8130				
	pulses) is reached.				
No.	Data check	Content of display	Print drum changeover		
0921	Print-drum angle display	Displays the current print drum angle (x 10).	В		
0923	Print-drum ink temperature display	Displays the temperature value (°C) converted from the A/D value of the ink thermistor.	В		
0925	Ink remaining volume display Displays the amount of ink left in the ink cartridge as a percent (%) value read from the ink cartridge tag.		В		
0926	Ink motor FG count	Displays the inking motor FG count value read from the ink cartridge tag. (1 count = 0.1 ml)	В		
0928	Displays the lnk use starting date.	starting date. bisplays the ink use start date stored in the ink cartridge tag. * For example, <2010/2/28> is displayed by alternating indications of <2010> and <0228>.			
0929	Main motor offset voltage information	Displays the main motor offset voltage information acquired by test mode adjustment No.1105.	_		

No.		Data check	Со	ntent of display	Print drum changeover
0930	Main motor	setting information	Displays the main motor setting information acquired by test mode adjustment No.1105.		_
0931	Second pap information	and paper feed motor offset voltage Displays the second paper feed motor offset voltage information acquired by test mode adjustment No.1106.		econd paper feed motor offset ation acquired by test mode 0.1106.	_
0932	Second pap	er feed motor setting information	Displays the se information ac No.1106.	econd paper feed motor setting quired by test mode adjustment	_
No.		Data s	setting		Print drum changeover
	Master loading sensor detection timing adjustment				5
	Description	Description Adjusts the master-loading detection angle.			
0940	Setting	Setting range: -200 to +100 (-20.0° to +10.0°)* (<+> for slower detectioningSetting unit: 5 (0.5°)timing)Default: 0 (0°) (0°)		* (<+> for slower detection timing)	В
	Print-drum Position-A adjustment				
	Description	Adjusts the print drum position-A	stop position.		
	Setting	Setting range: MZ8: -40 to +40 MZ10: -60 to +40	(-4.0° to +4.0°) (-6.0° to +4.0°)		В
0941		Setting unit: MZ8: 5 (0.5°) MZ10: 1 (0.1°)		* (<+> for overrun)	
		Default: MZ8 Drum No.1: 10 (1. MZ8 Drum No.2: 0 (0° MZ10 Drum No.1: -25 (MZ10 Drum No.2: -35 (0°) ') -2.5°) -3.5°)		
	Print drum position B adjustment				
	Description Adjusts the print drum position-B stop position				
0942	2000	Setting range: -40 to $+40$ (-4 0° to $+4$ 0°)			в
0942	Setting	Setting unit: 5 (0.5°) Default: 0 (0°)		* (<+> for overrun)	-
	Inking time adjustment (when over X% of ink is consumed from the ink tube.)				
0943	Description	Sets the continuous ink sensor OFF detection time that prompts the inkless detection signal if the amount of ink consumed exceeds a set percent value (value set in Test Mode No. 948) (data stored in print drum PCB).			В
	Setting	Setting range: 5 to 60 (5 to 60 sec) Setting unit: 1 (1 sec) Default: 10 (10 sec)			
	Inking time adjustment (right after the ink tube is replaced)				
0944	Description	Sets the continuous ink sensor OFF detection time that prompts the inkless detection signal after ink cartridge replacement (data stored in print drum PCB). * This information is recorded in the print drum EEPROM.			В
	Setting range: 5 to 60 (5 to 60 sec) Setting unit: 1 (1 sec) Default: 30 (30 sec)				

No.	Data setting			
	Ink overflow detection frequency adjustment			
0945	Description	Sets how frequently overflow sensor detection operations are performed to determine ink overflows.	_	
		* This information is recorded in the print drum EEPROM.	В	
	Setting	Setting range: 1 to 200 (1 to 200 times) Setting unit: 1 (Once)		
		Default: 50 (50 times)		
	Inking time adjustment (when under X% of ink is consumed from the ink tube.)			
0946	Description	Sets the continuous ink sensor OFF detection time that prompts the inkless detection signal when the consumed ink volume is less than the set percentage (value set in Test Mode No. 948) (data stored in print drum PCB). * This information is recorded in the print drum EEPROM.	В	
	Setting	Setting range: 1 to 60 (1 to 60 sec) Setting unit: 1 (1 sec) Default: 15 (15 sec)		
	Inking drum	rotation quantity (while inking) after ink tube is pulled out and put back.		
0947	Description	Specifies the number of print drum rotations to be performed after ink cartridge removal/installation. <machine and="" back="" be="" become="" effective="" for="" must="" newly="" off="" on="" parameter="" power="" set="" the="" to="" turned=""></machine>	В	
	Setting	Setting range: 0 to 10 (0 to 10 times) Setting unit: 1 (Once) Default: 1 (Once)		
	Selection of	Selection of X% for test modes No. 0943 and 0946.		
0048	Description	Determines the inkless detection timing switching condition (ink consumption) based on remaining ink volume.	- В	
0948	Setting	Setting range: 1 to 100 (1% to 100%) Setting unit: 1 (1%) Default: 80 (80%)		
	Print pressure setting for Proof-read printing (black ink)			
	Description	Selects the print pressure table for determining the density of the first print (using black ink).		
0949	Setting	Setting range: 0 (very low density), 1 (low density), 2 (normal), 3 (high density), 4 (very high density), 5 (maximum density)	_	
	Default: MZ8: 2 (normal) MZ10: 1 (low density)			
	Print pressure setting for Proof-read printing (color ink)			
0950	Description	Selects the print pressure table for determining the density of the first print (using color ink).		
	Setting	Setting range: 0 (very low density), 1 (low density), 2 (normal), 3 (high density), 4 (very high density), 5 (maximum density)	_	
		Default: MZ8: 2 (normal) MZ10: 0 (very low density)		

No.		Data setting			Print drum changeover	
	Ink Color Code				-	
	Description	Sets the color of ink to be set in the print drum (data stored in print drum PCB).			1	
		Setting range:				
		0 (Not specified)	65 (Blue)	66 (Blue2)		
		64 (Black)	68 (Blue4)	69 (Red)		
0951		67 (Blue3)	71 (Red3)	72 (Red4)		
		70 (Red2)	74 (Green2)	75 (Green3)		
		73 (Green)	77 (Yellow2)	78 (Brown)	В	
	Setting	76 (Yellow)	80 (Purple)	81 (Purple2)	_	
	coung	79 (Brown2)	83 (Gray2)	84 (Light gray)		
		82 (Gray)	86 (Orange)	87 (Orange2)		
		85 (Light gray2)	89 (Gold2)	90 (Silver)		
		88 (Gold)	92 (Pink)	93 (Pink2)		
		91 (Silver2)				
		94 (Special color)				
		Default: 0 (Not specified)				
	Print Drum I	nsertion Angle Fine Adjustme	ent			
		This adjustment is perform	ed if the print drum car	nnot be inserted even after		
		making the adjustment in T	est Mode No. 942 (Pri	nt-drum Position-B adjustment)		
	Description	(data stored in print drum PCB).		В		
0955		* The position-B positioning operation is based on a value equal to the sum of the				
		values in Test Mode No. 942 and No. 955. This value is between -40 and +40.				
		The same value also applies when the print drum does engage.				
	Setting	Setting range: -40 to +40 (-4.0° to +4.0°)				
		Setting unit: 1 (0.1°)				
		Default: 0 (0°)				
	Automatic P	rint Position Reset Condition	Setting			
		Selects the condition for automatic print position reset after master-making or				
	Description	renewal.				
		* After automatic reset, a proof copy is output and the TC count is incremented.				
		* In dual-color printing, an a	automatic reset is perfe	ormed after master-making by		
0956		both print drums, and a pro	of copy is output.		_	
		Setting range:				
		0 (No automatic reset) *	Remains at center after	er master-making/renewal		
	Setting	ng 1 (Automatic reset only after master renewal)				
		2 (Automatic reset after	master-making and re	newal)		
		Default: 1 (Automatic rese	t only after master ren	ewal)		
	Master Loading Drum Angle Compensation					
	_	Compensates the Position-	A of the print drum at t	the start of the master loading		
	Description	on the drum.		-		
		Setting range: +80 to -80	(+8.0° to -8.0°)			
0050		Setting unit: 1 (0.1°)			R	
0909		Default [.]			U	
	Setting	M78 A3/I edger machine	e = No 1 drum: -30	No 2 drum: 0		
		M78 B4 machine = No	1 drum: -20 No 2 dr	um: 0		
				v		
		MZ10 all machines = N	o.1 drum: -50 No.2	drum: 0		
No.		Data setting				
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	Position-A D	Prum Angle Fine Adjustment <for drum="" each="" print=""></for>		0		
0960	Description	Makes fine adjustment of the Position-A angle for * The actual Position-A angle of the print drum No. 0941 and 0960.	each print drum. is the sum of Test Mode	В		
		Setting range: -40 to +40 (-4.0° to +4.0°)				
	Setting	Setting unit: 1 (0.1°)				
		Default: 0 (0°)				
	Vertical Prin	t Position HP Compensation <for drum="" each="" print=""></for>				
	Description	Adjusts the offset amount in the vertical print posi	tion for each print drum.			
0968		Setting range: -50 to +50 (-5mm to +5mm)		В		
	Setting	Setting unit: 1 (0.1mm)				
		Default: 0 (0mm)				
	Vertical Prin	t Position HP Compensation <on machine="" the=""></on>				
	Description	Adjusts the offset amount in the vertical print posi	tion for each print drum.			
0968		Setting range: -50 to +50 (-5mm to +5mm)		_		
	Setting	Setting unit: 1 (0.1mm)				
		Default: 0 (0mm)				
	Vertical Print HP Position Adj					
	Description	Description Sets the home position offset value for the vertical print position phase difference.				
0969		Setting range: -50 to +50 (-5.0 to +5.0 mm)		-		
	Setting	Setting unit: 1 (0.1 mm)	* (<+> for adjustment up)			
		Default: 0 (0 mm)				
	Vertical HP Paper Feed Timing Adj					
	Description	Sets the home position offset value for the vertical print position (second paper feed timing).				
0971		Setting range: -50 to +50 (-5.0 to +5.0 mm)		В		
	Setting	Setting unit: 1 (0.1 mm)	* (<+> for adjustment up)			
	_	Default: 0 (0 mm)				
	Printing pres	ssure HP adjustment (Print Drum)	1			
0972	Description	Sets the offset value for the print pressure position (data stored in print drum PCB). * This setting should be made only when required by the print drum. * Printing pressure HP adjustment is based on a value equal to the sum of the values in Test Mode No. 972 and No. 975. This value is between –500 and +500.				
		Setting range: –500 to +500	* (<+> for increased print			
	Cotting	(–5000 to +5000 pulses)	pressure)			
	Setting	Setting unit: 1 (10 pulses)	·			
		Default: 0 (0 pulse)				
	Horizontal H	IP Adjustment (Print Drum)				
		Sets the offset value for the horizontal print home	position (data stored in print			
		drum PCB).				
	Description	* This setting should be made only when required	I by the print drum.			
0973		* Horizontal print HP adjustments are made base	d on a value equal to the sum	В		
		of the values in Test Mode No. 973 and No. 974	I. This value is between –20	_		
		and +20.				
	0.41	Setting range: -20 to $+20$ (-2.0 to $+2.0$ mm)				
	Setting	Default: 0 (0 mm)	<pre>(<+> tor adjustment left)</pre>			

No.		Data setting				
	Horizontal F	IP Adjustment (Machine)				
0974	Description	 Sets the offset value for the horizontal print home position. * This setting should be made only when required by the machine. * Horizontal print HP adjustments are made based on a value equal to the sum of the values in Test Mode No. 973 and No. 974. This value is between -20 and +20. 				
	Setting	Setting range: -20 to +20 (-2.0 to +2.0 mm) Setting unit: 1 (0.1 mm) Default: 0 (0 mm)				
No.		Data setting		Print drum changeover		
	Printing Pre	ssure HP Position Adjustment (Machine)				
0975	Description	Sets the offset value for the print pressure positio * This setting should be made only when required * The printing pressure HP adjustments are made sum of the values in Test Mode No. 972 and No. 9 and +500.	n. l by the machine. e based on a value equal to the 975. This value is between –500	В		
		Setting range: -500 to +500	* (<+> for increased print			
	Setting	(–5000 to +5000 pulses)	pressure)			
		Setting unit: 1 (10 pulses)				
	Print Drum Inside Adjustment Selection					
	Selects the area for storing adjustment values specific to each print drum					
	Description	Set a unique number if two or more machines are used				
0976		Each print drum can recognize up to three machines	nes.	В		
		Setting range: 0 to 2				
	Setting	Setting unit: 1				
		Default: 0				
	Vertical and	Horizontal Motion Distance Switching				
	Description	Selects whether the motion increment is set to 0.7				
0977		adjustment button is not displayed.	_			
	Catting	Setting range: 0 (0.5 mm)				
	Setting	Setting unit: 1 (0.1 mm)				
	Default: 0 (0.5 mm)					
		Selection of the print drum rotation quantity table	between Japan and Overseas.			
	Description	<the drum="" idling="" makes="" more="" overseas="" r<="" setting="" td=""><td>rotation after the machine is not</td><td></td></the>	rotation after the machine is not			
0978		in use for 4 or more days.>	-			
	Sotting	Setting range: 0 (Japan) 1 (Overseas)				
	Setting	Default: 1 (Overseas)				
	Pressure Ta	ble Configuration				
	Description	Shifts the printing density table to darker printing.				
0979		Setting range: $0 = $ Normal density table. $1 = 1.5$	5 times darker.	-		
	Setting	ng $2 = 2.0$ times darker.				
		Delault: 0 (Normal density table)				

No.	Data setting					
	Print Pressu	re Idle Position Adjustment (When printing with only No.2 Print Drum.)				
	Description	Sets the print pressure idle position of No.1 print drum side when printing with				
0081	Description	No.2 print drum only.				
0981	Setting	Setting range: -1170 to 0.	_			
		Setting unit: 10 (10 pulses)				
		Default: -968 (-968 pulses)				
	Interval Upper Limit Setting					
0989	Description	Selects the maximum print drum rotation between printing in Interval printing				
	Description	mode.	-			
	Sotting	Setting range: 0 (maximum 10 times) 1 (maximum 99 times)				
	Setting	Default: 0 (maximum 10 times)				

8. Protected Area Test Mode

No.			Unit check	Print drum changeover		
1102	Paper size VF	Paper size VR adjustment				
1102	Sets the VR v	alue for	105 mm (A6 paper width).			
1103	Paper size VR adjustment					
	Sets the VR v	alue for	297 mm (A3 paper width).			
	LCD Base Po	int Corr	pensation			
1104	Make adjustments as described below.					
	1. Touch two points located at diagonally opposite points on the panel.					
	2. Display the commitmation screen, touch three points, and commitmatine compensation is					
	Main Motor D		ny.			
	Sots the main		a Acquisition mode			
	and motor val	riations	(operation time: approx. 15 sec).			
1105	* Both print dr	rum driv	es must be connected during this operation.	-		
	* The acquire	d paran	neters can be checked by Test Mode No. 0929 (Main motor offset voltage			
	information)) and No	0.0930 (Main motor setting information).			
	Second Pape	r Feed	Notor Parameter Acquisition Mode			
	Sets the seco	ond pape	er feed motor control parameters for stable motor control in the DSP,			
1106	including machine and motor variations. (operation time: approx. 20 sec)					
	* The guide roller must be in its lowered position during this operation.					
	offset voltage information) and No 0932 (Second paper feed motor setting information)					
				Drint drum		
No.	Data cle	Data clear Details				
1198	1198 Initialize Men		ory Initializes the mechanical unit PCB memory.			
	This test mode is not displayed on		< I his test mode is not displayed on the operation panel.>	Drint drupp		
No.			Data setting	changeover		
	Paper Size Selection					
1201	Description	Selec	ts the paper size detection unit in either INCH, MILLIMETER or CHINESE.	_		
	Setting Setting range: 0 (Millimeter) 1 (Chinese) 2 (Inch)					
	Drum Code Entry Sets print drum information and size information in the print drum EEPPOM					
1210	Description	Sets p	Sets print drum information and size information in the print drum EEPROM			
1210		Sottin				
	Setting Setting range: 0 to 255 <129=A3, 130=B4, 132=A4-R/Letter-R, 133=Ledger>					
	Drum Serial Code Entry 1					
	Decemination	Inputs	the Top 4 digits of the print drum serial code (data stored in print drum			
1211	Description	PCB).		в		
1211		Settin	g range: 0 to 9999			
	Setting	Settin	g unit: 1			
			ly 2			
1212	Description	PCB).	the Last 4 digits of the print drum senar code (data stored in print drum	D		
		Settin	g range: 0 to 9999	Ď		
	Setting	Settin	g unit: 1			
		Defau	lt: 0			

No.			Data setting		Print drum changeover	
	Drum Color C	ode Entry				
	Description	Sets the print dr print drum PCB)	um color information in th	e print drum EEPROM (data stored in		
		Setting range:				
1214		0 (Not specifie	ed)	1 (Black)		
		2 (Blue)	2 (Blue) 3 (Medium Blue)			
		4 (Red)		5 (Bright Red)		
		6 (Riso Feder	al Blue)	7 (Purple)		
		8 (Riso Marin	e Red)	9 (Burgundy)		
		10 (Green)		11 (Teal)	В	
	Sotting	12 (Brown)		13 (Yellow)		
	Setting	14 (Light Gray)		15 (Gray)		
		16 (Fluorescen	ce Pink)	19 (Flat Gold)		
		17 (Fluorescen	ce Orange)	21 (Crimson)		
		18 (Orange)	、 、	31 (Order: paper specified)		
		20 (Hunter Gre	en)	63 (Any color)		
		30 (Custom co	lor)			
		32 (Order: pap	er not specified)			
		Default: 0 (Not specified)				
	Drum Ink Category Entry					
	Description	Sets the ink category code (3 bits) stored in the print drum EEPROM (data				
	Description	stored in print dr	rum PCB). <this mode<="" td="" test=""><td>e is not displayed on the operation panel.></td><td></td></this>	e is not displayed on the operation panel.>		
	Setting		0 (Not specified)			
			1 (normal)			
1215			2 (HD)		в	
1210		Setting range:	3 N		D	
			4 (Spare 2)			
			5 (Spare 3)			
			6 (Spare 4)			
			7 (Spare 5)			
		Default: 0 (Not s	pecified)			
	Scanner Adjustment (1) Sub-Scanning Position Compensation					
	Description	Sets the value indicated on the sticker affixed to the scanner unit.				
1220		Setting range: N	MZ8: 0 to 255 MZ10:	89 to167	_	
	Setting	Setting unit: 1 (0.0508mm) * (<+> for image to the top.)				
		Default: 128				
	Scanner Adju	stment (2) Main-S	canning Position Compe	nsation		
	Description	Sets the value ir	idicated on the sticker af	fixed to the scanner unit.		
1221		Setting range:	MZ8: 0 to 255 MZ10: 8	31 to 175	_	
	Setting	Setting unit: 1 (0.0432mm = Approx. 24 dots) * (<+> for image to the left.)				
		Default: 128				
	Scanner Adju	stment (3) Sub-So	anning Ratio Compensat	tion		
	Description	Sets the value ir	ndicated on the sticker af	fixed to the scanner unit.		
1222		Setting range:	MZ8: 0 to 100 MZ10:	46 to 54	-	
	Setting	Setting unit: 1 (0	.1%) * (<+> to shri	nk.)		
		Default: 50				

No.		Data setting		Print drum changeover		
	Scanner Adju	stment (4) Offset				
	Description	Sets the value indicated on the sticker aft	fixed to the scanner unit.			
1223	Setting	Setting range: -255 to +255 Setting unit: 1 Default: 64 * The setting value varies automatically a recent setting value is used for the next displayed in Test Mode does not chang	fter offset adjustment, and the most t offset adjustment. However, the value e until the machine is restarted.	_		
	Scanner Adju	stment (5) Gain				
	Description	Sets the value indicated on the sticker af	fixed to the scanner unit.			
1224	Setting	Setting range: 0 to 63 Setting unit: 1 Default: 0 * The setting value varies automatically a recent setting value is used for the next displayed in Test Mode does not change	fter gain adjustment, and the most gain adjustment. However, the value e until the machine is restarted.	-		
	Linked Printer (RLP) Enable Control					
1229	Description	Enables/disables linked printer function.		_		
1220	Setting	Setting range: 0 (Disabled), 1 (Enabled) Default: 0 (Disabled)				
	LCD Contrast Adjustment					
	Description	Adjusts panel contrast.				
1231	Setting	Setting range: –120 to +120 Setting unit: 1 Default: 0	_			
	LCD Backlight Adjustment					
	Description	Adjusts panel backlighting.				
1232	Setting	Setting range: 50 to 115 Setting unit: 1 Default: 85	_			
	TPH master-r	naking horizontal position adjustment				
	Description	Adjusts the horizontal print position of the	e thermal print head.			
1233	Setting	Setting range: -30 to +30 (-3.0 mm to +3.0 mm) Setting unit: 1 (0.1 mm) Default: 0 (0 mm)	* <+> moves the image to the back on the print drum (left on the prints).	В		
	TPH resistand	ce input				
	Description	Sets thermal print head resistance.				
1234	Setting	Setting range: MZ8 (300x600 dpi) = 1200 to 2300 (1200 ohm to 2300 ohm) MZ10 (600x600 dpi) = 1200 to 5920 (1200 ohm to 5920 ohm) Setting unit: 1 (1 ohm) Default: 1200 ohm				

No.		Data setting				
	Scanning Adjustment (7) Offset-2					
1242	Description	Sets the value indicated on the sticker affixed to the scanner unit.				
	Setting	Setting range: -255 to +255 Setting unit: 1 Default: 255 * The setting value varies automatically after offset adjustment, and the most recent setting value is used for the next offset adjustment. However, the value displayed in Test Mode does not change until the machine is restarted.	_			
	Scanning Adjustment (8) Gain-2					
	Description	Sets the value indicated on the sticker affixed to the scanner unit.				
1243	Setting	Setting range: 0 to +64 Setting unit: 1 Default: 0 * The setting value varies automatically after gain adjustment, and the most recent setting value is used for the next gain adjustment. However, the value displayed in Test Mode does not change until the machine is restarted.	_			

9. Test Mode for Optional Unit (AF)

No.	Sensor/switch	Detecting condition	Print drum changeover	
3000	AF-unit detection signal check	An AF is connected.	—	
3001	AF Original registration sensor	Light path blocked (original detected)	_	
3002	AF Original IN sensor	Light path blocked (original detected)	_	
3003	AF Original OUT sensor	Light path blocked (original detected)	_	
3004	AF original detection sensor	Original is detected.	_	
3005	AF Cover Set SW	Switch ON (AF closed)	_	
3006	AF Original Size Sensor 1	Light received (original detected)	_	
3007	AF Original Size Sensor 2	Light received (original detected)	_	
3008	AF Original Feed Cover Sensor Sensor ON (cover closed) <duplex af="" only=""> AF Original Width Detection Sensor 1 Sensor ON (width less than 235mm) <duplex af="" only=""></duplex></duplex>		_	
3009	AF Original Width Detection Sensor 1 Sensor ON (width less than 235mm) <duplex af="" only=""> Sensor ON (width larger than 270mm or less than</duplex>		_	
3010	AF Original Width Detection Sensor 2	Sensor ON (width larger than 270mm or less than 190mm) <duplex af="" only=""></duplex>	-	
3011	AF Original End Detection Sensor Sensor ON (original detected) <duplex af="" only=""></duplex>			
3012	AF Flipper Sensor	Sensor ON (original detected) <duplex af="" only=""></duplex>	—	
No.	Motor/solenoid	Remarks	Print drum changeover	
3030	AF read pulse-motor CW	Rotates the AF read pulse motor in feed direction. <this af6.="" for="" is="" mode="" test=""> * For Duplex AF, Test Mode No.3033 movement is made.</this>	_	
3032	AF Read/Switch-back Pulse Motor	AF original feed & switch-back pulse motor operation. <duplex af="" only=""></duplex>	-	
3033	AF Transfer Pulse Motor	AF transfer pulse motor operation. <this af="" duplex="" for="" is="" mode="" only.="" test=""> * For AF6, Test Mode No.3030 movement is made.</this>	_	
No.	Unit check			
	AF one cycle action with no Auto Base	Control		
3041	Performs a single AF scanning cycle. Picks up original -> Scanner unit return scanning position -> Scans and ejects * When using this test mode for Duple:	ns to home position -> Shading -> Scanner unit moves to original -> Scanner unit returns to home position. x AF, make simplex/duplex selection by TM3077.	_	
	AF original feed action			
3042	Performs AF original feed operation. Picks up original -> Scans original (original * When using this test mode for Duple)	ginal transport) x AF, make simplex/duplex selection by TM3077.	_	
3044	AF Original IN Sensor Sensitivity Adjust	stment <this af6.="" for="" is="" mode="" test=""></this>	_	
	Adjusts the sensitivity of the original IN	l sensor.		
3045	AF Original Guide Minimum Width <	This test mode is for AF6.>	_	
	AE Original Guido Maximum Width	This tast mode is for AE6 >		
3046	Sets the VR value when the paper guid	des are brought to the maximum-width position.	-	
2047	AF Original Feed Clutch Check			
3047	Activates the original feed clutch for 10) seconds. <duplex af="" only=""></duplex>	—	
3049	AF Original Feed Base Solenoid Chec	k		
5040	Activates the original feed base soeno	id for 10 seconds. <duplex af="" only=""></duplex>		
3049	AF Flipper Solenoid Check		_	
0070	Activates the flipper solenoid for 10 seconds. <duplex af="" only=""></duplex>			

No.	Data	a check	Content	of display	Print drum changeover
3060	AF Original Wi	dth (A/D)	Displays the A/D value of the <this af6.="" for="" is="" mode="" test=""></this>	AF original width.	-
3061	AF Original Siz	ze Code	AF6 Unit 00: No paper 01: A3 02: B4 03: A4 04: A4 Landscape 05: B5 06: B5 Landscape 07: A5 08: A5 Landscape 09: B6 11: Post Card (Japan size) 13: Ledger 14: Legal 15: Letter 16: Letter Landscape 17; Statement 18: Statement Landscape 19: Foolscap 53: Custom Size	Duplex AF Unit00: No paper01: A302: B403: A404: A4 Landscape05: B506: B5 Landscape07: A508: A5 Landscape13: Ledger14: Legal15: Letter16: Letter Landscape17; Statement18: Statement Landscape19: Foolscap53: Custom Size	_
No.	Data setting			Print drum changeover	
3070	Scanner unit s <for af<br="" both="">Description Setting</for>	canning position a 6 & Duplex scanr Adjusts mirror (c Setting range: – (- Setting unit: 1 (C Default: 0 (0 mn	adjustment (AF scanning) her> carriage) stop position in AF sca 20 to +20 -2.0 mm to +2.0 mm) 0.1 mm)	* <+> brings mirror carriage down = brings the printed image up.	_
3071	Mirror carriage <this mo<br="" test="">Description Setting</this>	iage position adjustment for Auto-Base-Control (AF scanning) it mode is for AF6.> n Adjusts AF Auto-Base-Control mirror stop position. Setting range: 0 to 30 * <+> brings mirror carriage down = brings the printed image up		_	
3072	Scanning horiz <for af<br="" both="">Description Setting</for>	anning horizontal position adjustment (AF scanning) <for &="" af6="" both="" duplex="" scanner=""> escription Adjusts horizontal position for scanning of original by the AF. (Separate test mode setting exist for the flatbed scanning.) Setting range: -30 to +30 (-3.0 mm to +3.0 mm) Setting unit: 5 (0.5 mm) Default: 0 (0 mm)</for>			_
3073	Scanning start Description Setting	-position adjustme Adjusts original <for af6<br="" both="">Setting range: – mm) Setting unit: 1 (0 Default: 0 (0 mn</for>	ent. (AF scanning) scanning start position (amount s & Duplex scanner> 60 to +60 (–6.0 mm to +6.0 0.1 mm) n)	t of scan skip) for the AF. * <+> brings the printed image up.	_

No.	Data setting					
3074	Scanning-spee <for af<="" both="" td=""><td>ed adjustment to control Elongation & Shrinkage in scar 6 & Duplex scanner></td><td>nning.</td><td></td></for>	ed adjustment to control Elongation & Shrinkage in scar 6 & Duplex scanner>	nning.			
	Description	Adjusts original scanning speed for the AF. (Adjusts AF read pulse motor speed.)				
	Setting	Setting range: AF6 Scanner: -50 to +50 (-5.0% to +5.0%). Duplex Scanner: -30 to +30 (-3.0% to +3.0%). Setting unit: 1 (0.1%) Default: 0 (0%)	* <+> to elongate	_		
3076	AF Original END Signal Timing. <for &="" af6="" both="" duplex="" scanner=""> Description Adjusts original scanning end position.</for>					
	Setting	Setting range: AF6 Scanner: –63 to +63 (–6.3 mm to +6.3 mm) Duplex Scanner: –30 to +30 (–3.0mm to +3.0mm). Setting unit: 1 (0.1 mm) Default: 0 (0 mm)	* <+> for scanning to continue further down.	-		
	AF Original Feed Sequence Change <duplex af="" only=""></duplex>					
	Description	AF original transfer action selection (1 cycle action).	1			
3077	Setting	Setting range: 0: Simplex 1: Duplex 2: Simplex (overside) for ejection to Sorter. Default: 0 (Simplex)	This test mode setting applies to Test Mode No. 3041 & 3042 operation.	_		

10.Test Mode for Optional Unit (Job Separator)

No.	S	ensor/switch		Detecting condition	Print drum changeover	
3100	Job separator tape jam sensor			ON when tape is jammed.	_	
3101	Job separato	or tape detection se	ensor	ON where tape is detected.	_	
3102	Job separato	or power switch		ON when powered ON	_	
3103	Job separato	or connection signa	al	Job separator is connected.	_	
No.				Unit check	Print drum changeover	
	Tape output					
3140	Outputs one tape. * Test Mode No. 3170 Stamping Quantity is enabled				_	
No.	Data setting			Print drum changeover		
	Stamping quantity					
	Description	iption Sets the number of stamping operations during Test Mode No. 3140 (Tape Output).				
3170	Setting	Setting range:	0 (No sta 1 (1 star 2 (2 star * Return	amping) nping) nping) s back to the default setting when powered OFF.	-	
	Default: 0 (No stampir		tamping)			
	Tape jammed message <activate deactivate="" or=""></activate>					
	Description	Displays/Hides the tape jam error display in tape output.				
3171	Setting	Setting range:	0 (Disab 1 (Enabl	le) e)	_	
		Default: 1 (Enab	le)	-)		

11. Test Mode for Optional Unit (Storage Memory)

No.		Unit check	Print drum changeover
3340	Storage Memory Configuration Char Processing for changing the card current machine. * Reconfigured card cannot be * Only one storage device sho	used by the RP to a configuration compatible with the e used by the RP. build be set in the slot to permit configuration adjustments.	_
3341	(Two cards cannot be processed simultaneously.) Externally Connected Controller Status Printout With an external controller connected, the controller status page master is made and printed out.		
No.	Data clear	Details	Print drum changeover
3355	Storage Memory Initialize (32M)	Initializes the storage device to delete data from the 32M storage device or when an error related to storage device prevents data restoration. * Only one storage device can be set in the slot for initialization.	_
3356	Storage Memory Initialize (128M)	Initializes the storage device to delete data from the 128M storage device or when an error related to storage device prevents data restoration. * Only one storage device can be set in the slot for initialization.	_
3357	Storage Memory Initialize (FAT32)	Initializes the storage device to delete data from the 256M to 8GByte storage device or when an error related to storage device prevents data restoration. * Only one storage device can be set in the slot for initialization.	_
No.	Data check	Content of display	Print drum changeover
3361	Storage Memory Information	Displays the volume label, capacity, area used, and available storage volume. * Only one storage device can be set in the slot.	_

12.Test Mode for Optional Unit (Linked Printer)

No.	Data setting			Print drum changeover	
3570	RLP Print Position Adjustment (Main)				
	Description	Adjusts RLP print position (main scanning direction = Horizontal adjustment). * If multiple RLP units are installed, this setting will affect all units.			_
	Setting	Setting range: -50 to +50 (-5.0 mm to +5.0 mm)Setting unit: 1 (0.1 mm)Default: 0 (0 mm)			
3571	RLP Print Po	sition Adjus	tment (sub scanning direction = Vertical a	adjustment))	
	Description	Adjusts RLP print position (sub scanning direction). * If multiple RLP units are installed, this setting will affect all units.			_
	Setting	Setting range: -50 to +50 (-5.0 mm to +5.0 mm) Setting unit: 1 (0.1 mm) Default: 0 (0 mm)		* <+> moves up	
	Zero Print Master-making Warning				
3572	Description	When auto-link is turned ON and if master-making is performed with the print quantity set to 0 in PtoP mode (scan-to-print), this setting determines whether the warning (F60) is displayed or not.			_
	Setting	Setting range:	0: (No warning message display.) 1: (Warning message is displayed.)		
		Default: 0: (No warning message display.)			1
	RLP Duplex Print Auto-Repeat				
3579	Description	Selection of whether the duplex printing selection is reset to simplex (OFF) or the duplex printing is automatically recalled for the next print job.			
	Setting	Setting range:	0: (OFF) 1: (Duplex setting is recalled)		
		Default: 1	: (Duplex setting is recalled)		

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CHAPTER 16: PANEL MESSAGE

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Explanation of Panel Messages

Error Code Display

- If an error occurs, an error message is displayed with an icon and an error code indicating the specifics of the generated error.
- Each error code consists of an <error type> indicating the type of error and an <error-point number> describing the error generating section.

Example: T99-123T99: Error type 123: Error point

1. Error type

The order of error priority is shown below.

Error type	Description	
Т	Service engineer call errors	
Α	Jam errors	
В	Option errors	
С	Consumable errors	
D	Set check errors	
ш	Warnings (service engineer call)	
F	Warnings (other)	
н	Parameter errors	
J	Paper jam errors	

2. Error point

The error point classification is shown below.

Error point	Description
0**	System, panel
1**	Scanning section, image processing section
2**	Master-making section
3**	Master disposal section
4**	Paper feed/ejection section
5**	Print drum section
6**	Printing adjustment section
7**	Optional equipment

1) List of panel messages

Error type	Description
T01	Main motor lock [Drum No.1]
T02	Elevator motor lock
T03	Clamp motor lock [Drum No.1]
T04	Ink overflow [Drum No.1]
T05	Print positioning pulse motor lock
T06	Horizontal pulse motor lock [Drum No.1]
T11	Print pressure control pulse motor lock [Drum No.1]
T12	Master disposal section motor lock [Drum No.1]
T13	Cutter motor lock
T14	Flatbed error
T15	AF error
T17	Solenoid counter not connected
T19	Thermal pressure motor lock
T20	Paper ejection section motor lock
T24	Inking motor lock [Drum No.1]
T25	No-battery error
T27	Master-making unit motor lock [Drum No.1]
T29	Guide release motor lock
T31	Central flap motor lock
T41	Main motor lock [Drum No.2]
T43	Clamp motor lock [Drum No.2]
T44	Overflow [Drum No.2]
T46	Horizontal pulse motor lock [Drum No.2]
T51	Print pressure control pulse motor lock [Drum No.2]
T52	Master disposal section motor lock [Drum No.2]
T64	Inking motor lock [Drum No.2]
T67	Master-making unit motor lock [Drum No.2]
T91	Panel EEPROM error
T92	Print drum EEPROM write error
T93	NET-D hardware error
T94	Call service error: TPH

Error type	Description
T95	FRAM error
T96	Data not input
T97	PC card access error
T98	Hardware error
T99	Software error

Error type	Description
A01	Master feed error
A02	Master loading error [Drum No.1]
A04	Master removal error [Drum No.1]
A05	Master present in master removal section [Drum No.1]
A06	Paper feed tray check
A07	Paper feed error
A08	Paper jam [Drum No.1]
A09	Paper ejection error
A10	AF original feed error
A16	Awaiting removal of master [Drum No.1]
A17	A17 [Cutter error]
A25	Central transport error
A34	Awaiting master reset
A42	Master loading error [Drum No.2]
A44	Master removal error [Drum No.2]
A45	Master present in master removal section [Drum No.2]
A48	Paper jam [Drum No.2]
A56	Awaiting removal of master [Drum No.2]

Error type	Description
B01	Card counter: No card
B21	Storage memory: Read/write error
B22	Job separator: Power OFF error
B23	Job separator: No-tape error
B24	Job separator: Jam error
B29	USB Memory: Incompatible Device (HUB)
B30	USB Memory: Non-Compliant Device
B31	Network cable not connected
B32	NIC: External communication error
B33	IP address setup error
B34	RLP (linked printer): No-toner error
B35	RLP (linked printer): Service error
B38	USB Memory: Folder making error
B39	USB Memory: Read/Write error

Error type	Description
C01	Ink cartridge replacement [Drum No.1]
C02	Master roll replacement
C03	Master disposal box full [Drum No.1]
C04	No-paper error
C05	Both master disposal boxes full
C41	Ink cartridge replacement [Drum No.2]
C43	Master disposal box full [Drum No.2]

Error type	Description
D01	Print drum not installed [Drum No.1]
D02	Print drum incompatibility [Drum No.1]
D03	Ink cartridge not installed [Drum No.1]
D04	Ink cartridge incompatibility [Drum No.1]
D05	Master not installed
D07	Master disposal box not installed [Drum No.1]
D08	Master-making unit not installed
D09	Master-making unit top cover not closed
D11	Front cover not closed
D13	Machine rear cover not closed
D17	Master incompatibility
D18	Print drum ready to pull-out [Drum No. 1]
D19	Master-making unit ready to pull out
D20	Master-making unit drawer cover not closed
D21	Master-making unit drawer cover ready to open
D22	Print drum pull-out command [Drum No.1]
D23	AF Feed cover opened
D28	D to P delete job Drum not in position (Print Drum No.1)
D30	Front cover setting demand
D41	Print drum not installed [Drum No.2]
D42	Print drum incompatibility [Drum No.2]
D43	Ink cartridge not installed [Drum No.2]
D44	Ink cartridge incompatibility [Drum No.2]
D47	Master disposal box not installed [Drum No.2]
D58	Print drum ready to pull-out [Drum No. 2]
D62	Print drum pull-out command [Drum No.2]
D68	D to P delete job Drum not in position (Print Drum No.2)

Error type	Description
E01	Battery replacement
E02	Maintenance call

Error type	Description
F01	No master on Drum No.1
F02	Paper/master-making size incompatibility 1
F03	Multi-up: Paper size error
F04	Admin. Setting: Maximum setting reached
F06	N-Up: Incorrect paper size
F07	N-Up: Incorrect original size
F09	Booklet: Incorrect paper size
F10	Paper/master-making size incompatibility 2
F11	Auto size reproduction disabled (falls outside range of possible size reproduction)
F13	4P Booklet was selected with wrong size paper on the paper feed tray]
F14	4P Booklet was selected with wrong size original
F20	Binding margin: Wrong paper size
F24	Auto size reproduction disabled (falls outside range of possible size reproduction)
F30	Multiple feed check
F32	Storage memory: No space available
F33	USB memory: No space available
F37	Combined use of book mode and AF not possible
F43	DtoP original/paper incompatibility
F44	Auto size reproduction disabled (exceeds original size detection range)
F45	Presence of original unknown/no original
F46	Print drum color not matching with DtoP job color [Drum No. 1]
F47	Combined use of AF and postcard size reproduction not possible
F48	Multi-up: Outside original size detection range
F49	Multi-up: No original when Start key pressed
F52	Use of RLP mode not possible (RLP information not acquired)
F58	Use of RLP mode not possible (NET-D initialization in process)
F60	RLP auto-link/master-making continuation confirmation (when printing quantity is 0)
F61	RLP paper/original size incompatibility
F62	RLP auto-link/RLP error
F63	RLP auto tray selection/nonstandard-size original
F64	Specified function disabled, at job reception
F65	Scan mode auto-saving size selection/non- standard size original
F66	RLP saddle stitching not possible

Error type	Description
F67	RLP rotation sorting not possible
F68	Specified area/traced color separation: Excess number of specified areas
F69	Specified area/traced color separation: Distance of border for specified area longer than master-making size
F70	Specified area/traced color separation: Image processing time-out error
F71	No master on Drum No.2
F72	Hand-written/red-color separation: Image processing time-out error
F73	Auto tray selection not possible, RLP tray designation disabled
F74	150ppm not possible due to low temperature
F75	Combined use of specified area separation and AF not possible
F76	Print drum color not matching with DtoP job color [Drum No.2]
F77	Print drum color not matching with DtoP job color [Drum No.1]
F78	Digitizer: Stage cover open
F79	Digitizer: No original during re-scanning
F80	Paper not compatible with dual-color printing
F81	Dual-color printing: Ink-saving mode set on only one print drum
F82	Paper not compatible for Drum No.2 printing
F83	Use of Drum No.2 mode not possible
F85	Scanning not possible: External CI not connected
F90	Supply stock management (ink)
F91	Supply stock management (master)
F93	Reproduction ratio is larger than master making area
F94	Protect confirmation (compulsory)
F95	Protect confirmation
F96	Admin. Mode: Due Date for the ID Counter Report
F97	Admin. Mode: Due Date for the Counter Report

Error type	Description
H01	Generic supply parameter input (Drum No.1)
H04	Generic supply parameter input (master)
H07	Generic supply parameter input (Drum No.2)

2) Details of error codes

1. Service engineer call errors (T**)

Error type	T01 [Main motor lock] (Drum No.1)
Panel display	T01-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
520	Main motor lock [1] detected. The main motor FG sensor count reduced to 50% from the set speed.
521	The position B sensor does not change status within 2910 pulses while the main motor is ON.
523	Main motor lock [2] detected. (The main motor lock detected by DSP)
537	The print drum fails to stop at position B.
538	The print drum is not locked during operations.

Error type	T02 [Elevator motor lock]
Panel display	T02-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
400	The elevator upper-limit position detection and the elevator lower-limit detection are switches ON simultaneously.
401	Elevator motor overload detected. The elevator motor overcurrent port was activated 5 consecutive times (polling at 10-msec intervals).
404	The elevator lower-limit sensor does not switch OFF within 2 seconds after the elevator motor applies a lifting force from the elevator lower-limit position.
405	The elevator upper-limit sensor does not switch ON within 12 seconds after the elevator motor applies a lifting force.
406	The elevator upper-limit sensor does not switch OFF within 2 seconds after the elevator motor applies a lowering force from the elevator upper-limit position.
407	The elevator lower-limit sensor does not switch ON within 12 seconds after the elevator motor applies a lowering force.
408	The elevator upper-limit sensor remained OFF for more than 2 seconds during elevator servo action.

Error type	T03 [Clamp motor lock] (Drum No.1)
Panel display	T03-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
500	The clamp sensor A of the Clamp No.1 is OFF at the end of the clamp movement.
501	The clamp sensor B of the Clamp No.1 does not change status within 1 second after the clamp motor operates in the forward direction.
502	The clamp sensor B does not change status within 1 second after the clamp motor operates in the reverse direction.
503	The clamp sensor A of the Clamp No.1 does not switch ON within 3 seconds during clamp unit initialization.
504	The logical values of the clamp sensors A and B of the Clamp No.1 do not match at the start of the clamp releasing operation.
505	The logical values of the clamp sensors A and B of the Clamp No.1 do not match at the start of the print drum position-A compensation operation.
506	The logical values of the clamp sensors A and B of the Clamp No.1 do not match at the start of the clamp unit home positioning operation.
507	The clamp sensor A of the Clamp No.1 is ON after completion of the clamp releasing operation.
508	The clamp sensor A of the Clamp No.1 is ON after completion of the print drum position-A compensation operation.
514	The print drum is not at the horizontal home position while the clamp unit operates.
545	The clamp unit is not at the specified position at the start of print drum rotation.
546	The clamp unit is not at the home position at the start of print drum horizontal movement.
547	The clamp unit is not at the home position when the master-making unit slides.

Error type	T04 [Ink overflow]
Panel display	T04-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key with the overflow sensor switched OFF.
Error point	Error detecting condition
513	The overflow sensor switches ON successively for the set number of times during the 10-ms-interval overflow sensor check.

Error type	T05 [Print positioning pulse motor lock]
Panel display	T05-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
603	The Vertical Print Positioning Pulse Motor did not complete the movement within the set time when the motor rotated in the print image downward direction.
604	The Vertical Print Positioning Pulse Motor did not complete the movement within the set time when the motor rotated in the print image upward direction.

Error type	T06 [Horizontal pulse motor lock] (Drum No.1)
Panel display	T06-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
607	The horizontal home position sensor detects no light within the set period after the print drum drive releasing operation started.
608	Athe light path of he horizontal home position sensor is not blocked within the set time after the print drum connecting operation started.
609	Although the horizontal pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value, or the operation fails to complete in counter stop mode within the specified time.
627	The light path of the drive release home position sensor is not blocked during print drum drive connecting operation.
628	The light path of the drive release home position sensor is not detected during print drum drive release operation.

Error type	T11 [Print pressure control pulse motor lock] (Drum No.1)
Panel display	T11-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
600	The print pressure control sensor does not change from OFF to ON within 3.9 seconds after the print pressure control motor activates to increase pressure during home positioning.
601	The print pressure control sensor does not change from ON to OFF within 4.6 seconds after the print pressure control motor activates to reduce pressure during home positioning.
602	Although the print pressure control pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value, or the operation fails to complete in counter stop mode within the specified time.

Error type	T12 [Master disposal section motor lock] (Drum No.1)
Panel display	T12-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
300	Overload current detected in master disposal motor. The master disposal motor over current was detected 5 consecutive times (polling at 10-msec intervals).
301	Master compression motor lock detected. The compression detection switch went ON while lifting the compression plate.
302	The compression FG value was larger than normal when the compression plate made HP movement preparation.
305	The master compression HP sensor does not switch ON within 7.5 seconds after the master compression motor activates to lift the compression plate.
306	The master compression HP sensor does not switch OFF within 2 seconds after the master compression motor activates in the compressing direction.
307	[1] The compression detection does not switch ON within 7.5 seconds after the master compression motor activates in the compressing direction. (Within 5 seconds if moving to the Protect position.).[2] The master compression FG sesnor does not count 20 pulses even after the master compression motor rotated in the compressing direction for 800ms.
309	The FG count value does not change when the master compression motor applies a force to begin the compression, after moving away from the home position sensor. (The master compression motor FG sensor status does not change.)
316	Master disposal motor lock detected. The master disposal motor FG count reduced to half the value from the set speed.

Error type	T13 [Cutter motor lock]
Panel display	T13-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
203	The cutter home position switch does not change from ON to OFF within 100 ms after the cutter unit moves from the home position.
204	The cutter home position switch does not switch ON within 300 ms after the cutter begins operating.
205	The master positioning sensor is ON even when the print drum rotates to the specified angle after cutting the master.

Error type	T14 [Flatbed error]
Panel display	T14-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
112	The home position sensor does not switch OFF within the set time.
113	The home position sensor does not switch ON within the set time.
114	Faulty parameters sent from the machine to the scanner.
115	The scanner operation fails to complete within the set time.
116	Time-out error generated during black shading (Black compensation fails to complete within the set time.)
117	Time-out error generated during white shading (White compensation fails to complete within the set time.)
123	Time-out error generated during offset adjustment (Offset adjustment fails to complete within the set time.)
124	Time-out error generated during gain adjustment (Gain adjustment fails to complete within the set time.)
125	Offset adjustment processing not completed (Process fails to complete within the set times.)
126	Gain adjustment processing not completed (Process fails to complete within the set times.)
135	Scanner GA PCB malfunction in Offset adjustment.
136	Scanner GA PCB malfunction in Gain adjustment.
137	Scanner GA PCB malfunction during Black shading.
138	Scanner GA PCB malfunction during White shading.

Error type	T15 [AF error]
Panel display	T15-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
100	Original IN sensor adjustment error in the AF.
101	AF-EEPROM error.
110	Time-out error generated at the ABC standby position. This error is issued if the original stops at the ABC standby position after the start of AF scanning operation (with ABC), and the original remains electrically charged for the set time. * Error issued from AF.
130	AF command reception time-out error generated in the main printer unit. After a command is sent from the printer to the AF, if no response is transmitted within the set time, the same command is retransmitted. This error is generated if no response is made to this retransmitted command within the set time.
131	The main printer unit received an undefined command from the AF.
132	The main printer unit detected a communication sequence error in the AF unit. * Error issued from AF.
133	AF communication error in the main printer unit (ACK or NAK error).
134	The main printer unit did not transmit a signal to the AF within the set time. After a command is sent from the AF to the printer, if no response is transmitted within the set time, the same command is retransmitted. This error is generated if no response is made to this retransmitted command within the set time.
143	Original width VR value error in the AF.
161	AF unit not connected.

Error type	T17 [Solenoid counter not connected]
Panel display	T17-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Solenoid counter connection signal: ON
Error point	Error detecting condition
020	The solenoid counter is not connected.

Error type	T19 [Thermal pressure motor lock]
Panel display	T19-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
207	The TPH pressure sensor does not change from ON to OFF within 2 seconds after the thermal pressure motor operates to reduce pressure (or during home positioning).
208	The TPH pressure sensor does not change from OFF to ON within 2 seconds after the thermal pressure motor operates to reduce pressure.
216	The TPH pressure sensor does not change from ON to OFF within 2 seconds after the thermal pressure motor operates to apply pressure.
217	The TPH pressure sensor does not change from OFF to ON within 2 seconds after the thermal pressure motor operates to apply pressure.

Error type	T20 [Paper ejection section motor lock]
Panel display	T20-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
414	The paper ejection wing home position sensor does not change status within the set time after the paper ejection wing pulse motor starts operation.
415	The paper ejection wing home position sensor does not switch OFF within the set time after the paper ejection wing pulse motor operates when the paper ejection wings are at the home position (home position sensor ON).
416	Paper ejection motor overload current detected. The motor over-current port switches ON 2 consecutive times after the paper ejection motor switches ON (polling at 10-msec intervals).
437	Paper ejection motor lock detected. The paper ejection motor FG sensor count reduced to half from the set count.
442	Although the paper ejection wing pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value, or the operation fails to complete in counter stop mode within the specified time.

Error type	T24 [Inking motor lock] (Drum No.1)
Panel display	T24-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
539	Inking motor lock detected. The inking motor FG sensor status did not change even after 200msec from the operation of the inking motor.

Error type	T25 [No-battery error]
Panel display	T25-*** !!Low Battery!! Call Service
Error reset method	Replace the battery.
Error point	Error detecting condition
026	No battery power. * Readjust the machine clock after resetting the error.

Error type	T27 [Master-making unit motor lock] (Drum No.1)
Panel display	T27-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
248	The master-making unit position sensor does not change status as specified within the set time after the master-making unit begins moving to the standby position.
249	The light path of the master-making unit pull-out position sensor was not blocked within the set time when the master-making unit moved to the pull-out position.
250	The master-making unit position sensor does not change status as specified within the set time after the master-making unit begins moving to the master-making position.
251	Although the master-making unit transport pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value. Or the operation fails to complete in counter stop mode within the specified time.
252	The top cover of the master-making unit opened at a location other than the master-making unit pull-out position. (The pressure plate opened when the master-making-unit was moving.)
257	The top cover of the master-making unit opened at a location other than the master-making unit pull-out position. (The master-making-unit tried to move with its top cover opened.)

Error type	T29 [Guide release motor lock]
Panel display	T29-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
438	The guide roller release home position sensor detects no light within 3.8 seconds after the guide roller begins operating.
439	The light path of the guide roller release home position sensor is not blocked within 3.8 seconds after the guide roller begins operating.
450	Overload current detected in the guide roller release motor. The guide roller release motor overcurrent port switches ON 20 consecutive times (polling at 10-msec intervals).

Error type	T31 [Central flap motor lock]
Panel display	T31-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
445	The central flap home position sensor detects no light within the set time after the central flap motor
	begins operating.
446	The light path of the central flap home position sensor is not blocked within the set time after the central flap motor begins operating.

Error type	T41 [Main motor lock] (Drum No.2)
Panel display	T41-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
521	The position-B sensor does not change status within 2910 pulses while the main motor is ON.
523	Main motor lock [2] detected by DPS.
537	The position-B stop operation failed.
538	The print drum is not locked during print drum operation.

Error type	T43 [Clamp motor lock] (Drum No.2)
Panel display	T43-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
500	The Second clamp sensor logical value is incorrect when the Second clamp completes the movement.
501	The Second clamp sensor does not change status within 1 second after the clamp motor begins rotating in the forward direction.
502	The Second clamp sensor does not change status within 1 second after the clamp motor begins rotating in the reverse direction.
504	The logical values of the Second clamp sensor is incorrect at the start of the clamp releasing operation.
506	The logical values of the Second clamp sensor is incorrect at the start of the clamp unit home positioning operation.
514	The print drum is not at the horizontal home position while the clamp unit is operating.
545	The clamp unit is not at the specified position when the print drum begins rotating.
546	The clamp unit is not at the home position when the print drum initiates horizontal movement.
547	The clamp unit is not at the home position when the master-making unit begins its motion.

Error type	T44 [Ink overflow (Drum no.2)
Panel display	T44-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	With the overflow sensor switched OFF, press the Reset key.
Error point	Error detecting condition
513	The overflow sensor switches ON successively for the set number of times during the 10-ms-interval check.

Error type	T46 [Horizontal pulse motor lock] (Drum no.2)
Panel display	T46-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
607	The horizontal home position sensor detects no light within xx seconds after the horizontal home positioning operation initiates movement toward the right during drive releasing operation.
608	The light path of the horizontal home position sensor is not blocked within xx seconds after the horizontal home positioning operation initiates movement toward the left during drive connecting operation.
609	Although the horizontal pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value, or the operation fails to complete in counter stop mode within the specified time.
627	The light path of the drive release home position sensor is not blocked during drive connecting operation.
628	The drive release home position sensor detects no light during drive releasing operation.

Error type	T51 [Print pressure control pulse motor lock] (Drum No.2)
Panel display	T51-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
600	The print pressure control sensor does not change from OFF to ON within 3.9 seconds after the print pressure control pulse motor activates to increase pressure during home positioning.
601	The print pressure control sensor does not change from ON to OFF within 4.6 seconds after the print pressure control pulse motor activates to reduce pressure during home positioning.
602	Although the print pressure control pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value, or the operation fails to complete in counter stop mode within the specified time.

Error type	T52 [Master disposal section motor lock] (Drum No.2)
Panel display	T52-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
300	Overload current detected in master disposal motor. The master disposal motor over current was detected 5 times consecutively (polling at 10-msec intervals).
301	Master compression motor lock detected. The compression detection switch went ON while lifting the compression plate.
305	The master compression HP sensor does not switch ON within 7.5 seconds after the master compression motor activates to lift the compression plate.
306	The master compression HP sensor does not switch OFF within 2 seconds after the master compression motor activates in the compressing direction.
307	 [1] The compression detection does not switch ON within 7.5 seconds after the master compression motor activates in the compressing direction. (Within 5 seconds if moving to the Protect position.). [2] The master compression EG sesnor does not count 20 pulses even after the
	master compression motor rotated in the compressing direction for 800ms.
309	The FG count value does not change when the master compression motor applies a force to begin the compression, after moving away from the home position sensor. (The master compression motor FG sensor status does not change.)
316	Master disposal motor lock detected. The master disposal motor FG count reduced to half the value from the set speed.

Error type	T64 [Inking motor lock] (Drum No.2)
Panel display	T64-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key or switch power OFF, then ON.
Error point	Error detecting condition
539	Inking motor lock detected. The inking motor FG sensor does not change status within 20 ms after the inking motor switches ON.

Error type	T67 [Master-making unit motor lock] (Drum No.2)
Panel display	T67-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
Error point	Error detecting condition The master-making unit position sensor does not change status as specified within the set time after the master-making unit begins moving to the standby position.

Error type	T91 [Panel EEPROM error]
Panel display	T91-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
013	The date information data is incorrect
968	Read error generated in the panel EEPROM.
969	Write error generated in the panel EEPROM.
976	Checksum error generated in the panel EEPROM.
977	Verification error generated in the panel EEPROM.

Error type	T92 [Print drum EEPROM write error]
Panel display	T92-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
570	The print drum EEPROM is being accessed while the print drum is performing a releasing action.

Error type	T93 [NET-D hardware error]
Panel display	T93-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
932	No response from the NIC (Network Interface Card) when NIC is accessed.

Error type	T94 [Call service error: TPH]
Panel display	T94-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
225	The TPH code does not correspond to the machine model code when the power is switched ON (only when the master-making unit is in the operating position) or when the master-making unit is inserted in the operating position.

Error type	T95 [FRAM error]
Panel display	T95-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
059	The machine serial number information sent from the SH-PCB does not correspond to the machine serial number information in the mechanical control PCB.

Error type	T96 [Data not input]
Panel display	T96-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Enter parameters in Test Mode.
Error point	Error detecting condition
171	TPH resistance not set.
172	Scanner adjustment not completed.
433	Paper width potentiometer (VR) not set.
569	Print drum color or ink category not set.
613	Print pressure compensation not set.
972	REv data storage area not initialized.

Error type	T97 [PC card access error]
Panel display	T97-*** !!System Error!! Press Reset Key If Recovery has Failed, Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
939	PC card access error: PC card not set.
940	PC card access error: Device information multiple-ID error (PCMCIA card information error).
941	PC card access error: Device error (incompatible CF card error).
942	PC card access error: File creation failed (File with the same name already exists).
943	PC card access error: Unformatted.
944	PC card access error: Media ID error.
945	PC card access error: Media error (CF card cannot be accessed).
946	PC card access error: Insufficient disc capacity (Not enough space available on the CF card to write data).
990	PC card access error: Specified file not found on the selected drive.
991	PC card access error: The file accessed is not currently open.
992	PC card access error: File information storage folder already in use.
993	PC card access error: Incorrect read address setting for data transfer to mechanical unit.
994	PC card access error: File deletion failed.

Error type	T98 [Hardware error]
Panel display	T98-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
005	Hardware error (Machine model code error).
006	FRAM checksum error.
025	Faulty tag RF PCB on the print durm (initial communication with the tag RF PCB failed).
028	Test Mode NO. 103 [Machine Test-Mode Data Recording] failed.
029	Test Mode NO. 105 [Machine Test-Mode Data Re-store] failed.
034	Unable to write data to the main unit EEPROM (EEPROM cannot be accessed).
035	CRC <cyclic check="" redundancy=""> error generated in the main unit EEPROM (EEPROM data error).</cyclic>
039	Incorrect EEPROM.
051	Communication error with touch-panel controller.
053	Unsuccessful attempt to read memory parameters (program, mode, user paper).
054	Unsuccessful attempt to write memory parameters (program, mode, user paper).
055	The machine model code sent from the SH-PCB does not correspond to the machine model information in the mechanical control PCB.
063	The test mode parameter setting data in the memory is out of selectable range. CAUTION: When this error displays, make sure to go into Test Mode and activate Test Mode No.112 [Clearing Normal Area Test Mode Dara Memory], or the machine mechanical mechanism may damage.
064	Communication between SH PCB and mechanical control PCB: Undefined command was issued.
065	Communication error between SH PCB and mechanical control PCB (01) (on mechanical control PCB side): Incorrect number of bytes exist in received command.
067	communication error between SH PCB and mechanical control PCB (03) (on mechanical control PCB side): RNK received.
068	Communication error between SH PCB and mechanical control PCB (04) (on mechanical control PCB side): NAK received 3 times.
069	Communication error between SH PCB and mechanical control PCB (05) (on mechanical control PCB side): No ACK response.
070	Communication error between SH PCB and mechanical control PCB (06) (on mechanical control PCB side): Transmission prevented by SH PCB.
071	Communication error between SH PCB and mechanical control PCB (07) (on mechanical control PCB side): Command received while awaiting response.
072	Communication error between SH PCB and mechanical control PCB (08) (on mechanical control PCB side): FB command received in mode other than download mode.
073	side): FC/FD command received in mode other than download mode.
074	Communication error between SH PCB and mechanical control PCB (10) (on SH PCB side): FE command received (No mechanical control PCB program).
075	Communication error between SH PCB and mechanical control PCB (11) (on SH PCB side): Incorrect number of bytes in received command.
076	Communication error between SH PCB and mechanical control PCB (12) (on SH PCB side): Received ACK not specified in sequence.
077	Communication error between SH PCB and mechanical control PCB (13) (on SH PCB side): RNK received.
078	Communication error between SH PCB and mechanical control PCB (14) (on SH PCB side): NAK received 3 times.
079	Communication error between SH PCB and mechanical control PCB (15) (on SH PCB side): No ACK response.
080	Communication error between SH PCB and mechanical control PCB (16) (on SH PCB side): Transmission prevented by the mechanical control PCB (CTS = 1).

Error type	T98 [Hardware error]
Panel display	T98-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
081	Communication error between SH PCB and mechanical control PCB (17) (on SH PCB side): Mechanical control download mode was transmitted by error.
082	Communication error between SH PCB and mechanical control PCB (18) (on SH PCB side): Mechanical CTS remained at <1> for 2 seconds.
083	Communication error between SH PCB and mechanical control PCB (19) (on SH PCB side): FA command received at time other than startup.
084	Communication error between SH PCB and mechanical control PCB (20) (on SH PCB side): <80> command not received within 10 seconds after power ON.
094	Communication sequence error between SH PCB and mechanical control PCB. (Mechanical control PCB error).
097	The Test Mode adjustment value set in the print drum memory lies outside the adjustment range.
098	The machine serial number information in the main unit EEPROM does not correspond to the machine serial number information in the FRAM.
099	SH4F PCB: Undefined interrupt processing was generated.
119	Faulty image PCB (Memory check of the image processing IC failed). (Image processing IC check timing: during initialization)
	Time-out error generated while awaiting scanner serial communication interrupt command (The CPU failed to receive interrupt command from FORCE device within 100 ms).
120	Scanner serial communication timing:Transmission of data to AK8412 (A/D converter). Transmission of data to scanner gate array. Reading of data from scanner gate array. Reading of TPH thermister A/D converter data.
129	Faulty scanner gate array PCB (Error generated in the memory check of the scanner gate array).
245	Time-out error (action other than sensor standard) for the write pulse motor during master transport in master-making operation.
246	Time-out error (action other than sensor standard) for the load pulse motor during master transport in master-making operation.
422	The DA setting for adjustment of the light-emitting section reached the upper-limit value during automatic multiple paper feed adjustment in Test Mode No. 705 [Multiple Paper Feed Detection Sensor Sensitivity Automatic Adjustment].
423	The DA setting for adjustment of the light-emitting section reached the lower-limit value during automatic multiple paper feed sensor adjustment in Test Mode No. 705 [Multiple Paper Feed Detection Sensor Sensitivity Automatic Adjustment].
448	The DA setting for adjustment of the light-emitting section reached the upper-limit value during automatic registration sensor adjustment in Test Mode No. 709 [Registration Sensor Sensitivity Automatic Adjustment].
449	The DA setting for adjustment of the light-emitting section reached the lower-limit value during automatic registration sensor adjustment in Test Mode No. 709 [Registration Sensor Sensitivity Automatic Adjustment].
453	Timeout during multiple feed sensor sensitivity automatic adjustment. (Error displays when the adjustment is made without paper.)
Error type	T98 [Hardware error]
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Panel display	T98-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
454	Timeout during registration sensor sensitivity automatic adjsutment. (Error displays when the adjustment is made without paper.)
735	24V-OP does not go ON (Possibility of broken Option related Fuse = Fuse F3).
736	Fuse chip (CP2) on Mechanical Control PCB is faulty.
777	Test Mode No. 103 [Machine Test Mode Data Recording] error - Error in making file.
778	Test Mode No. 103 [Machine Test Mode Data Recording] error - Error in making directory.
787	Test Mode No. 105 [Machine Test Mode Data Restore] error - No file to restore.
788	Test Mode No. 105 [Machine Test Mode Data Restore] error - Machine type data error.
789	Test Mode No. 105 [Machine Test Mode Data Restore] error - Machine serial number error.
790	Test Mode No. 105 [Machine Test Mode Data Restore] error - File version number error.
791	Test Mode No. 105 [Machine Test Mode Data Restore] error - Machine re-boot error after restore.
792	Test Mode No. 105 [Machine Test Mode Data Restore] error - No directory error.
921	Faulty USB controller chip. (USB connection between the machine and PC).
922	SH4F PCB system lock (image communication error).
934	Communication error between mechanical control PCB and RF tag PCB (detection on tag RF PCB side).
935	Communication error between mechanical control PCB and RF tag PCB (detection on mechanical control PCB side).
937	Serial number not set.
938	FRAM version down.
947	24V-A does not switch ON (possibility of blown 24V-A fuse).
948	24V-B does not switch ON (possibility of blown 24V-B fuse).
949	24V-A does not switch OFF.
950	24V-B does not switch OFF.
952	Checksum error in SH4F PCB flash memory.
953	Error generated during attempt to write data to SH4F PCB flash memory.
960	Error generated during attempt to read data from SH4F PCB flash memory.
961	SH4F PCB flash memory not in use.
978	Illegal power ON command received from the mechanical control PCB at a time other than boot up or wake-up.
979	Abnormal properties value in SH4F PCB flash memory.
983	24V-C does not go ON when the machine reboots from the stand-by mode.
984	24V-C does not go OFF when the machine goes into low-power mode.
986	The software for the mechanical control PCB does not match the DSP (main, secondary) software. Download the DSP software version suitable for the software for the mechanical control PCB.
987	Communication error between DSP and mechanical control PCB.
988	The second paper feed motor parameter and the main motor parameter are <00h>. [Main motor parameter acquisition mode] and [second paper feed motor parameter acquisition mode] in Test Mode have not been executed.
996	Faulty RF-PCB, either on the master making unit or print drum.

Error type	T99 [Software error]
Panel display	T99-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
014	Sub-microcomputer is physically broken.
510	Angle control error.
899	Wrong type mechanical control PCB attached.
982	The program loader on the Mechanical Control PCB is for another machine model.

2-1. Jam errors (A**)

Error type	A01 [Master feed error]
Panel display	A01-*** Master Mis-Feed Pull Out Master Making Unit and Rewind Master Roll, then Reset Master in Place.
Error reset method	Master-making unit sensor: OFF -> ON and Master positioning sensor: OFF << Reset the master to cancel the error. >> (Or switch power OFF, then ON.)
Error point	Error detecting condition
201	During master settings, cutting, or making, the master positioning sensor does not switch ON, even after the master is sent.
202	During master setting or at the start of the master-making operation, the master positioning sensor does not switch OFF, even when the master is rewound for the set time.
211	The master positioning sensor is ON during standby.
215	Although the write pulse motor has completed the operation in sensor stop mode, the logical value of the sensor at the arrival point does not match the design value, or the operation fails to complete in counter stop mode within the specified time (faulty gate array control).
258	Master end sensor went OFF after detecting the master end tape, but the master end sensor detected the end tape again.

Error type	A02 [Master loading error] (Drum No.1)
Panel display	A02-*** Master Loading Error Pull Out Print Cylinder 1 and Discard Master
Error reset method	First print drum connection signal: ON -> OFF and first print drum safety SW: ON -> OFF <<< Pull out the print drum to cancel the error. >> * If the print drum is at position B when this error occurs, the print drum lock is automatically released.
Error point	Error detecting condition
509	The master loading sensor was OFF when the presence of master was checked at the specified angle during master-loading operation.

Error type	A04 [Master removal error] (Drum No.1)
Panel display	A04-*** Master Disposal Error Pull Out Print Cylinder 1 and Discard Master
Error reset method	First print drum connection signal: ON -> OFF and first print drum safety SW: ON -> OFF << Pull out the print drum to cancel the error. >> * If the print drum is at position B when this error occurs, the print drum lock is automatically released.
Error point	Error detecting condition
303	Print drum check request when the master removal error or removed master jam detected.

Error type	A05 [Master present in master removal section] (Drum No.1)
Panel display	A05-*** Master Jammed in Disposal Unit Pull Out Master Disposal Box 1 and Remove Jammed Master
Error reset method	First master disposal box safety SW: OFF and first master disposal jam sensor: OFF << When the master disposal box is pulled out, the error is cancelled if the master has been removed. >> (Or switch power OFF, then ON.)
Error point	Error detecting condition
304	Master disposal box check request when Master removal error or removed master jam detected.
312	The master disposal jam sensor was ON at the start of the master-making operation.
315	The master disposal jam sensor was ON at the completion of the recovery operation.

Error type	A06 [Paper feed tray check]
Panel display	A06-*** Safety SW on Standard Feed Tray is Activated Reset paper on Standard Feed Tray
Error reset method	Paper feed tray upper safety SW: ON or Paper feed tray lower safety SW: ON (Or switch power OFF, then ON.)
Error point	Error detecting condition
403	The paper feed tray safety switch is OFF.

Error type	A16 [Awaiting removal of master] (Drum No.1)
Panel display	A16-*** Master Remains on Print Cylinder 1 Pull Out Print Cylinder 1 and Remove Master
Error reset method	First print drum connection signal: ON -> OFF and first print drum safety SW: ON -> OFF << Pull out the print drum to cancel the error. >> * If the print drum is at position B when this error occurs, the print drum lock is automatically released.
Error point	Error detecting condition
525	Waiting for master to be removed.

Error type	A17 [Cutter error]
Panel display	A17-*** System Error in Master Making Unit Take Out Master and then Close Master Making Unit Cover
Error reset method	Master-making unit sensor: OFF -> ON and Master detection sensor: OFF <<< When the master making unit cover is closed without a master, the error is cancelled. >>
Error point	Error detecting condition
209	The cutter home position switch is OFF when the machine enters standby, at the start of the master- making operation, or when the master material is set.

Error type	A34 [Awaiting master reset]
Panel display	A34-*** Master Not Set in Place Insert Lead Edge of Master into Master Entrance and Close Master Making Unit
Error reset method	Master-making unit sensor: OFF -> ON and Master positioning sensor: OFF << When the master material is re-inserted, the error is cancelled. >>
Error point	Error detecting condition
218	Requesting the reset of master material.

Error type	A42 [Master loading error] (Drum No. 2)
Panel display	A42-*** Master Loading Error Pull Out Print Cylinder 2 and Discard Master
Error reset method	Second print drum connection signal: ON -> OFF and second print drum safety SW: ON -> OFF << Pull out the print drum to cancel the error. >> * If the print drum is at position B when this error occurs, the print drum lock is automatically released.
Error point	Error detecting condition
509	The master loading sensor was OFF when the presence of master was checked at the specified angle during master-loading operation.

Error type	A44 [Master removal error] (Drum No. 2)
Panel display	A44-*** Master Disposal Error Pull Out Print Cylinder 2 and Discard Master
Error reset method	Second print drum connection signal: ON -> OFF and second print drum safety SW: ON -> OFF <<< Pull out the print drum to cancel the error. >> * If the print drum is at position B when this error occurs, the print drum lock is automatically released.
Error point	Error detecting condition
303	Print drum check request when the master removal error or removed master jam detected.

Error type	A45 [Master present in master removal section] (Drum No. 2)
Panel display	A45-*** Master Jammed in Disposal Unit Pull Out Master Disposal Box 2 and Remove Jammed Master
Error reset method	Second master disposal box safety SW: OFF and second master disposal jam sensor: OFF << When the master disposal box is pulled out, if the master has been removed, the error is cancelled. >> (Or switch power OFF, then ON.)
Error point	Error detecting condition
304	Master disposal box check request when Master removal error or removed master jam detected.
312	The master disposal jam sensor was ON at the start of the master-making operation.
315	The master disposal jam sensor was ON at the completion of the recovery operation.

Error type	A56 [Awaiting removal of master] (Drum No. 2)	
Panel display	A56-*** Master Remains on Print Cylinder 2 Pull Out Print Cylinder 2 and Remove Master	
Error reset method	Second print drum connection signal: ON -> OFF and second print drum safety SW: ON -> OFF << Pull out the print drum to cancel the error. >> * If the print drum is at position B when this error occurs, the print drum lock is automatically released.	
Error point	Error detecting condition	
525	Waiting for the master to be removed.	

2-2. Jam errors (A**: Indicates the detail of J-type error)

Error type	A07 [Paper feed error]
Error point	Error detecting condition
409	The central transport sensor was OFF when the paper reached the central transport sensor, and the paper feed sensor was ON when the operation stopped (paper feed error).
412	The paper feed sensor switched OFF consecutively for n number of times at the time of the initial paper feed jam detection (no-paper feed error).
413	The paper feed sensor was ON when the paper left the paper feed sensor (extra-long paper error). Or the fuse for the Second paper feed motor is burnt.
418	The paper feed sensor was ON at the start of the operation.
443	The registration sensor was OFF at the time the paper reached the registration sensor.
444	The registration sensor was ON even though there was no paper.

Error type	A08 [Paper jam] (Drum No. 1)
Error point	Error detecting condition
410	The central transport sensor was OFF at the timing when the paper should have arrived at the central transport sensor, and the Paper sensor was OFF when the machine stopped. (Either a paper jammed on the drum or the fuse for the Second paper feed motor is burnt).

Error type	A09 [Paper ejection error]	
Error point	Error detecting condition	
411	The paper ejection sensor was ON when the paper left the paper ejection sensor. Second paper feed motor is burnt.	Or the fuse for the
417	The paper ejection sensor was ON at the start of the operation.	

Error type	A10 [AF original feed error]
Error point	Error detecting condition
102	Original jam error resulting from pulled-out original. - The original IN sensor switched OFF while the original registration sensor and the original IN sensor were ON during scanning. - The original ejection sensor switched OFF before completion of scanning (prior to SIG_C output). - The original registration sensor switched OFF from the time of completion of leading edge insertion operation to the time of scanning start. * Error issued from AF.
103	Original jam at the AF registration sensor (extra-long paper error). Simplex AF: The original registration sensor fails to switch OFF after the original IN sensor switched ON. Duplex AF: AF registration sensor did not go OFF after the original started to feed. * Error issued from AF.
105	Original jam at the original IN sensor The original IN sensor fails to switch OFF after the original registration sensor switched OFF (max: movement of 84 mm). * Error issued from AF.
106	Original jam at the original OUT sensor Simplex AF: The original OUT sensor fails to switch OFF after the original IN sensor switched OFF. Duplex AF: The original OUT sensor fails to switch OFF after the original registration sensor switched OFF. * Error issued from AF.
107	Original registration sensor non-arrival jam Original fails to reach the original registration sensor after the feed operation started. * Error issued from AF.
108	Original IN sensor non-arrival jam Original fails to reach the original IN sensor after the scanning operation started (max.: movement of 42 mm). * Error issued from AF.
109	Original OUT sensor non-arrival jam Simplex AF: Original fails to reach the original OUT sensor after the original IN sensor switched ON. Duplex AF: Oiginal fails to reach the original OUT sensor after the original started to feed. * Error issued from AF.
169	Original jammed in the AF unit due to the reason that the AF unit was opened during the operation.
178	Original flipper sensor non-arrival jam Original fails to reach the Original flipper sensor after the original was fed. * Only on Duplex AF.
179	Original jam at the original flipper sensor. Original flipper sensor fails to switch OFF after the original was fed. * Only on Duplex AF.
180	Gap between the originals not constant. * Only on Duplex AF.

Error type	A25 [Central transport error]	
Error point	Error detecting condition	
419	The central transport sensor was ON at the start of the operation.	
441	The central transport sensor was ON at the timing the paper should have left the central transport sensor (central transport error).	
447	The paper ejection sensor did not detect the paper at the timing when the paper should have arrived, and when the machine stops, the central transport sensor was ON (central transport error).	
455	Central transport error (during the recovery movement).	

Error type	A48 [Paper jam] (Drum No. 2)	
Error point	Error detecting condition	
410	The paper ejection sensor was OFF at the timing when the paper should have arrived to the sensor and when the machine stopped, the central transport sensor was OFF. (Paper jammed on Drum No.2)	

3. Option errors (B**)

Error type	B01 [Card counter: No card]
Panel display	B01-*** Insert Card in Key/Card Counter
Error reset method	Insert the card.
Error point	Error detecting condition
730	Card counter: No card

Error type	B21 [Storage memory: Read/write error]
Panel display	B21-*** !!System Error!! Turn Main Power SW OFF Then ON If Recovery has Failed, Call Service
Error reset method	Switch power OFF, then ON.
Error point	Error detecting condition
715	Storage memory access error.

Error type	B22 [Job separator: Power OFF]
Panel display	B22-*** !! Job Separator is OFF !! Turn On Power Switch of it
Error reset method	Press the Reset key. (Confirm that the job separator is switched ON.)
Error point	Error detecting condition
721	With the tape separation setting switched ON, the job separator is in a Power OFF state when the Start key is pressed.
727	The BUSY signal remains at <l> (powe is switches OFF during job separator tape output) for more than 7 seconds after the cluster-A signal switches ON.</l>

Error type	B23 [Job separator: No-tape error]
Panel display	B23-*** No Paper Tape in Job Separator Replace Tape Roll
Error reset method	Press the Reset key. (Confirm that the job separator is switched ON.)
Error point	Error detecting condition
722	With the BUSY signal at <h> (Power ON) and the tape separation setting switched ON, the tape detection signal is at <h> (no tape) when the Start key is pressed.</h></h>
723	The tape detection signal is at <h> (no tape) after the tape output command is issued, and the BUSY signal changed from <l> to <h> (after completion of operation).</h></l></h>

Error type	B24 [Job separator: Jam error]
Panel display	B24-*** Paper Tape Jam in Job Separator Remove Paper Tape
Error reset method	Press the Reset key. (Confirm that the job separator jam is reset.)
Error point	Error detecting condition
724	With the BUSY signal at <h> (Power ON) and the tape separation setting switched ON, the tape detection signal is at <l> (tape remaining) when the Start key is pressed.</l></h>
725	The tape jam detection signal remains at <h> for more than 1.2 seconds after cluster-A signal switched ON (tape transport error).</h>
726	The tape jam detection signal was at <l> when the BUSY signal changed from <l> to <h> or it remains at <l> for more than 7 seconds after the cluster-A signal switched ON (tape ejection error).</l></h></l></l>

Error type	B29 [USB Memory: Incompatible Device (HUB)]
Panel display	B29-*** Unable to Recognize (HUB) Remove Paper Tape
Error reset method	Touch [Close] button, Press the Reset key, or remove the USB device.
Error point	Error detecting condition
926	USB-HUB is inserted.

Error type	B30 [USB Memory: Non-Compliant Device]
Panel display	B30-*** Unable to Recognize Remove Paper Tape
Error reset method	Touch [Close] button, Press the Reset key, or remove the USB device.
Error point	Error detecting condition
910	Non-Compliant USB device is inserted.

Error type	B31 [Network cable not connected]
Panel display	B31-*** !! No Linked Printer Detected !! Check Cable Connection and Power Supply for Linked Printer
Error reset method	Press the Reset key.
Error point	Error detecting condition
916	The network cable was not connected when the machine starts up.

Error type	B32 [NIC: External communication error]
Panel display	B32-*** !! No Linked Printer Detected !! Check Cable Connection and Power Supply for Linked Printer
Error reset method	Press the Reset key. << Remove the cause of the error in the printer to cancel the error. >>
Error point	Error detecting condition
914	MIB information request error. * Transmission not possible after waiting 3 seconds (WAK), no response from communication destination, interruption by communication destination, TCP/IP not operating in the NET-D, or unauthorized interrupt received from the main unit, etc.
915	No MIB information returned. * No response from the NET-D (communication destination) for 50 seconds (error detected in main unit).
917	Network communication error.

Error type	B33 [IP address setup error]
Panel display	B33-*** No IP Address Assigned to This Printer Contact Your Network Administrator
Error reset method	Press the Reset key.
Error point	Error detecting condition
931	The DHCP is ON, but the DHCP server cannot be found.

Error type	B34 [RLP: No-toner error]
Panel display	B34-*** No Toner in Linked Printer
Error reset method	Press the Reset key.
Error point	Error detecting condition
919	No toner in the linked printer.

Error type	B35 [RLP: Service error]
Panel display	B35-*** Linked Printer in Error
Error reset method	Press the Reset key.
Error point	Error detecting condition
970	Service error in the linked printer.

Error type	B38 [USB Memory: Folder making error]
Panel display	B38-*** USB Memory Folder Error
Error reset method	Touch [Close] button, Press the Reset key, or remove the USB device.
Error point	Error detecting condition
911	Error in making RISO Folder.

Error type	B39 [USB Memory: Read/Write error]
Panel display	B39-*** USB Memory Read/Write Error
Error reset method	Touch [Close] button, Press the Reset key, or remove the USB device.
Error point	Error detecting condition
999	Error in USB file system.

4. Consumable errors (C**)

Error type	C01 [Ink cartridge replacement] (Drum No. 1)
Panel display	C01-*** No Ink in Print Cylinder 1 Replace Ink Cartridge
Error reset method	First ink cartridge set SW: OFF -> ON << Install a new ink cartridge to cancel the error. >> Or first print drum safety SW: OFF, first print drum connection signal: OFF, and first print drum lock sensor: OFF << Pull out the print drum to cancel the error. >>
Error point	Error detecting condition
512	The ink sensor does not switch ON when the inking operation is conducted for the set time (inkless).
563	The remaining volume information in the ink tag reached the maximum value.
574	Inkless error was generated 5 times for the same ink cartridge.

Error type	C02 [Master roll replacement]
Panel display	C02-*** No Master Replace Master Roll
Error reset method	Master-making unit sensor: OFF -> ON << Open and close the master-making unit to cancel the error. >>
Error point	Error detecting condition
200	The 10-ms-interval master end check detected 2 consecutive times during the master transport.
240	The remaining volume information in the master tag reached the maximum value.
253	[No-master] error was generated twice for the same master.

Error type	C03 [Master disposal box full (Drum No. 1)
Panel display	C03-*** Master Disposal Box 1 is Full Empty Master Disposal Box
Error reset method	Switch OFF the first master disposal box sensor OFF, then turn ON after waiting at least 5 seconds.
Error point	Error detecting condition
308	After the master compression motor activates in the compressing direction, the compression detection switches ON before the FG count exceeds the specified volume.
311	The master compression software counter reached the full detection set count.

Error type	C04 [No-paper error]
Panel display	C04-*** Add Paper
Error reset method	The paper detection sensor is ON.
Error point	Error detecting condition
402	The paper detection sensor is OFF.

Error type	C05 [Both master disposal boxes full]
Panel display	C05-*** Master Disposal Box 1 and 2 are Full Empty Both Master Disposal Boxes
Error reset method	Switch OFF the first master disposal box sensor, then switch it back ON after waiting at least 5 seconds. Switch OFF the second master disposal box sensor, then switch ON after waiting at least 5 seconds.
Error point	Error detecting condition
317	After the master compression motor on the first print drum side or second print drum side begins to apply a compression force, the compression detection activates and the other disposal box exceeds 90% capacity before the FG count exceeds the specified volume (Expected disposal box full).

Error type	C41 [Ink cartridge replacement] (Drum No. 2)
Panel display	C41-*** No Ink in Print Cylinder 2 Replace Ink Cartridge
Error reset method	Second ink cartridge set SW: OFF -> ON << Install a new ink cartridge to cancel the error. >> Or second print drum safety SW: OFF, second print drum connection signal: OFF, and second print drum lock sensor: OFF << Pull out the print drum to cancel the error. >>
Error point	Error detecting condition
512	The ink sensor does not turn ON when inking is performed for the set time (inkless).
563	The remaining volume information in the ink tag reached the maximum value.
574	An inkless error was generated 5 consecutive times for the same ink cartridge.

Error type	C43 [Master disposal box full] (Drum No. 2)
Panel display	C43-*** Master Disposal Box 2 is Full Empty Master Disposal Box
Error reset method	Switch OFF the second master disposal box sensor, then switch back ON after waiting at least 5 seconds.
Error point	Error detecting condition
308	After the master compression motor activates in the compressing direction, the compression detection switches ON before the FG count exceeds the specified volume.

5. Set check errors (D**)

Error type	D01 [Print drum not installed] (Drum No. 1)
Panel display	D01-*** Set Print Cylinder in Place
Error reset method	First print drum safety SW: ON, first print drum connection signal: ON, and first print drum lock sensor: ON << Install the print drum to clear the error. >>
Error point	Error detecting condition
526	The print drum is removed. (The connection signal, safety SW, and lock sensor are OFF.)
527	The print drum connection signal is OFF after the print drum is installed.
528	The print drum safety switch is OFF after the print drum is installed.
529	The print drum lock sensor is OFF after the print drum is installed (time-out during insertion: 5 sec).
530	The print drum connection signal does not switch OFF within 5 seconds after the print drum safety switch switches OFF, when the print drum is removed.
581	The drum safety switch turned OFF during machine operation.

Error type	D02 [Print drum incompatibility] (Drum No. 1)
Panel display	D02-*** Wrong-Type Print Cylinder Installed in Cylinder Position 1 Replace with Correct Type
Error reset method	Replace with the correct print drum. (The print drum code must match the machine model.)
Error point	Error detecting condition
532	The print drum is incompatible. (Drum code not correct)
580	The print drum is incompatible. (Drum style not correct)

Error type	D03 [Ink cartridge not installed] (Drum No. 1)
Panel display	D03-*** Install Ink Cartridge in Print Cylinder 1
Error reset method	First ink cartridge set SW: ON
Error point	Error detecting condition
533	The ink cartridge set switch is OFF.

Error type	D04 [Ink cartridge incompatibility] (Drum No. 1)
Panel display	D04-*** Wrong-type Ink Cartridge Installed in Cylinder 1 or Cannot Read Ink Info Replace Ink Cartridge or Contact Dealer/Riso Office
Error reset method	Replace with a correct ink cartridge.
Error point	Error detecting condition
534	The ink cartridge is incompatible.
560	Error due to missing ink cartridge tag.
561	Ink tag communication error (tag communication error due to noise).
562	Abnormal ink tag information. Checksum error, verification error, storage of master information, etc.
564	Serial number mismatch detected during the periodic ink tag serial number check.
575	Software error involving ink tag. Antenna CH selection error, erroneous writing of data to write-protected area.

Error type	D05 [Master not installed]
Panel display	D05-*** Set Master in Place
Error reset method	Master-making unit sensor: OFF << Open the master-making unit to clear the error. >>
Error point	Error detecting condition
210	The master detection sensor is OFF.

Error type	D07 [Master disposal box not installed] (Drum No. 1)
Panel display	D07-*** Set Master Disposal Box 1 in Place
Error reset method	First master disposal box safety SW: ON << Install the master disposal box to clear the error. >>
Error point	Error detecting condition
310	The master disposal box safety switch is OFF.

Error type	D08 [Master-making unit not installed]
Panel display	D08-*** Set Master Making Unit in Place
Error reset method	With the master-making unit removed, the second master-loading sensor or the master-making unit pull- out position sensor is ON, and the cover safety SW is OFF. << Install the master-making unit into the main unit to clear the error. >>
Error point	Error detecting condition
224	The master-making unit is in the pulled-out condition (safety switch, lock sensor OFF).

Error type	D09 [Master-making unit not cover closed]
Panel display	D09-*** Close Master Making Unit Cover
Error reset method	Master-making unit sensor: ON << Close the master-making unit to clear the error. >>
Error point	Error detecting condition
212	The master-making unit Top cover set sensor is OFF.

Error type	D11 [Front cover not closed]
Panel display	D11-*** Close Front Cover
Error reset method	Front cover safety SW: ON
Error point	Error detecting condition
535	The front cover safety switch is OFF.

Error type	D13 [Machine rear cover not closed]
Panel display	D13-*** Rear Cover of Main Body is Off Call Service
Error reset method	Rear cover safety SW: ON
Error point	Error detecting condition
009	The rear cover of the main unit is not closed. (The rear cover safety switch is OFF.)

Error type	D17 [Master incompatibility]
Panel display	D17-*** Wrong-type Master Installed or Cannot Read Master Info Replace Master Roll or Contact dealer/Riso office
Error reset method	Master-making unit safety SW: ON -> OFF and Master-making unit lock sensor: ON -> OFF << Pull out the master-making unit to clear the error. >>
Error point	Error detecting condition
236	The master is incompatible.
237	Error due to missing master tag.
238	Master tag communication error (tag communication error due to noise).
239	Abnormal master tag information. Checksum error, verification error, storage of ink information, etc.
241	Serial number mismatch detected during the periodic master tag serial number check.
256	Software error involving master tag. Antenna CH selection error, erroneous writing of data to write-protected area.

Error type	D18 [Print drum ready to pull-out] (Drum No. 1)
Panel display	D18-*** Print Cylinder 1 has been Unlocked
Error reset method	First print drum connection signal: ON -> OFF and first print drum safety SW: ON -> OFF << Pull out the print drum to clear the error. >> Or Front cover set SW: ON << Close the front cover to clear the error. >> Or master-making unit release button: ON << Press the master-making unit release button to clear the error. >>
Error point	Error detecting condition
522	The print drum is in the pull-out position. (The print drum lock solenoid is ON.)

Error type	D19 [Master-making unit ready to pull out]
Panel display	D19-*** Master Making Unit has been Unlocked
Error reset method	Second master-loading sensor: OFF; Master-making unit pull-out position sensor: OFF; and Cover safety SW: OFF Or master-making unit drawer cover safety SW: OFF -> ON
Error point	Error detecting condition
223	The master-making unit is in the pull-out position (The master making unit lock solenoid ON).

Error type	D20 [Master-making unit drawer cover not closed]
Panel display	D20-*** Close Master Making Unit Access Cover
Error reset method	Master-making unit drawer cover safety SW: OFF -> ON
Error point	Error detecting condition
254	The master-making unit drawer cover is not in position. (Master-making unit removed (second master-loading position sensor: ON or master-making unit pull-out position sensor: ON) and cover safety SW: OFF)

Error type	D21 [Master-making unit drawer cover ready to open]
Panel display	D21-*** Ready to Open Master Making Unit Access Cover
Error reset method	Master-making unit drawer cover safety SW: ON -> OFF Or Pull-out position sensor: ON -> OFF
Error point	Error detecting condition
255	The master-making unit drawer cover ready to open. (Master-making unit pull-out position sensor: ON and Cover safety SW: ON)

Error type	D22 [Print drum pull-out command] (Drum No. 1)
Panel display	D22-*** Print Cylinder 1 is not Set in Place Press Cylinder Release Button and Pull Out Print Cylinder Once after Button Lights
Error reset method	First print drum safety SW: OFF; first print drum connection signal: OFF; and first print drum lock sensor: OFF
Error point	Error detecting condition
531	The print drum lock sensor is ON when the print drum lock solenoid is ON. (The check is performed 100 ms after the print drum lock solenoid switches ON.)
540	Data cannot be written to or read from the EEPROM on the print drum. (EEPROM cannot be accessed.)
542	CRC error in the EEPROM on the print drum (data error in the EEPROM).
577	The print drum is not set into position properly.

Error type	D23 [AF Feed cover opened]
Panel display	D23-*** AF Feed Cover Opened Close AF Feed Cover
Error reset method	Set switch ON
Error point	Error detecting condition
177	The original feed cover of the Duplex AF Unit is opened.

Error type	D28 [D to P delete job Drum not in position] (Print Drum No.1)
Panel display	D28-*** Two Color Print Job Received Set Drum No.1 in Position
Error reset method	Set the print drum in position and delete the print job.
Error point	Error detecting condition
573	Specified print drum for D to P (data to print from PC) is not set in position.

Error type	D30 [Front cover setting demand]
Panel display	D30-*** Starting Recovery Action Close Front Cover
Error reset method	Front cover SW: ON
Error point	Error detecting condition
576	The front cover is not in position when a single print drum is set into place in position and the print drum removal button is pressed without the print drum at position B.

Error type	D41 [Print drum not installed] (Drum No. 2)
Panel display	D41-*** Set Print Cylinder 2 in Place
Error reset method	Second print drum safety SW: ON, second print drum connection signal: ON, and second print drum lock sensor: ON << Install the print drum to clear the error. >>
Error point	Error detecting condition
526	The print drum has been pulled out. (The connection signal, safety SW, and lock sensor are OFF.)
527	The print drum connection signal is OFF after the print drum is installed.
528	The print drum safety switch is OFF after the print drum is installed.
529	The print drum lock sensor is OFF after the print drum is installed (time-out during insertion: 5 sec).
530	The print drum connection signal does not switch OFF within 5 seconds after the print drum safety switch switched OFF when the print drum is removed.
581	The print drum safety switch turned OFF during machine operation.

Error type	D42 [Print drum incompatibility] (Drum No. 2)
Panel display	D42-*** Wrong-Type Print Cylinder Installed in Cylinder Position 2 Replace with Correct Type
Error reset method	Replace with the correct print drum. (The print drum code must match the machine model.)
Error point	Error detecting condition
532	The print drum is incompatible. (Drum code is not correct)
580	The print drum is incompatible. (Drum style is not correct)

Error type	D43 [Ink cartridge not installed] (Drum No. 2)
Panel display	D43-*** Install Ink Cartridge in Print Cylinder 2
Error reset method	Second ink cartridge set SW: ON
Error point	Error detecting condition
533	The ink cartridge set switch is OFF.

Error type	D44 [Ink cartridge incompatibility] (Drum No. 2)
Panel display	D44-*** Wrong-type Ink Cartridge Installed in Cylinder 2 or Cannot Read Ink Info Replace Ink Cartridge or Contact Dealer/Riso Office
Error reset method	Replace with the correct ink cartridge.
Error point	Error detecting condition
534	The ink cartridge is incompatible.
560	Error due to missing ink cartridge tag.
561	Ink tag communication error (tag communication error due to noise).
562	Abnormal ink tag information. Checksum error, verification error, storage of master information, etc.
564	Serial number mismatch detected during periodic ink tag serial number check.
575	Software error involving ink tag. Antenna CH selection error, erroneous writing of data to write-protected area.

Error type	D47 [Master disposal box not installed] (Drum No. 2)
Panel display	D47-*** Set Master Disposal Box 2 in Place
Error reset method	Second master disposal box safety SW: ON << Install the master disposal box to clear the error. >>
Error point	Error detecting condition
310	The master disposal box safety switch is OFF.

Error type	D58 [Print drum ready to pull-out] (Drum No. 2)
Panel display	D58-*** Print Cylinder 2 has been Unlocked
Error reset method	Second print drum connection signal: ON -> OFF and second print drum safety SW: ON -> OFF << Pull out the print drum to clear the error. >> Or front cover SW: ON << Close the front cover to clear the error. >> Or master-making unit release button: ON << Press the master-making unit release button to clear the error. >>
Error point	Error detecting condition
522	The print drum is in the pull-out position. (The print drum lock solenoid is ON.)

Error type	D62 [Print drum pull-out command] (Drum No. 2)
Panel display	D62-*** Print Cylinder 2 is not Set in Place Press Cylinder Release Button and Pull Out Print Cylinder Once after Button Lights
Error reset method	Second print drum safety SW: OFF; second print drum connection signal: OFF; and second print drum lock sensor: OFF
Emerupatint	
Error point	Error detecting condition
531	Error detecting condition The print drum lock sensor is ON when the print drum lock solenoid is ON. (The check is performed 100 ms after the print drum lock solenoid switches ON.)
531 540	Error detecting condition The print drum lock sensor is ON when the print drum lock solenoid is ON. (The check is performed 100 ms after the print drum lock solenoid switches ON.) Data cannot be written to or read from the EEPROM on the print drum. (EEPROM cannot be accessed.)
531 540 542	Error detecting condition The print drum lock sensor is ON when the print drum lock solenoid is ON. (The check is performed 100 ms after the print drum lock solenoid switches ON.) Data cannot be written to or read from the EEPROM on the print drum. (EEPROM cannot be accessed.) CRC error in the EEPROM on the print drum (data error in the EEPROM).

Error type	D68 [D to P delete job Drum not in position] (Print Drum No.2)
Panel display	D68-*** Two Color Print Job Received Set Drum No.2 in Position
Error reset method	Set the print drum in position and delete the print job.
Error point	Error detecting condition
573	Specified print drum for D to P (data to print from PC) is not set in position.

6. Warning (E**: Service engineer call)

Error type	E01 [Battery replacement]
Panel display	E01-*** !!Battery Replacement!! Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
010	Battery voltage is below 2.1 V when power is switched ON (replacement of battery required). * Since the battery voltage detected by the software is 0.5 V below the actual battery voltage, error detection activates when the value set in the RTC is below 1.6 V. * Precautions for battery replacement Switch ON main power before replacing the battery. If the battery is replaced with the main unit OFF the following two problems may occur: The internal clock data will be incorrect> Reset the clock. The <t25-026 no-battery=""> error will be issued once again when power is switched ON after battery replacement> Switch power OFF, then ON again, and confirm that no error is issued.</t25-026>

Error type	E02 [Maintenance call]
Panel display	E02-*** !!Maintenance!! Call Service
Error reset method	Press the Reset key.
Error point	Error detecting condition
011	The master count reached the value set in the Test Mode at power ON, reset, or at operation completion (maintenance call).
012	The copy count reached the value set in the Test Mode at power ON, reset, or at operation completion (maintenance call).
022	The maintenance count in the print drum reached the value set in the Test Mode at power ON, reset, or at operation completion (maintenance call).

7. Warning (F**: Others)

Error type	F01 [No master on Drum No. 1]
Panel display	F01-*** No Master on Print Cylinder 1 Make a New Master
Error reset method	Press the Reset key. Set an original and execute the master-making operation.
Error point	Error detecting condition
015	There is no master on the print drum at the start of printing.

Error type	F02 [Paper/master-making size incompatibility 1]
Panel display	F02-*** Page Format is Larger than Paper Size !! Possible Ink Smudges on Prints !!
Error reset method	Press the Continue button or Stop button (Check print paper size).
Error point	Error detecting condition
018	Paper and master-making sizes (master image size on print drum) do not match at the start of printing.

Error type	F03 [Multi-up: Paper size error]
Panel display	F03-*** !! Multi-Up is Not Available with This Paper Size !! Replace with Proper Paper of Standard Size
Error reset method	Touch [Close] button, or press Stop button. Set proper standard-size paper on the paper feed tray.
Error point	Error detecting condition
016	The multi-up operation was executed with nonstandard (customs size) paper.
Error type	F04 [Admin. Setting: Maximum setting reached]
Panel display	F04-*** !! Reached Maximum Count !! Cannot Continue
Error reset method	Touch [Close] button, press Stop key, or press Reset key.
Error point	Error detecting condition
905	The master-making count reached the maximum count.
906	The print count reached the maximum count.

Error type	F06 [N-Up: Incorrect paper size]
Panel display	F06-*** !! N-Up is Not Available with This Paper Size !! Replace with Proper Paper of Standard Size
Error reset method	Press the Close button. Set standard-size paper on the paper feed tray.
Error point	Error detecting condition
004	The multi-up operation was executed with nonstandard (customs size) paper.

Error type	F07 [N-Up: Incorrect original size]
Panel display	F07-*** !! Multi-Up is Not Available with This Original Size !! Replace with Original of Proper Size
Error reset method	Press the Reset button or Stop button. Use correct size original.
Error point	Error detecting condition
023	N-Up operation was executed with wrong size original or custom size original.

Error type	F09 [Booklet: Incorrect paper size]
Panel display	F09-*** !! Booklet is Not Available with This Paper Size !! Replace with Original of Proper Size
Error reset method	Touch [Close] button, or press Stop button. Set proper standard-size paper on the paper feed tray.
Error point	Error detecting condition
810	Booklet operation was executed with wrong size non-standard (customs size) paper.

Error type	F10 [Paper/master-making size incompatibility 2]
Panel display	F10-*** Page Format is Larger than Paper Size !! Possible Ink Smudges on Prints !! (Continue->PROOF Key)
Error reset method	Press the Continue button or Stop button. (Check print paper size.)
Error point	Error detecting condition
021	Paper and master-making sizes (image size on print drum) do not match at the start of proof printing.

Error type	F11 [Auto size reproduction disabled (falls outside range of possible size reproduction)]
Panel display	F11-*** !! Original Size Exceeds Limitation of Booklet !! Specify the original size
Error reset method	Press the Reset key or Stop key.
Error point	Error detecting condition
717	When Booklet was selected, the original size was out of range or not in standard size.

Error type	F13 [4P Booklet was selected with wrong size paper on the paper feed tray]
Panel display	F13-*** !! 4P booklet is not available with this paper size !! Replace with proper paper of standard size
Error reset method	Touch the [Close] key, or press the Reset or Stop key. Place appropriate size paper on feed tray.
Error point	Error detecting condition
718	4P Booklet was selected with non-standard size paper on the paper feed tray.

Error type	F14 [4P Booklet was selected with wrong size original]
Panel display	F14-*** !! Original size exceeds limitation of 4P booklet !! Specify the original size
Error reset method	Press the Reset or Stop key.
Error point	Error detecting condition
719	When Booklet was selected, the original size was out of range or not in standard size.

Error type	F20 [Binding margin: Wrong paper size]
Panel display	F20-*** !! Reproduction Cannot be made with this paper size !! Replace with proper paper of standard size
Error reset method	Touch the [Close] key, or press the Reset or Stop key. Place appropriate size paper on feed tray.
Error point	Error detecting condition
30	Wrong size paper or non-stadard size paper is used for Binding margin with auto reduce-reproduction enabled.

Error type	F24 [Auto size reproduction disabled (falls outside range of possible size reproduction)]
Panel display	F24-*** !! Images may not fit in Frame of Paper with This Reproduction Size !! Re-perform the size setting
Error reset method	Press the Reset key. (Manually enter the size reproduction setting.)
Error point	Error detecting condition
037	Size reproduction setting falls outside the permissible range when the operation started based on the auto size reproduction setting.

Error type	F30 [Multiple feed check]
Panel display	F30-*** !! Possible Multiple Paper Feed !! Check Printed Copies
Error reset method	Press the Multiple Feed Detection OFF button or Reset key.
Error point	Error detecting condition
425	Multiple feed with the first sheet.
426	Multiple feed.

Error type	F32 [Storage memory: No space available]
Panel display	F32-*** !! The Data Storage Area has Become Full !! Clear Old Storage Data
Error reset method	Press the Reset key. (Check the available capacity.)
Error point	Error detecting condition
713	Inadequate storage memory during data write.

Error type	F33 [Storage memory: No space available]
Panel display	F33-*** !! The file size is too large to store on USB flash drive !! Change the USB flash drive or delete some files to make spaces
Error reset method	Touch the [Cancel] key, or press the Reset or Stop key.
Error point	Error detecting condition
913	Inadequate USB flash drive memory during data write.

Error type	F37 [Combined use of book mode and AF not possible]
Panel display	F37-*** !! Book Shadow Editor is Not Available with ADF !! Place Original on Stage Glass
Error reset method	Press the Close button.
Error point	Error detecting condition
050	With book mode set, an original was found on the AF at the start of the master-making operation.

Error type	F43 [DtoP original/paper incompatibility]
Panel display	F43-*** !! Unmatched Size Current Page and Printing Paper !! Check Paper Size
Error reset method	Press the Continue button or Stop button. (Check print paper size.)
Error point	Error detecting condition
902	Paper and original sizes do not correspond at the start of DtoP master-making.

Error type	F44 [Auto size reproduction disabled (exceeds original size detection range)]
Panel display	F44-*** !! No Auto Reproduction with This Original and Printing Paper !! Select Size Manually
Error reset method	Touch the [Cancel] key, or press the Reset or Stop key. (Manually enter the size reproduction setting.)
Error point	Error detecting condition
901	The original size detection failed. (The original did not conform to the detection specification.)

Error type	F45 [Presence of original unknown/no original]
Panel display	F45-*** Original Undetected Reset Original
Error reset method	Reset the original. Press the Continue button or Stop button.
Error point	Error detecting condition
954	Master-making operation or RLP output was executed with the auto tray or auto size reproduction setting set to ON, and the presence of an original could not be detected.
959	Master-making operation or RLP output was executed without an original.
981	When the Next button was clicked on the multi-up count entry screen of Multi-up Wizard, no original was detected.

Error type	F46 [Print drum color not matching with DtoP job color] (Drum No. 1)
Panel display	F46-*** !! Unmatched Color Data Color and Cylinder Color 1 !! Change Print Cylinder Color: (Color name)
Error reset method	Press the Reset key or the Continue button. (Replace the print drum.)
Error point	Error detecting condition
903	The color of the print drum fails to match between the color specified for DtoP job and the color set for the specified print mode.

Error type	F47 [Combined use of AF and postcard size reproduction not possible]
Panel display	F47-*** [A4->Card] Reproduction is Not Available in combination with ADF Place Original on Stage Glass
Error reset method	Remove the original from the AF and press the Close button.
Error point	Error detecting condition
904	Master-making operation or RLP output was performed with <a4 postcard="" to=""> size reproduction selected and original set on the AF.</a4>

Error type	F48 [Multi-up: Outside original size detection range]
Panel display	F48-*** Original Size Exceeds Limitation of Multi-Up Specify Original Size
Error reset method	Press the Reset key.
Error point	Error detecting condition
955	Multi-up is selected with non-applicable original size or customs size original.

Error type	F49 [Multi-up: No original when Start key pressed]
Panel display	F49-*** Original Undetected Reset Original
Error reset method	Press the Stop button.
Error point	Error detecting condition
989	No original is detected when the Enter key is pressed for the single original/multi-original multi-up setting.

Error type	F52 [Use of RLP mode not possible (RLP information not acquired)]
Panel display	F52-*** Acquiring Linked Printer Configuration Data Please Wait a Moment
Error reset method	Press the Close button.
Error point	Error detecting condition
912	RLP mode cannot be used. (RLP information has not been acquired.)

Error type	F58 [Use of RLP mode not possible (NET-D initialization in process)]
Panel display	F58-*** Starting Up RISORINC-NET Please Wait a Moment
Error reset method	Press the Close button.
Error point	Error detecting condition
927	RLP mode cannot be used. (The NET-D is being initialized.)

Error type	F60 [RLP auto-link/master-making continuation confirmation (when printing quantity is 0)]
Panel display	F60-*** !! Number of Copies is set to "0"!! Printing Operation will Start on this Printer (Continue -> START key)
Error reset method	Press the Start key or Stop button.
Error point	Error detecting condition
929	Confirmation of auto-link operation/master-making continuation (when printing quantity is 0).

Error type	F61 [RLP paper/original size incompatibility]
Panel display	F61-*** Set Proper Paper Size in the Linked Printer
Error reset method	Select paper using Manual Feed or Paper Selection.
Error point	Error detecting condition
930	RLP paper/original size is incompatible.

Error type	F62 [RLP auto-link/RLP error]
Panel display	F62-*** !!Auto-Link Operation is Not Available!! Specified Linked Printer may be in Error or Turned OFF
Error reset method	Press the Stop button
Error point	Error detecting condition
956	Error generated on the RLP side during RLP auto-link operation.

Error type	F63 [RLP auto tray selection/nonstandard-size original]
Panel display	F63-*** !! No Auto Paper Size Selection with Irregular Size Original !! Select Paper Size and then Restart
Error reset method	Press the Reset key. (Manually select paper.)
Error point	Error detecting condition
971	RLP output was performed with a nonstandard-size original and auto paper size selection.

Error type	F64 [Specified function disabled, at job reception]
Panel display	F64-*** Processing Print Data from PC This Function is Not Available while Process- ing Current Data
Error reset method	Press the Close button.
Error point	Error detecting condition
964	An instruction involving an exclusive function (scan mode, overlay, name insertion, digitizer, hold, easy separation) was issued for DtoP job reception, development, or awaiting-output status.

Error type	F65 [Scan mode auto-saving size selection/nonstandard-size original]
Panel display	F65-*** Auto Page Size Selection is Not Available for Irregular-Size Original Select Format Size to Store and then Restart
Error reset method	Press the Reset key. (Manually select storage size.)
Error point	Error detecting condition
965	The size selected in auto size (storage data) selection at the start of scanning operation was nonstandard.

Error type	F66 [RLP saddle stitching not possible]
Panel display	F66-*** Saddle Stitching is Not Available with This Paper Size
Error reset method	Press the Close button.
Error point	Error detecting condition
962	The paper in the specified paper feed tray was not A3, B4, or A4 (landscape) at the time of RLP output with saddle stitching function switched ON.

Error type	F67 [RLP rotation sorting not possible]
Panel display	F67-*** !! Improper Paper for Rotation Sorting !! Set Same Sized Paper in 2 Trays, One in Horizontal and Other in Vertical Direction
Error reset method	Press the Close button.
Error point	Error detecting condition
963	No paper of the size specified by the RLP Paper Tray is set in either portrait or landscape orientation at the time of RLP output with rotation sorting function switched ON.

Error type	F68 [Specified area/traced color separation: Excess number of specified areas]
Panel display	F68-*** !! Exceeding Number of Editing Areas Selected !! Deselect Some Areas and Redo Color Separation
Error reset method	Press the Reset key.
Error point	Error detecting condition
173	The number of specified areas for specified area/traced color separation exceeded the maximum value.

Error type	F69 [Specified area/traced color separation: Distance of border for specified area longer than master-making size]
Panel display	F69-*** Cannot Read Selection Area Reset Original Correctly
Error reset method	Press the Reset key.
Error point	Error detecting condition
174	The distance of the border of the specified area for specified area/traced color separation exceeds the length against the master being made.

Error type	F70 [Specified area/traced color separation: Image processing time-out error]
Panel display	F70-*** !! Complicated Area Form !! Re-circle Editing Areas and Redo Color Separation
Error reset method	Press the Reset key.
Error point	Error detecting condition
175	Image processing time-out error during specified area/traced color separation.

Error type	F71 [No master on Drum No. 2]
Panel display	F71-*** No Master on Print Cylinder 2 Make a New Master
Error reset method	Press the Reset key. Set an original and execute the master-making operation.
Error point	Error detecting condition
015	No master is found on the print drum at the start of printing.

Error type	F72 [Hand-written/red-color separation: Image processing time-out error]
Panel display	F72-*** !! Complicated Area Form !! Re-circle Editing Areas and Redo Color Separation
Error reset method	Press the Reset key.
Error point	Error detecting condition
176	Image processing time-out error during hand-written/hand-written (ink)/red-color separation.

Error type	F73 [Auto tray selection not possible, RLP tray designation disabled]
Panel display	F73-*** Paper Size cannot be Defined by Specified Reproduction Size Select Paper Size Manually
Error reset method	Select paper using Manual Feed or Paper Selection. Press the Reset key.
Error point	Error detecting condition
975	The specified fixed size reproduction and the detected original size do not match at the start of RLP. Or zoom/independent size reproduction was specified.

Error type	F74 [50ppm not possible due to low temperature]
Panel display	F74-*** Printer Temperature is Low <150ppm> is Not Available [Cancel] [Continue]
Error reset method	Press the Stop button or Continue button.
Error point	Error detecting condition
980	150ppm printing was selected at temperatures below 15°C while using the second print drum.

Error type	F75 [Combined use of specified area separation and AF not possible]
Panel display	F75-*** Specified Area Separation is Not Available in Combination with ADF Place Original on Stage Glass
Error reset method	Press the Reset key.
Error point	Error detecting condition
985	With specified area separation selected, an original was on the AF at the start of master-making.

Error type	F76 [Print drum color not matching with DtoP job color] (Drum No. 2)
Panel display	F76-*** !! Unmatched Color Data Color and Cylinder Color 2 !! Change Print Cylinder Color: (Color name)
Error reset method	Press the Reset key or Continue button. (Replace the print drum.)
Error point	Error detecting condition
903	The color of the print drum to be used fails to match with the DtoP job specified print color.

Error type	F77 [Print drum color not matching with DtoP job color] (Drum No. 1)
Panel display	F77-*** !! Unmatched Color Data Color and Cylinder Colors !! Change Print Cylinders Color: (Color name)
Error reset method	Press the Reset key or Continue button. (Replace the print drum.)
Error point	Error detecting condition
903	The color of the print drum to be used fails to match with the DtoP job specified color.

Error type	F78 [Digitizer: Stage cover open]
Panel display	F78-*** Close Stage Cover If original moves you may not get desired result
Error reset method	Close the stage cover. Press the Close button.
Error point	Error detecting condition
731	The stage cover was opened during the digitizing operation.

Error type	F79 [Digitizer: No original during rescanning]
Panel display	F79-*** Set Original and Press Start Key Re-scanning will be Started to Add Image Processing
Error reset method	Press the Start key or Stop button.
Error point	Error detecting condition
732	No original was detected at the start of digitizer re-scanning.

Error type	F80 [Paper not compatible with dual-color printing]
Panel display	F80-*** Dual-Color Printing is Not Available for This Paper Size Load Paper Larger than B5 (Portrait)
Error reset method	Press the Reset key. (Use paper larger than the minimum size.)
Error point	Error detecting condition
966	The paper size is smaller than the minimum paper size for dual-color printing.

Error type	F81 [Dual-color printing: Ink-saving setting only for one print drum]
Panel display	F81-*** Either of Masters is Made in Ink Saving Process Operate Dual-Color Printing?
Error reset method	Press the Stop button or Continue button.
Error point	Error detecting condition
967	At the start of dual-color printing operation, the master was made with one print drum in ink-saving master-making mode and the other in normal master-making mode.

Error type	F82 [Paper not compatible for Drum No. 2 printing]
Panel display	F82-*** Printing is Not Available for This Paper Size with Print Cylinder 2 Set Print Cylinder to be Used in Cylinder Position 1 and Re-select Printing Mode
Error reset method	Press the Reset key.
Error point	Error detecting condition
974	The paper size is smaller than the minimum paper size for printing with Drum No. 2.

Error type	F83 [Use of Drum No. 2 mode not possible]
Panel display	F83-*** Printing is Not Available for This Setting with Print Cylinder 2 Set Print Cylinder to be Used in Cylinder Position 1 and Re-select Printing Mode
Error reset method	Press the Reset key.
Error point	Error detecting condition
973	There is no confidential master on Drum No. 1 at the start of printing/proof-printing operation with Drum No. 2.

Error type	F85 [Scanning not possible: External CI not connected]
Panel display	F85-*** ! Scanning is Not Possible ! External CI is not Connected or Processing Connection Check Cable Connection
Error reset method	Press the Close button or Start key.
Error point	Error detecting condition
995	The PS7R is not connected.
997	Jog is unsuccessfully deleted from PS7R.
998	Sanned data unsuccessfully received by PS7R.

Error type	F90 [Supply stock management (ink)]
Panel display	F90-*** Check Stock of Required Ink and Please Order If Needed
Error reset method	Press the Close button.
Error point	Error detecting condition
957	Stock management counter for the relevant color ink is over the Specified quantity (setting value).

Error type	F91 [Supply stock management (master)]
Panel display	F91-*** Check Stock of Required Master and Please Order If Needed
Error reset method	Press the Close button.
Error point	Error detecting condition
958	Stock management counter for the master is over the Specified quantity (setting value).

Error type	F93 [Reproduction ratio is larger than the master making area]
Panel display	F93-*** Present reproduction ratio may not fit in the master making area Please check Please Order If Needed
Error reset method	Press START key to continue, or press CANCEL key to stop. (Change the reproduction ratio manually)
Error point	Error detecting condition
936	With the reproduction ratio set to AUTO, the reproduction image size became larger than the master making area.

Error type	F94 [Protect confirmation (compulsory)]
Panel display	F94-*** - protect - The master will be removed Please Order If Needed
Error reset method	Press START key.
Error point	Error detecting condition
007	The protect function is active when the machine power is turned ON, waking up from sleep, or when the print drum is inserted in the machine.

Error type	F95 [Protect confirmation]
Panel display	F95-*** - protect - The master will be removed Please Order If Needed
Error reset method	Press START key to remove the master, or press STOP key to keep the master on the drum.
Error point	Error detecting condition
800	The message displays after current job is finished with the protect function active.

Error type	F96 [Admin. Mode: Due Date for the ID Counter Report]
Panel display	F96-*** Please inform this message to your administrator Due date for ID counter report
Error reset method	Touch [Close] key, or Press Stop or Reset key.
Error point	Error detecting condition
918	The due date came for the ID counter report set by the Admin. setting.

Error type	F97 [Admin. Mode: Due Date for the Counter Report]
Panel display	F97-*** Please inform this message to your administrator Due date for counter report
Error reset method	Touch [Close] key, or Press Stop or Reset key.
Error point	Error detecting condition
928	The due date came for the counter report set by the Admin. setting.
8. Parameter Errors (H**)

Error type	H01 [General supply parameter input] (Drum No. 1)	
Panel display	Ink (Cylinder 1) Cannot Get Consumable Info Input Values Required	
Error reset method	Enter the parameters and press the Start key.	
Error point	Error detecting condition	
566	Enter parameters, since first ink tag color information, steady-state viscosity information, and FP viscosity information are unreliable.	

Error type	H04 [General supply parameter input (master)]	
Panel display	Ink (Master) Cannot Get Consumable Info Input Values Required	
Error reset method	Enter the parameters and press the Start key.	
Error point	Error detecting condition	
242	Enter parameters, since master tag sensitivity information, steady-state viscosity information, and FP viscosity information are unreliable.	

Error type	H07 [General supply parameter input] (Drum No. 2)	
Panel display	Ink (Cylinder 2) Cannot Get Consumable Info Input Values Required	
Error reset method	Enter parameters and press the Start key.	
Error point	Error detecting condition	
571	Enter parameters, since second ink tag color information, steady-state viscosity information, and FP viscosity information are unreliable.	

9. J-type Error Display (J**)

Paper jam (including AF original feed error) generates an internal $[A^{**}]$ error. However, since this type of error is combined with another error code, the panel displays a $[J^{**}]$ error code.

<**> in the [J**] error code is a value obtained by assigning a bit to each error (one of four types shown in the table below) subject to paper jam processing and adding the numeric values corresponding to the assigned bits.

The detailed error code is displayed by pressing the < * > key on the Operation Panel.

Error type	J** [Paper jam error]
Panel display	J** Paper Jam Remove Paper in Indicated Areas and Press [OK] Button

Error type	Error name	Bit	Numeric value	
A10	AF original feed error	Bit 0	1 🗲	
A09	Paper ejection error	Bit 1	2	▲
A08	Paper jam on print drum (No.1 Drum)	Bit 2	4 🔶	
A07	Paper feed error	Bit 3	8	
A25	Central transport error	Bit 4	16	
A48	Paper jam on print drum (No.2 Drum)	Bit 5	32	

Example: When <A10> and <A08> are generated, [J05] is displayed.

10. Errors Saved in Memory

The following errors are saved in memory and cannot be cleared simply by switching off the power.

Error type	Description
A04	Master removal error on first print drum side
A44	Master removal error on second print drum side
A08	Paper jam on first print drum
A48	Paper jam on second print drum
A25	Central transport error
C01	First ink cartridge replacement
C41	Second ink cartridge replacement
C02	Master roll replacement
C03	First master disposal box full
C43	Second master disposal box full
C05	Both master disposal boxes full

CHAPTER 17: OTHER PRECAUTIONS

CONTENTS

1. Downloading the DSP Software.....17-2

1. Downloading the DSP Software

NOTE: The DSP Software is required to synchronize the Second Paper Feed Motor to the Main Motor. The DSP Software is download in the Extension-PCB2. If the Extension-PCB2 is replaced, the DSP Software must be downloaded.

The DSP Software changes the speed of the Second Paper Feed Motor when feeding the paper from the second paper feed area to the print drum, according to the print drum angle when the Timing Roller and Guide Roller start feeding the paper. This control action keeps the image print position constant on all the prints. The DSP Software also controls the Second Paper Feed Motor speed the moment the print drum pinches the leading edge of the paper. When the leading edge of the paper arrives at the print drum, according to the paper size and to which print drum the paper is sent to, the trailing edge of the paper is still pinched by the Timing Roller and Guide Roller. The DSP Software makes sure that the Second Paper Feed Motor feeds the paper in the same speed as the print drum to ensure smooth paper feeding through the printing area to prevent smeared image which may occur if the Timing Roller and Guide Roller pull on the paper during the printing.

The DSP Software version should match with that of the Mechanical Control PCB and NeoROSA PCB firmware. The compatibility information on the firmware program versions will be issued at the same time when updated DSP Software is announced.

- (1) With the appropriate firmware for the mechanical control PCB and for the NeoROASA PCB downloaded, turn ON the machine in test mode to confirm that the machine properly goes into Test Mode.
- (2) Switch OFF the machine power and insert the download CF Card in an adopter or in USB Memory Stick, containing the DSP software.
- (3) Launch Test Mode and run Test Mode No. 102 [DSP Download (Main, Secondary)].
- (4) Check the operation panel and make sure that the download is completed (The download should take around one minute).
- (5) Switch OFF the machine power and remove the CF card or USB memory stick.
- (6) Launch Test Mode again and run Test Mode No. 126 (Optional Configuration Check). Check the software version on the display to confirm that the DSP Software is upgraded.

MZ7 & MZ9 Series contain the DSP Software in the Mechanical Control PCB.

MZ8 & MZ10 Series contain the DSP Software in the Extension-PCB2.



RISO MZ870/MZ890/MZ1070/MZ1090 Technical Manual <Differential information compared to the existing MZ7 & MZ9 Series.>

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