

Model: Haokan-P1		Date: 26-Oct-17	No.: RJ089001
Subject: Notes on replacing the cassette stand/carriage		Prepared by: K. Tsutsui	
From: System Strategy Dept. IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Service Manual Revision

Notes on replacing the cassette stand and cassette carriage were added to the following sections of the field service manual.

Cassette Stand

4 Replacement and Adjustment > Covers > Cassette Stand

Cassette Carriage

4 Replacement and Adjustment > Boards > Lift Board (up to step 16)

The cassette stand and carriage are registered as a service part as a set. The components are packed separately in the same box as shown below.



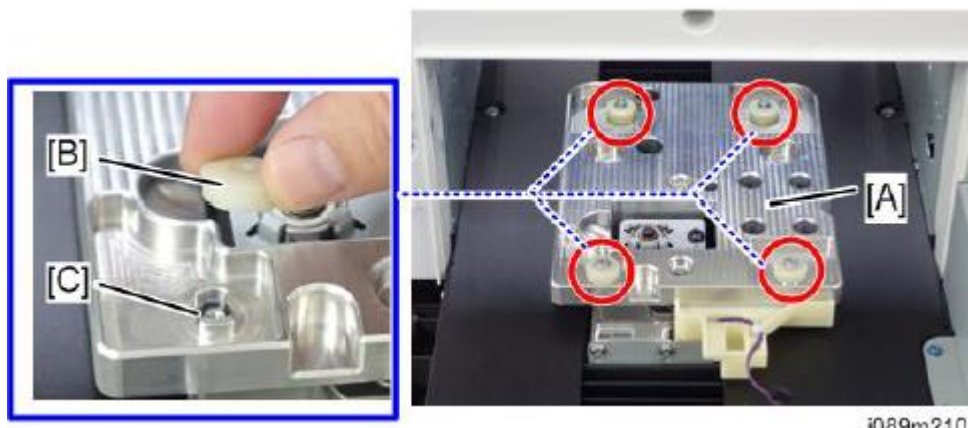
Cassette Stand



Cassette Carriage

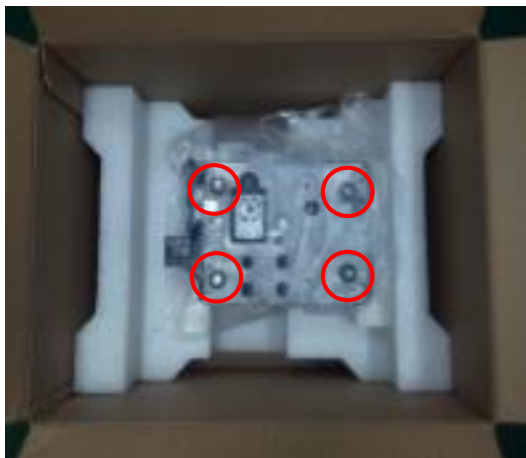
NOTE

- When replacing the cassette stand and/or carriage, make sure to replace the two components supplied in the box together as a set, because the height and level of the stand are precisely adjusted accordingly with the carriage at the factory.



The height and level are adjusted at four points (circled in red above) on the carriage [A] with caps [B] and spacers [C].

- The position of the caps/spacers are also specified for each set of stand/carriage. Do not change the position of the caps/spacers.



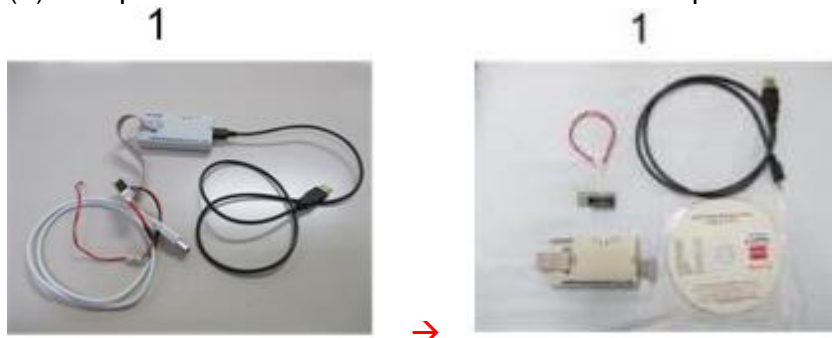
Model: Haokan-P1		Date: 11-Dec-17	No.: RJ089002
Subject: FSM correction - Finisher Firmware Update		Prepared by: Tsutsui	
From: System Strategy Dept. IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Please make the following corrections to the Finisher field service manual, in this section:

2. Troubleshooting > Firmware Update

Equipment Needed > Hardware

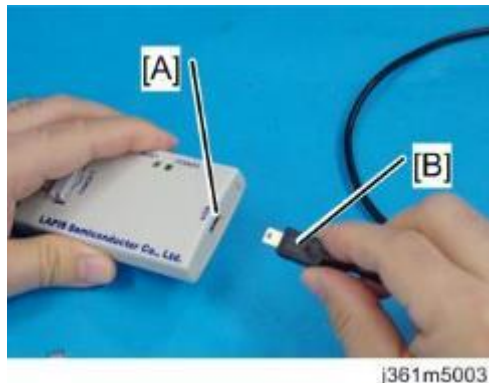
- (1) 1. uEASE (Writing tool. Includes the USB cable [A-miniB], ~~power supply USB cable,~~ relay board, and connecting harness.)
 * Note that the supplied setup CD is not used.
- (2) 2. PC (with ~~2-USB ports~~ → 1 USB port available)
- (3) The picture below in “3.This machine” was replaced.



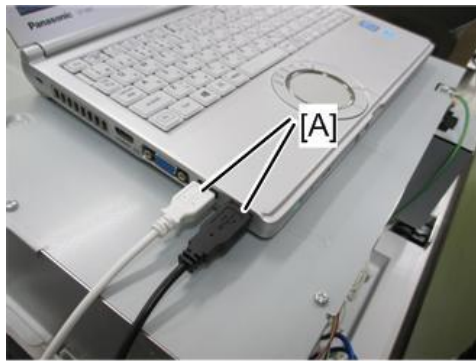
Preparation > Installing the USB driver for uEASE

- (1) The following step was added after step 2.

Connect the USB-MiniB connector [B] to the uEASE's USB port [A].



- (2) 3. Connect ~~the 2 USB cables [A] of uEASE~~ → the USB-A connector [A] to the PC's USB ports. ~~Each cable can be inserted into any of the USB ports.~~
- (3) The picture below was replaced.



j361m0033



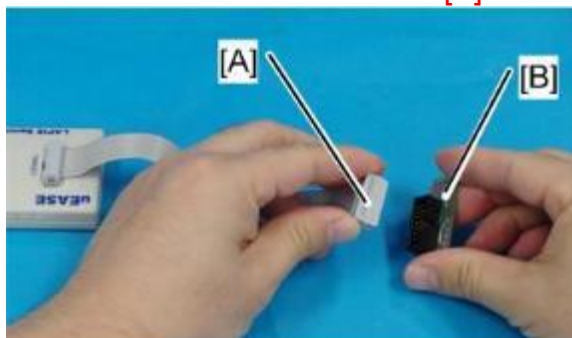
j361m5002

- (4) 11. Remove ~~the 2 uEASE USB cables~~ → the USB cable from the computer's USB ports.

Preparation > Connecting uEASE and the Machine

- (1) The following step was added after step 2.

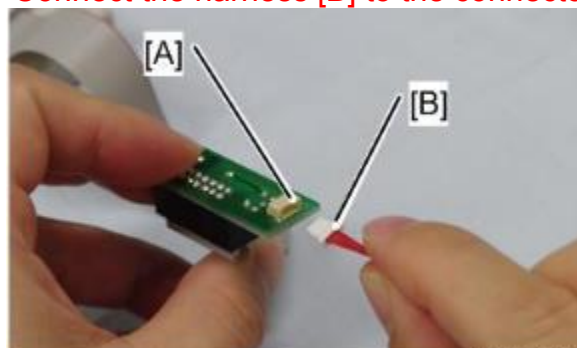
Connect the FFC from uEASE [A] to the connector on the relay board [B].



x1

j361m5004

Connect the harness [B] to the connector on the relay board [A].



x1

j361m5005

Model: Haokan-P1

Date: 11-Dec-17

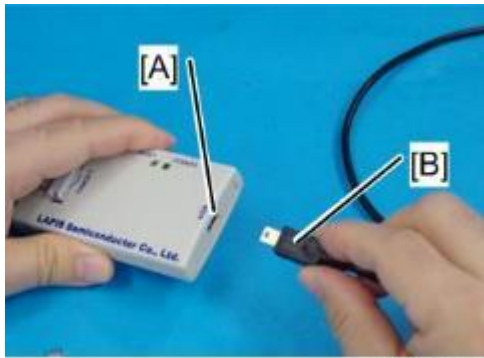
No.: RJ089002

- (2) 4. Connect ~~the uEASE harness [B]~~ → the harness from the relay board [B] to the main PCB's connector [A].

Preparation > Connecting uEASE and the PC

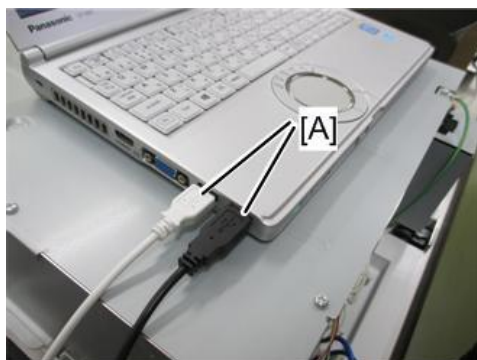
- (1) The following step was added before step 1.

Connect the USB-MiniB connector [B] to the uEASE's USB port [A].



j361m5003

- (2) 1. Connect ~~the 2 USB cables [A] of uEASE~~ → the USB-A connector [A] to the PC's USB ports. ~~Each cable can be inserted into any of the USB ports.~~
- (3) The picture below was replaced.



j361m0033

→



j361m5002

Model: Haokan-P1		Date: 19-Mar-18	No.: RJ089003
Subject: Temporarily unavailable service parts		Prepared by: Tsutsui	
From: System Strategy Dept. IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input checked="" type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Announcement on Temporarily Unavailable Service Parts

This bulletin provides information on the service parts currently unavailable along with their substitutes.

This bulletin is mainly for RE, because there was difference between the service parts information which RCL sent last day based on design changed matters and actual inventory status. But, RCL would like the other regions to take care for your reference.

Hereafter, common announcement to all the regions will follow as soon as the parts become available.

p/n: J0883642 (DC STEPPER MOTOR:ASS'Y)

The above is temporarily substituted with p/n: J0883638 (DC STEPPER MOTOR:MM42:ASS'Y).

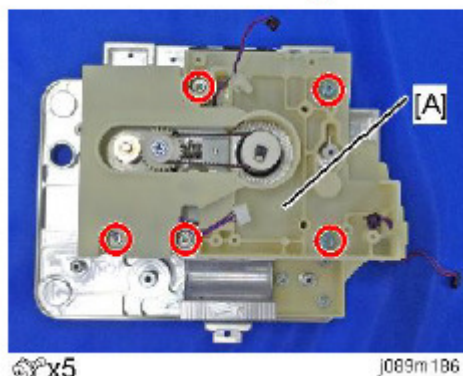
P/n: J0883638 is listed in the parts catalog ver.1.02 and ver.1.03.

Replacement procedure is described in the following section of the FSM released in July 2017 (first release):

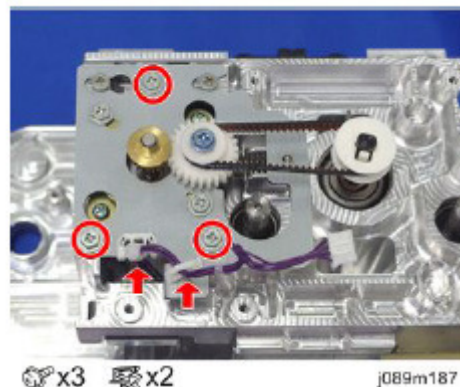
4. Replacement and Adjustment > Motors > Lift Motor Unit

1. Remove the lift board. (page 107 "Lift Board")

2. Remove the lift board bracket [A].



3. Remove 3 screws and release 2 clamps.

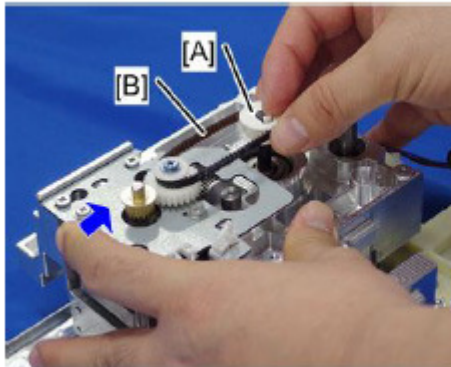


Model: Haakan-P1

Date: 19-Mar-18

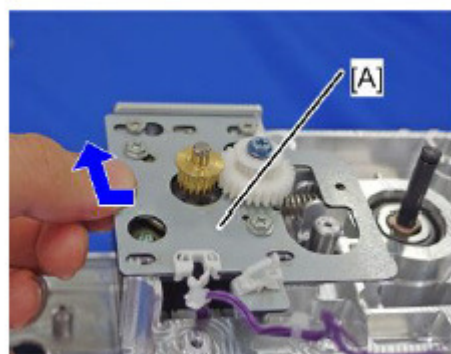
No.: RJ089003

4. Remove the gear [A] and the belt [B].



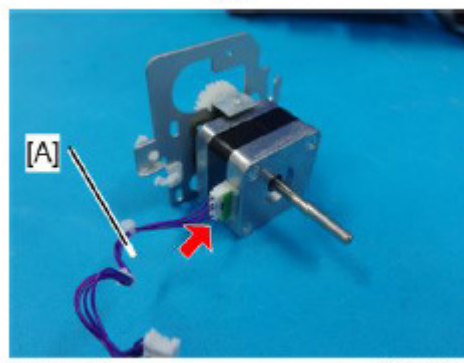
j089m188

5. Remove the lift motor unit [A].



j089m189

6. Remove the harness [A].



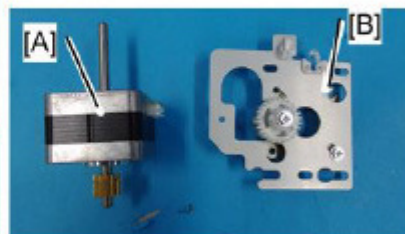
x1

j089m190

7. Separate the lift motor [A] from the bracket [B].



x2

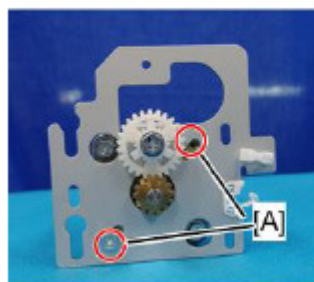


j089m190a

The note below is IMPORTANT.

Note

- Do not remove or loosen the 2 screws [A], as this will prevent accurate engagement of the gears.



j089m190a

Model: Haokan-P1

Date: 19-Mar-18

No.: RJ089003

p/n: J3620323 (CASSETTE:A4 LENGTHWISE:ASS'Y)

The above is temporarily substituted with p/n: J3620320.

P/n: J3620320 is listed in the parts catalog ver.1.02 and ver.1.03.

p/n: J0892757 (RADIAL BALL BEARING:CARRIAGE:PRESS FIT)

The above is temporarily unavailable and is not listed in the parts catalog. There is no substitute for this part.

p/n: J0881099 (SEPARATION PLATE:DUCT:2:ASS'Y)

The above is for the modified units added with two fans and is mentioned in the parts catalog ver.1.03. There is no substitute for this part.

p/n: J0890336 (CARRIAGE SECTION:SUB SCANNING:ASS'Y)

The above is temporarily substituted with p/n: J0880336 (CARRIAGE SECTION:SUB SCANNING:ASS'Y).

P/n: J0880336 is listed in the parts catalog ver.1.02 only.

P/n: J0890336 is listed in the parts catalog ver.1.03 only.

When p/n: J0890336 is available, this will be listed in the parts catalog ver.1.02, too

Model: Haakan-P1		Date: 5-Apr-18	No.: RJ089004
Subject: Notice for the product transportation		Prepared by: Tsutsui	
From: System Business Department, IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input checked="" type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

This is an IMPORTANT NOTICE and REQUEST regarding transportation of the product.

After installing the product at the customer site, the product may be transported for the following purposes:

1. Exhibitions and demonstrations
2. Lease to other end users
3. Send to service depot for repair
4. Other

To avoid damages to the product during transport for the above, it is requested to positively follow the instructions below. These instructions are described in the Operation Instructions and FSM, but were copied to this bulletin as an important reminder.

- When moving the machine a long distance such as for off-site repair, according to the type of ink cartridge in use, do as follows:

- M-size ink cartridges (RICOH Garment Ink Cartridge X Type 1):
Do not remove the ink cartridges. Make sure that the ink cartridges are fully inserted, and then move the machine as it is.

Reason:

Transporting the product with the cartridge removed may cause the ink to leak out.

- L-size ink cartridges (RICOH Garment Ink Cartridge X (Hi Yield) Type 1):
Remove the ink cartridges. After moving the machine, reinstall the ink cartridges by fully inserting them, and then leave them installed in the machine.

Reason:

Vibration from transport may cause L-size ink cartridge to loosen and damage the surrounding components due to its size (weight).

- Always remove the cassette before moving the machine.

Reason:

Components inside the cassette carriage may become damaged due to the weight of the cassette and the vibration from transport.

Model: Haokan- P1		Date: 22-May-18	No.: RJ089005
Subject: Field Service Manual Correction		Prepared by: Tsutsui	
From: System Business Department, IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Part information <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> Electrical <input type="checkbox"/> Paper path <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Product Safety <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5	

Please apply the following corrections to your Ri 100 field service manual, in section:

6. Troubleshooting > Error Codes > Service Call Code Tables

Descriptions were corrected in **red** and added in **blue**.

~~SC28221~~ **SC28211**

- TRIGGER
- Air leak from head tank
 - Wear of the head tank seal (slow leak)
- CAUSE
- Defective carriage unit
 - Disconnection or short-circuit of the harness between the HRB and Ink Lever Sensor
 - Disconnection or short-circuit of the FFC between the HRB and CTL board
- SOLUTION
1. Turn the main power switch Off and then back On.
 2. Replace the carriage unit.
 3. Replace the harness connecting the HRB and Ink Lever Sensor
 4. Replace the FCC connecting the HRB and CTL board

~~SC28222~~ **SC28212**

- TRIGGER
- Air leak from head tank
 - Wear of the head tank seal (slow leak)
- CAUSE
- Defective carriage unit
 - Disconnection or short-circuit of the harness between the HRB and Ink Lever Sensor
 - Disconnection or short-circuit of the FFC between the HRB and CTL board

Model: Haokan- P1

Date: 22-May-18

No.: RJ089005

- SOLUTION**
1. Turn the main power switch Off and then back On.
 2. Replace the carriage unit.
 3. Replace the harness connecting the HRB and Ink Lever Sensor.
 4. Replace the FCC connecting the HRB and CTL board.

~~SC28223~~ **SC28213**

- TRIGGER**
- Air leak from head tank
 - Wear of the head tank seal (slow leak)
- CAUSE**
- Defective carriage unit
 - Disconnection of short-circuit of the harness between the HRB and Ink Lever Sensor
 - Disconnection or short-circuit of the FCC between the HRB and CTL board
- SOLUTION**
1. Turn the main power switch Off and then back On.
 2. Replace the carriage unit.
 3. Replace the harness connecting the HRB and Ink Lever Sensor.
 4. Replace the FCC connecting the HRB and CTL board.

Model: Haokna-P1		Date: 13-Sep-18	No.: RJ089007
Subject: Field service manual correction: add Sleeve & Socks Tray		Prepared by: Tsutsui	
From: System Business Department, IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Sleeve & Socks tray was added as a new option. So, please apply the following **red** description to the existing description in your Ri 100 field service manual, in section:

1.Product information > Specifications > Basic Specifications > Main Machine > Printable area type

Sleeve & socks tray (option) 204 × 142 mm (8.0 × 5.6 inches)

1.Product information > Specifications > Basic Specifications > Optional cassette

Sleeve & Socks tray

External dimensions (W × D × H) : 242.2 × 409.2 × 97.9 mm (9.5 × 16.1 × 3.9 inches)

Weight : Approx. 2.4 kg (5.3 lb.)

1.Product information > Operation Specifications > Printing Operation > Print Area >

The printing ranges of each cassette are as follows:

- **Sleeve & Socks Tray: 204 × 142mm (8.0 × 5.6 inches)**

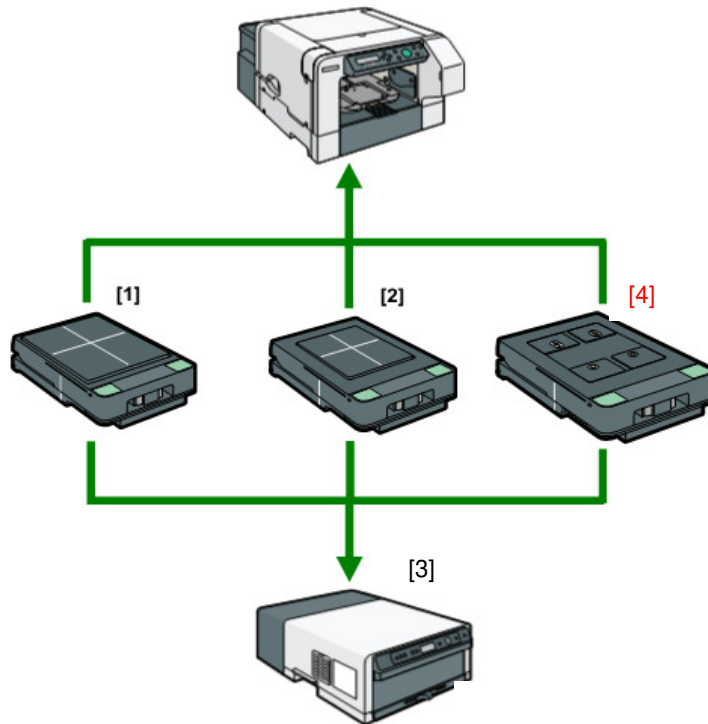
1.Product information > Overview > Machine Codes and Peripherals Configuration > Options

Code: J373

Product Name: RICOH Tray for Sleeve & Socks Type 1

Remarks: Sleeve & Socks tray

1.Product information > Overview > Machine Codes and Peripherals Configuration > Diagram



(4) RICOH Tray for Sleeve & Socks Type 1 (Optional tray)

Next, the FSM correction is below.

1.Product information > Specifications > Basic Specifications > Optional cassette

- A5 tray
~~2.13 kg (4.7 lb.)~~ -> **Approx. 2.6 kg (5.8 lb.)**

Model: Haokan-P1		Date: 9-Jul-18	No.: RJ089006
Subject: Checking method for Inkjet Head normal operation		Prepared by: Tsutsui	
From: System Business Department, IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Below, when abnormality occurs in the printed image, please note how to judge whether the Inkjet Head is normal or not.

1. Not use the color sample (image of fish) in the unit

(1) Request

It is NOT possible to judge whether there is an abnormality in the Inkjet Head by using the color sample (image of fish) prepared as default in the unit. The below shows where the image sample (image of fish) is described in the FSM.

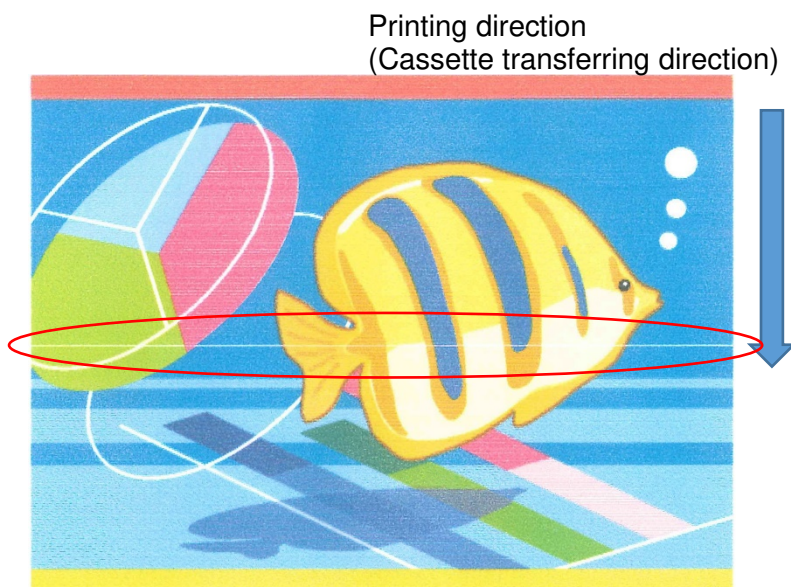
4. Replacement and Adjustment > Print Head Cleaning and Adjustment > Color Demo Print

Therefore, don't use the image for checking the Inkjet Head

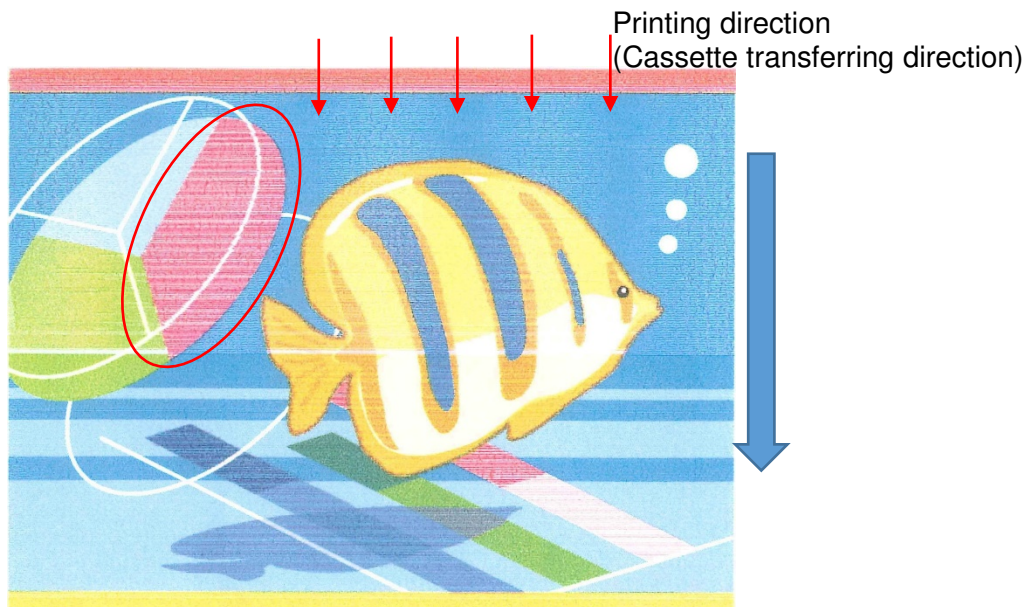
(2) Reason

The image and its printing operation (single scan) are for the former products (Aficio SG series), and white lines and color unevenness may occur when printing the image on paper with Ri 100.

Ex1. When printed on paper, white line (red circles) occurs at the center of the printing direction.



Ex.2 When printing on paper, color unevenness (pointed by red arrows) occurs in the blue image in parallel to the printing direction, or multiple white lines (ex. magenta portion in the red circle) in magenta, orange, and dark blue image portion.



2. How to check whether the Inkjet Head is normal or not

(1) Description of printing operation and printing image

Ri 100 prints with multiple scans (overprint) of the Inkjet Head by gradually moving the print media such as garment in the sub scanning direction (cassette transferring direction). Even if there is a misalignment of the ink ejection position with the Nozzle Check described below, it will be filled with multiple scans (overprinting) in the actual printing. So the white lines hardly occur.

(2) If white lines appear on the printed image, please confirm and correspond according to the following method.

Checking method

- 1. Nozzle Check
- 2. Head Position

Please check the printed pattern on paper by the above method. For setting a paper to the cassette, refer to the FSM below.

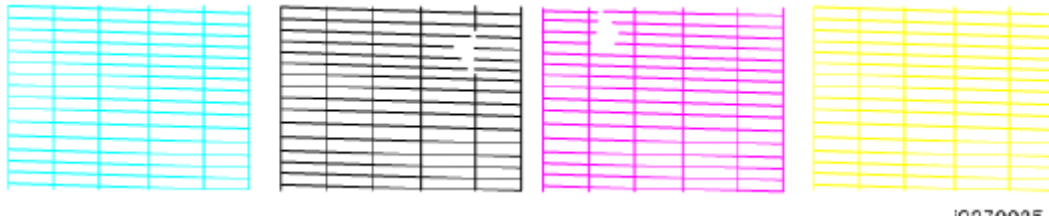
4. Replacement and Adjustment > Print Head Cleaning and Adjustment > Preparing for Test Printing

Model: Haokan-P1

Date: 9-Jul-18

No.: RJ089006

For the Nozzle Check, confirm only line chipping (caused by clogged nozzle).
Ex. The below printing patterns show that black and magenta nozzles are clogged.



And, the judgment for deviation of ejection position (line misalignment etc.) is unnecessary.

Correspondence in case of line chipping of Nozzle Check pattern (nozzle clogging)

- Head cleaning: 3 times
- Head flushing: 1 time
- Leave the unit overnight (either power ON or OFF is OK)

Execute in the order of the above (Head cleaning: 3 times -> Head flushing: 1 time -> leaving), print the Nozzle Check pattern again, and please check the condition of recovery.

In the case that no recover even after carrying out the above maintenance, please judge it as unrecoverable.

(3) Remarks

As mentioned above, Ri 100 prints with multiple scans (overprint) of the Inkjet Head by gradually moving the printing media such as garment moving in the sub scan direction. Therefore, even if there are deviations in ejection position seen by Nozzle Check and some clogged nozzles (non-adjacent nozzles), they are filled with multiple scans (overprint) in the actual printing. So, the white lines are not noticeable.

Also, it may be more effective to change the printing mode to high quality one (ex. "Fast" to "Fine").

Therefore, even if the nozzle can not be completely recovered after the above mentioned Inkjet Head maintenance is implemented, there may be a case that this status does NOT affect the printing quality to customers' actual garment.

So, please judge whether repair (Inkjet Head unit replacement) is necessary or not as a result of the considering of the above (Inkjet Head maintenance and quality of customers' actual printed one).

Model: Haokna-P1		Date: 18-Sep-18	No.: RJ089008
Subject: Firmware ver. for Sleeve & Socks Tray		Prepared by: Tsutsui	
From: System Business Department, IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input checked="" type="checkbox"/> Other (Firmware ver.)	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input checked="" type="checkbox"/> Tier 0.5

Sleeve & Socks tray which RCL informed you by RTB (RJ089007) needs the below firmware version. This is for advanced information before their official firmware release. Please be noted.

Mainframe: Ver. 1.20.0

Design software: Win: Ver. 1.06.000

Mac: Ver. 1.05.000

Remarks

-To use the Sleeve & Socks tray, Mainframe and Design software must be updated simultaneously.

-You don't have to update the printer driver. The current version is available.

Technical Bulletin

PAGE: 1/1

Model: Haakan- P1		Date: 11-Jan-19	No.: RJ089009
Subject: Field Service Manual Correction		Prepared by: Tsutsui	
From: System Business Department, IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting	<input type="checkbox"/> Part information	<input type="checkbox"/> Action required
	<input checked="" type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input checked="" type="checkbox"/> Service manual revision
	<input type="checkbox"/> Paper path	<input type="checkbox"/> Transmit/receive	<input type="checkbox"/> Retrofit information
	<input type="checkbox"/> Product Safety	<input type="checkbox"/> Other ()	<input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Please apply the following corrections to your Ri 100 field service manual.

6. Troubleshooting > Image Problems > Basic Check Points and Specifications

> Ink cartridge

- Print cartridges should be opened before their expiration date and used within ~~six months~~ -> 90 days of being opened. Use new cartridge.

“Six months” is incorrect. Please change “six months” into “90 days”. “90 days” is same description as some instructions for customers.

Model: Haokan-P1		Date: 5-Feb-19	No.: RJ089010
Subject: FSM correction - Finisher Firmware Update : Confirmation		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Please make the following corrections to the Finisher field service manual, in section:

2. Troubleshooting > Firmware Update > Firmware Update Procedure

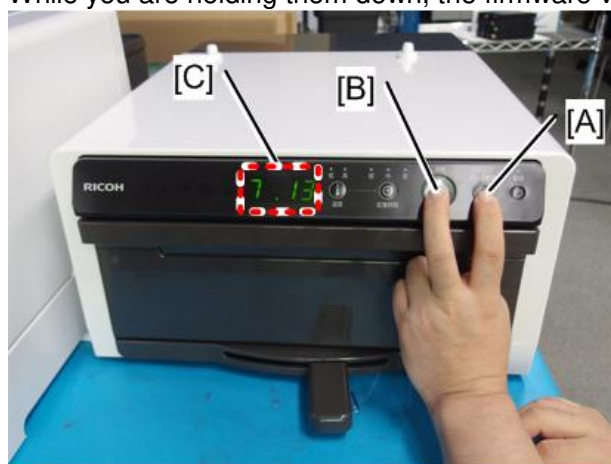
After "Firmware Update Procedure", please add the following new procedure.

Reset Procedure to Confirm Rewrite

Do the reset operation to complete rewriting the firmware.

- 1. Assemble the machine and connect it to the AC power source.**
- 2. With the machine power off, hold down the [Stop/Unlock] key [A] and [Preheat] key [B] at the same time.**

While you are holding them down, the firmware version [C] appears in the display window.



j361m0044

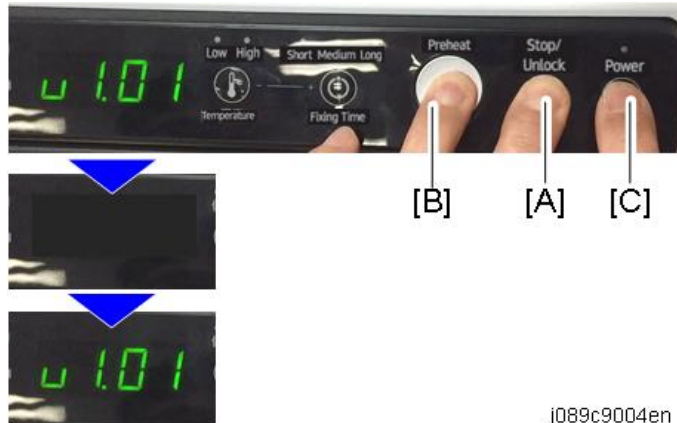
Model: Haakan-P1

Date: 5-Feb-19

No.: RJ089010

3. While holding down [Stop/ Unlock] [A] and [Preheat] [B], press and hold down the [Power] key [C].

The firmware version flashes once.



j089c9004en

Note

- The version number displayed in the photo above is not the most recent.

4. Release all the keys.

The firmware version notice goes off and the power turns off.

How to Confirm Completion of the Reset

5. Switch the mode to Pro2.

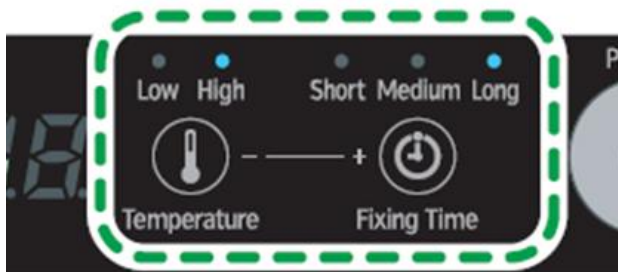
Standard mode -> Professional mode -> Professional 2 mode



j089c9005

Note

- Switch the mode by pressing the [Temperature] key and [Time]* key simultaneously for 2 seconds or more.



J089m720_en

*: Depend on the machine version, the key name is [Time] or [Fixing Time].

Model: Haokan-P1

Date: 5-Feb-19

No.: RJ089010

6. Make sure the Temperature and Time are set as shown below.

Item		Setting
Temperature	Low	150 °C
	High	180 °C
Time (Fixing Time)	Short	30 sec
	Medium	3 min
	Long	4 min

Note

- The settings in the table above are for Pro2 mode (the settings for Std/Pro mode are different).
- In the Pro2 mode, the time for “Press mode state (lever = left)” is displayed.
- In the Pro/Std mode, the time for “Fix mode state (lever = right)” is displayed.

Model: Haokan-P1		Date: 19-Mar.-19	No.: RJ089011
Subject: FSM correction - Finisher Firmware Update : Jig		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

For RUSA and RE only

Please make the following corrections to the Finisher field service manual, in section:

2. Troubleshooting > Firmware Update

Equipment Needed > Hardware

(1) Step 1 was revised below and a new procedure was added as step2.

1. uEASE (Writing tool. Includes the USB cable [A-miniB], ~~relay board, and connecting harness.~~)

* Note that the supplied setup CD is not used.

2. ~~Connecting harness between the Main PCB and the Tool.~~

3. PC (with 1 USB port available)

4. This machine

(2) No.1 picture was replaced.



(3) No.2 picture was newly added.



(4) The number of each picture was changed below.

2 -> 3

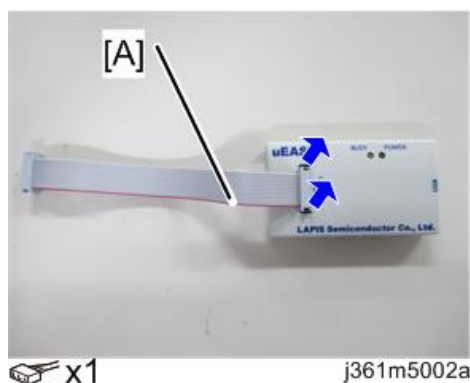
3 -> 4



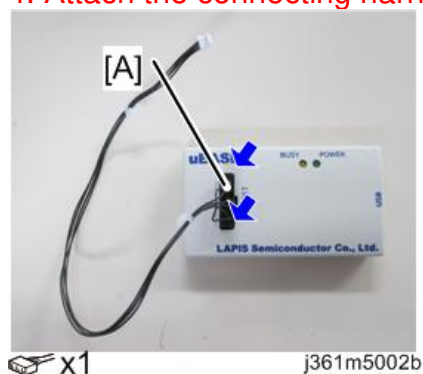
Preparation > Installing the USB driver for uEASE

(1) After the original step 2, the following steps were added.

3. Remove the original FFC [A] from the uEASE .

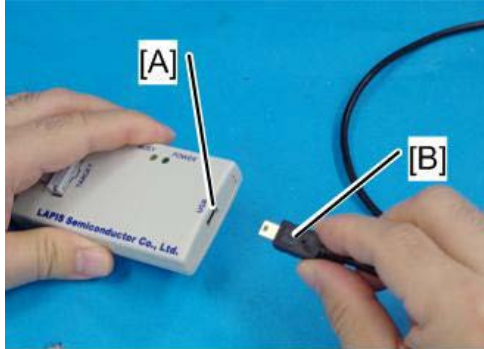


4. Attach the connecting harness [A] to the uEASE .



After step 4 above, the step numbers were shifted by two like below, but the procedures are same as the current ones.

3. -> 5. Connect the USB-MiniB connector [B] to the uEASE's USB port [A].



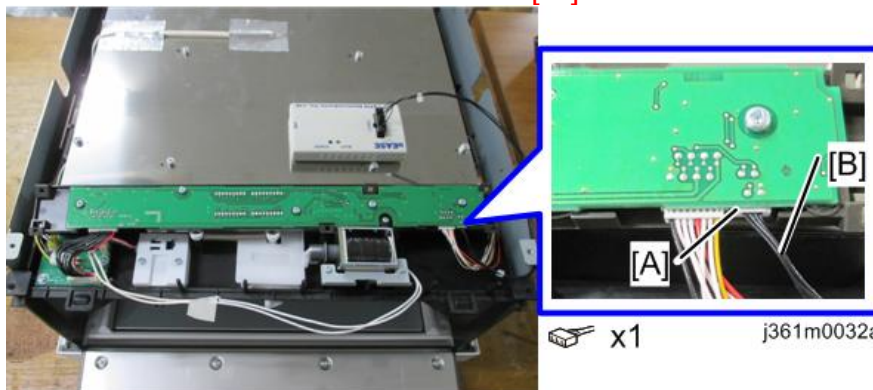
j361m5003

Preparation > Connecting uEASE and the Machine

(1) The procedures from step 3 to step 5 were deleted.

(2) The original step 6 was revised like below as newly step 3.

3. Connect the harness from uEASE [B] to the connector on the main PCB [A].



x1

j361m0032a

That's all.

Model: Haokan-P1		Date: 19-Mar.-19	No.: RJ089012
Subject: FSM correction - Finisher Firmware Update : Procedure		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Please make the following corrections to the Finisher field service manual, in each section:

2. Troubleshooting > Firmware Update > Equipment Needed > Firmware/Software/Driver
Software

Contents	File name	Description
Device information file	jp.zip	Information file for the LSI used with this machine
MWuEASE	U8Dev.zip	Writing software for the update file

MWuEASE.zip

2. Troubleshooting > Firmware Update > Preparation > Software installation

3. According to the software to be installed, execute the following files from the extracted folder.

Software	Installer
Device information file	\jp\SetupDevInfo_j.exe
MWuEASE	\U8Dev\MWuEASE\MWuEASE.exe

\MWuEASE\en\setupMWuEASE.exe

2. Troubleshooting > Firmware Update > Preparation > Installing the USB driver for uEASE

1. Log on a PC with an administrator account.
2. Download the driver, and then extract it.

Add "**Connect the PC and uEASE.**" Between 1. and 2.

1. Log on a PC with an administrator account.
2. **Connect the PC and uEASE.**
3. Download the driver, and then extract it.

Model: Haokan-P1

Date: 19-Mar.-19

No.: RJ089012

2. Troubleshooting > Firmware Update > Firm Update Procedure

Before implementing the update procedure, disconnect the power cable of the Finisher. If the power cable is connected, the procedure does not work.

That's all.

Model: Haokan-P1		Date: 26-Mar-19	No.: RJ089013
Subject: Field Service Manual Correction :SC93300		Prepared by: Kobayashi	
From: System Business Department, IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Please apply the following corrections to your Ri 100 field service manual, in section:

6. Troubleshooting > Error Codes > Service Call Code Tables

Descriptions were corrected in **red** and added in **blue**.

SC93300

Error •HRB fuse blown

SOLUTION

1. Turn the main power switch off and then back on.
2. Replace two flat cables between the CTL board and HRB(the Head Relay Board)
3. Replace the CTL board.
4. Replace the carriage unit.
- ~~2. Replace the relay board. -> No effect~~
- ~~3. Replace the harness of the top cover switch -> No effect~~
- ~~5. Replace the interlock switch -> No effect~~

Model: Haokan-P1		Date: 25-Apr-19	No.: RJ089014
Subject: Field Service Manual Correction Color Demo Print		Prepared by: Kobayashi	
From: Regional Sales Department, Global IP Sales Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Please apply the following corrections to your Ri 100 field service manual, in section:

4. Replacement and Adjustment > Print Head Cleaning and Adjustment >
Color Demo Print

Descriptions were added in **red**.

1. Prepare for test printing. (page 174 "Preparing for Test Printing")
Set fabric as printing media.(Fabric : refer to operating instructions)
2. At the "Ready" prompt, press [/Menu] and select "List/Test Print" and press [#Enter].
3. Select "Color Demo Page" and press [#Enter].
4. Press [Start].

Reason of Change

Color demo pattern may not be able to correctly check the condition on the fabric cause this pattern prints "image for paper" with current firmware version.

Therefore, firmware will be changed to print "image for fabric" to be able to check condition correctly on the fabric.

If you set paper as printing media, the new firmware version may not be able to properly check the condition due to the image for the fabric.

Newer firmware version

Version 1.21.0 will be released

Model: Haokan-P1		Date: 14-Jun.-19	No.: RJ089015
Subject: FSM correction: SC52300		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Part information <input type="checkbox"/> Action required <input checked="" type="checkbox"/> Mechanical <input checked="" type="checkbox"/> Electrical <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Paper path <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Retrofit information <input type="checkbox"/> Product Safety <input type="checkbox"/> Other () <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5		

Please apply the following corrections to your Ri 100 field service manual, in section:

6. Troubleshooting > Error Codes > Service Call Code Tables

The descriptions were added.

SC52300

Pattern	D
Error Name	Height sensors error
Detection Criteria	-
Major Cause	1. Dirtied by ink mist 2. Failure of the Hight sensors or related electrical parts
Solution	1. Clean the sensors, and turn the main power switch off and then back on. 2. Check and replace the following electrical parts (1) The Height sensors (2) The Harness between the Hight sensors and the Relay Board (3) The Relay Board (4) The Harness between the Relay Board and the CTL Board (5) The CTL Board

That's all.

Model: Haokan-P1		Date: 26-Sep-19	No.: RJ089016
Subject: FSM correction: SC28211, 28212, and 28213		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Part information <input type="checkbox"/> Action required <input checked="" type="checkbox"/> Mechanical <input checked="" type="checkbox"/> Electrical <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Paper path <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Retrofit information <input type="checkbox"/> Product Safety <input type="checkbox"/> Other () <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5		

Please apply the following corrections to your Ri 100 field service manual, in section:
 6. Troubleshooting > Error Codes > Service Call Code Tables

The following SC codes were revised and their table is below.

SC28221 -> **SC28211**

SC28222 -> **SC28212**

SC28223 -> **SC28213**

Pattern *	D
Error Name	SC28211 Air detection frequency error (Print Head 1 error)
	SC28212 Air detection frequency error (Print Head 2 error)
	SC28213 Air detection frequency error (Print Head 1,2 error)
Detection Criteria *	-
Major Cause *	1. FCC failure between the HRB and the CTL board 2. Harness failure between the HRB and the air sensors in the carriage unit (Only checking, not replaceable) 3. Air leak of the head tank by the carriage unit failure 4. Deterioration of the head tank seal (slow leak) by the carriage unit failure
Solution *	1. Turn the main power switch off and then back on. 2. Replace the FCC described "A: SIG" in the Point-to-point Diagram to the above cause 1. 3. Replace the carriage unit to the above cause 2, 3, and 4.

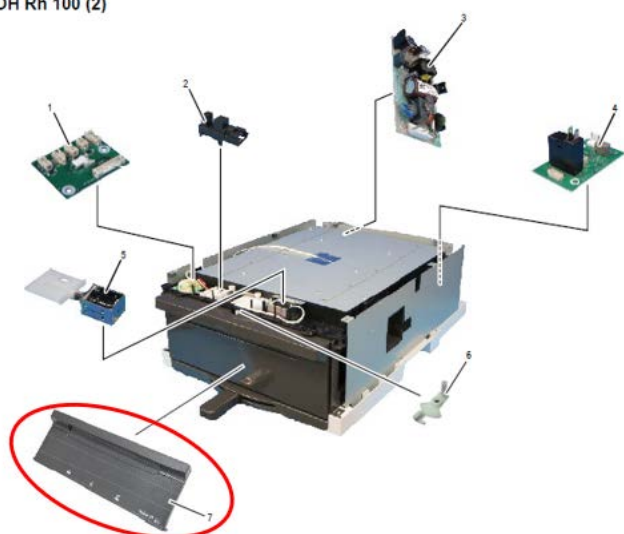
Remark: * common for **SC28211, SC28212, and SC28213**

That's all.

Model: Haokan-P1		Date: 7-Oct.-19	No.: RJ089017
Subject: FSM correction: Finisher how to replace front door		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input checked="" type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

The front door of the Finisher was added as service part. The following is how to replace the door.

2. RICOH Rh 100 (2)



First, follow the procedure below in your Rh 100 field service manual, in section:

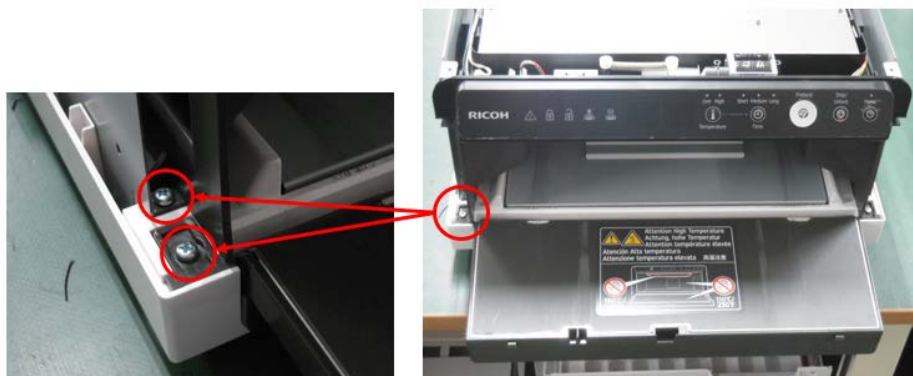
1. Replacement and Adjustment > Replacement and Adjustment > Door Lock Release Solenoid > Step 3. Remove the top inner plate [A].

After “Step 3. Remove the top inner plate [A]”, remove the door like below.

1. Remove one screw at the right side.



2. Remove two screws at the left side.



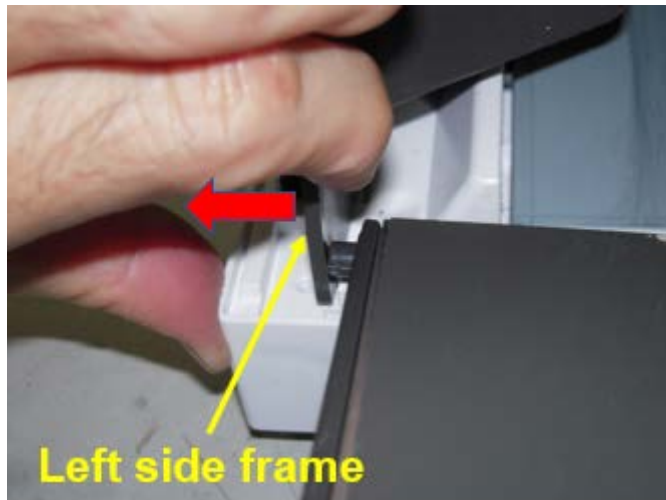
3. Remove the parts marked by red circle at the both sides.
Right side



Left side



4. With pulling the left side frame to the left (red arrow direction) slightly, remove the front door.



When assembling the door, refer to the above procedures. Make sure that the dents of two removed parts face up.



That's all.

Model: Haokan-P1		Date:11-Oct.-19	No.: RJ089018
Subject: FSM correction: Finisher FW update Jig change		Prepared by: Tsutsui	
From: System Business Dept. IP Business Center			
Classification:	<input type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input checked="" type="checkbox"/> Other (FW update)	<input type="checkbox"/> Action required <input checked="" type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

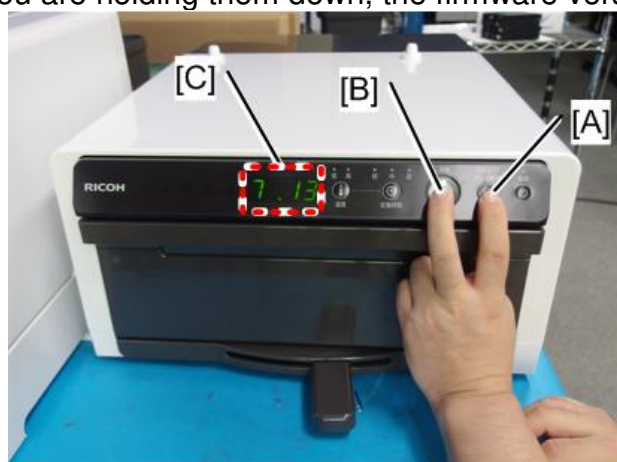
The Finisher, Rh 100, added "Pro 2" mode. The function requires that the firmware version of the Rh 100 is 2.01 or later.

First, check the firmware version like blow. If the version is old, update that based on this RTB.

Firmware Version Check

With the machine power off, hold down the [Stop] button [A] and [Preheat] button [B] at the same time.

While you are holding them down, the firmware version [C] appears in the display window.



j361m0044

A jig is required to update the firmware. The jig is composed of a jig device and a harness, and each one is registered as service part individually.

A jig device: J0899500 JIGS:FINISHER:UPDATE

A harness: J0899501 HARNESS:FINISHER:UPDATE

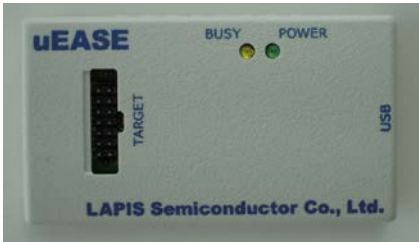
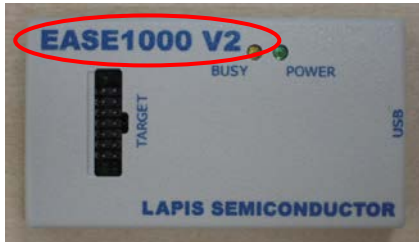
The type of jig and how to use are described on the following pages.
The jig is only for the Finisher, Rh 100. That is not required for Ri 100.

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

The Jig to update the Finisher firmware was changed like below. So, when you update the Finisher firmware, please take appropriate action according to the update work.

Items	Old Jig	New Jig
Type	uEASE 	EASE1000 V2 
Accessories	<ul style="list-style-type: none"> ■For RA and RCN, refer to the current FSM, and RTB; J089002. ■For RUSA and RE, refer to the current FSM, and RTB; J089011. 	Refer to this RTB for all regions.
How to obtain the Jig	Not service part As RCL distributed some jigs to service key person in each region in advance, so please contact them.	Service part J0899500 JIGS:FINISHER:UPDATE J0899501 HARNESS:FINISHER:UPDATE
Application and firmware	Not SERES released, so please contact service key person in each region. Old and new jig applications are not compatible.	SERES released. Access to the Firmware Download Center.
How to use	<ul style="list-style-type: none"> ■For RA and RCN, refer to the current FSM, and RTB; J089002, J089010, J089012. ■For RUSA and RE, refer to the current FSM, and RTB; J089010, J089011, J089012. 	Refer to this RTB for all regions.

And, please apply the following corrections of the new jigs to your Rh 100 field service manual, in section:

2. Troubleshooting > Firmware Update > Service Call Code Tables

The descriptions were added.

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

Firmware Update

Update the firmware using a PC connected to the machine via the EASE1000 V2 writing tool.

The machine's connector is on the main PCB, so it is necessary to remove the operation panel.

Equipment Needed

Firmware/Software/Driver

◆ Update Firmware for the Rh 100

Contents	File name	Description
Firmware update file	A16096_ML620153B_vx.xx.HEX	"vx.xx" is firmware version No.

For this RTB, the version is v2.01.

◆ Software

Contents	File name	Description
Device information file	U8DevInfo.zip	Information file
MWU16	MWU16.zip	Writing software for the update file

◆ Driver

Contents	File name	Description
EASE1000 V2 Driver	EASE_inst_pac.zip	USB driver for writing tool

The above files are included of "J3615000A_201.zip" and place it on the "Firmware Download Center".

-Part No: J3615000A_201

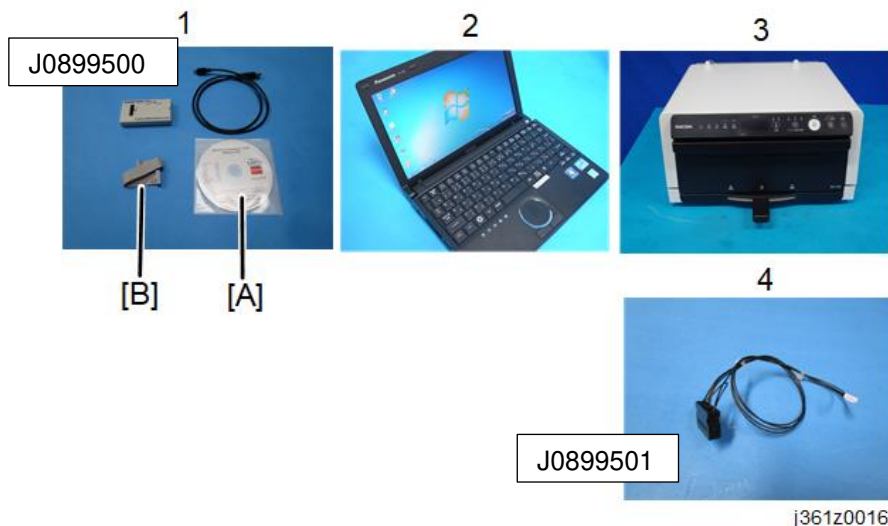
Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

Hardware

1. EASE1000 V2 (Writing tool. Includes the USB cable [A-miniB])
 - * Do not use the supplied Setup CD-ROM [A] and the FFC cable [B].
2. PC (with 1 USB port available)
3. This machine
4. Connection Harness to the Main PCB



Preparation

★ Important

If the uEASE (old Jig) driver is already installed, uninstall it.
Be sure to download the update file and necessary software and driver to the computer from the SERES server and extract them in advance.

Preparing the Update File

Be sure to download the update file to the computer's desk top from the SERES server and extract it in advance.

Software Installation

The required software is as follows:

- Device information file (SetupDevInfo_j.exe)
- MWU16 (update file writing software)

STEP1 Log on a PC with an administrator account.

★ Important

If you log on with an account name that includes "&", the program may not be installed properly. To ensure installation is done properly, be sure to log on with an account name that does not include "&".

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

STEP2 Download the software to be installed, and then extract it.

STEP3 According to the software to be installed, execute the following files from the extracted folder.

Software	Installer
Device information file	¥U8DevInfo¥SetupDevInfo.exe
MWU16	¥MWU16¥setupMWU16_R1_1_2.exe

Note

You may install the software in any order.
The following procedure applies to all the software.

STEP4 Click “Next”.(The following figure shows a sample wizard for installing the device information file.)



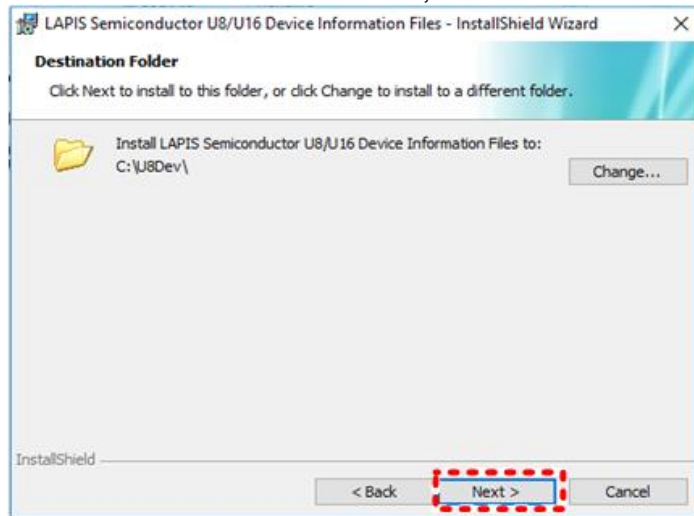
j361z0026

STEP5 Check “I accept the terms in the license agreement” and click “Next”.



j361z0027

STEP6 Select where to install the file, and then click “Next”.



j361z0028

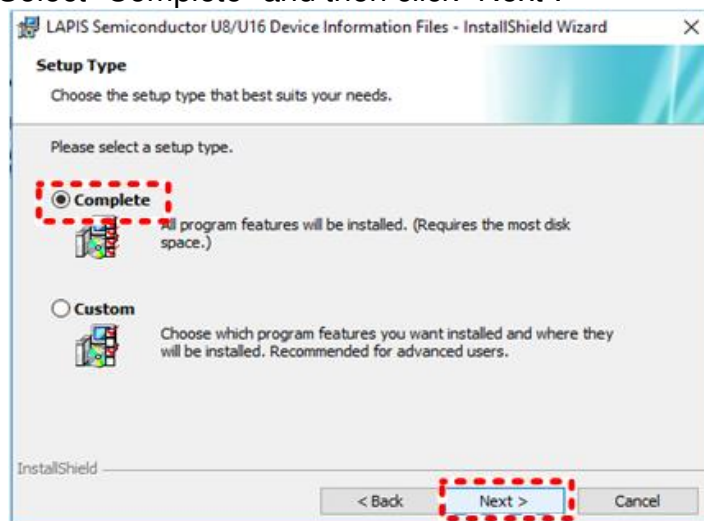
Note

Do not include double-byte characters or blanks in the file name or path. If you do, the installation may fail.

When installing the device information file (SetupDevInfo.exe), the sub-folder “HEX” is created in the folder selected in Step 6.

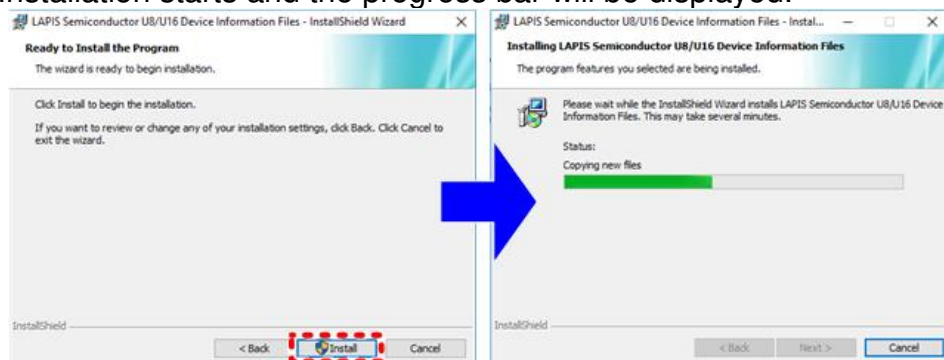
This machine’s device information is “A16096_ML620153B”.

STEP7 Select “Complete” and then click “Next”.



j361z0029

- STEP8** Click "Install".
Installation starts and the progress bar will be displayed.



j361z0030

- STEP9** The following dialog will be displayed when installation is successful. Then, click [Finish] to finish installation.

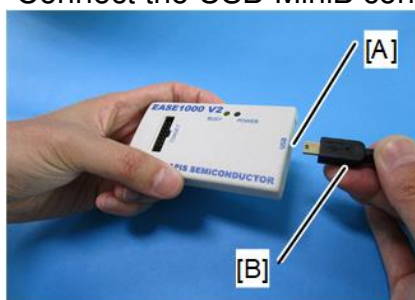


j361z0031

- STEP10** Repeat steps 2 to 8 until you finish to install all software required.

Installing the USB Driver for EASE1000 V2

- STEP1** Log on a PC with an administrator account.
- STEP2** Download the driver, and then extract it.
- STEP3** Connect the USB-MiniB connector [B] to the EASE1000 V2's USB port [A].



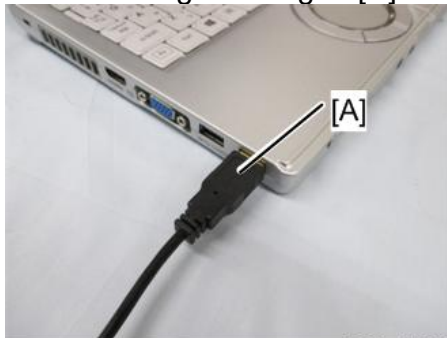
j361z0017

Model: Haokan-P1

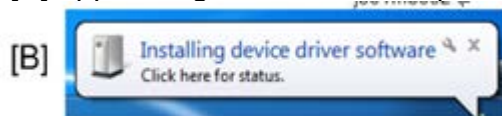
Date:11-Oct.-19

No.: RJ089018

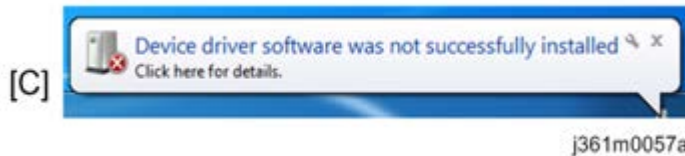
- STEP4** Connect the USB-A connector [A] to the PC's USB port.
The following messages [B] and then [C] appear.



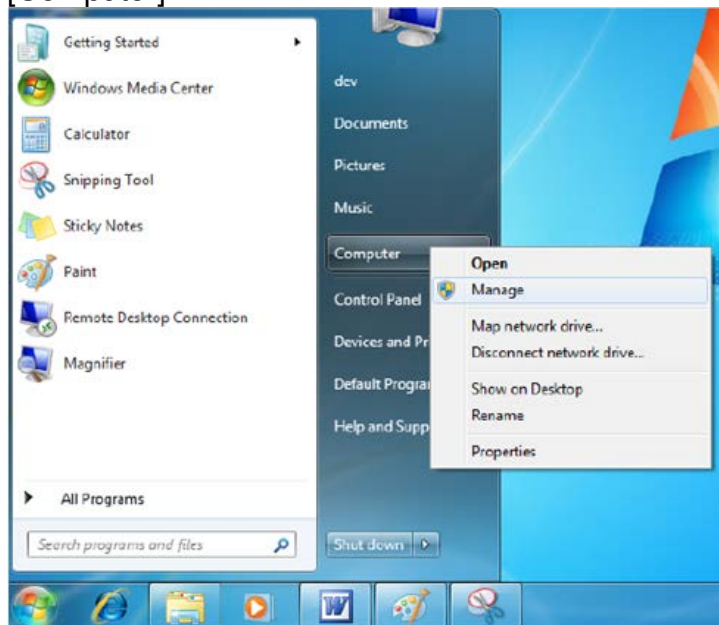
If [B] appears, go to the next step.



If [C] appears, try "STEP 2: Download the driver, and then extract it." Again.



- STEP5** Open the [Start] menu of PC and select [Manage] from the context menu for [Computer].

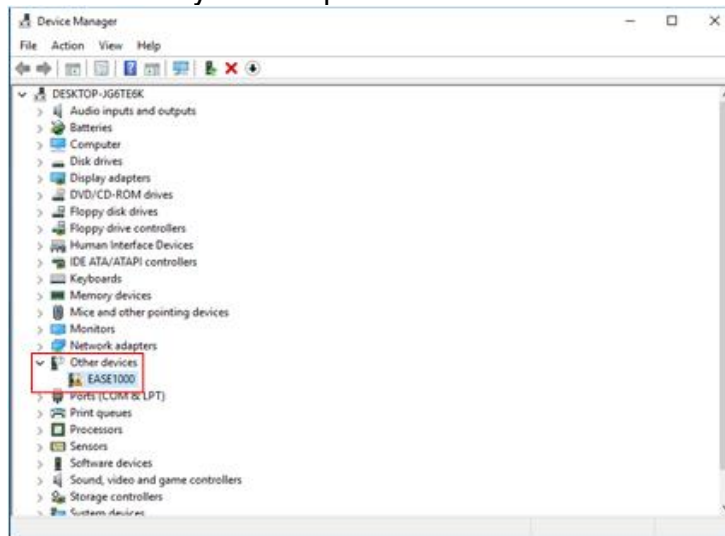


Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

- STEP6** Click the [Device Manager] on [Computer Management] dialog.
EASE1000 with attention mark will be displayed in the [Other devices] on the device list of your computer.

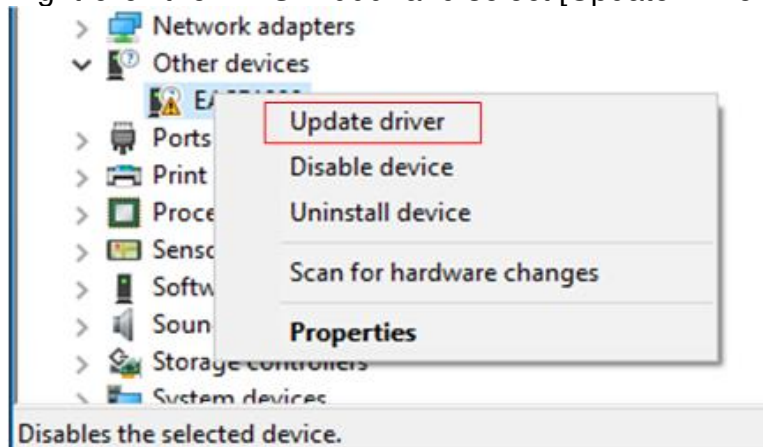


j361z0032

Note

Although the device name is "EASE1000 V2", select "EASE1000" in this step.

- STEP7** Right-click the "EASE1000" and select [Update Driver] on the context menu.



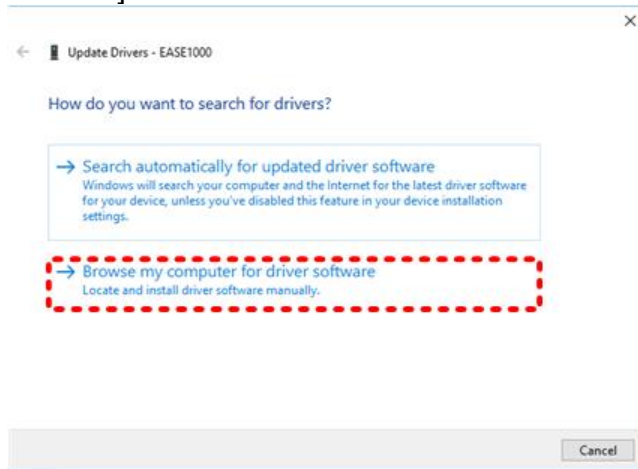
j361z0033

Model: Haokan-P1

Date:11-Oct.-19

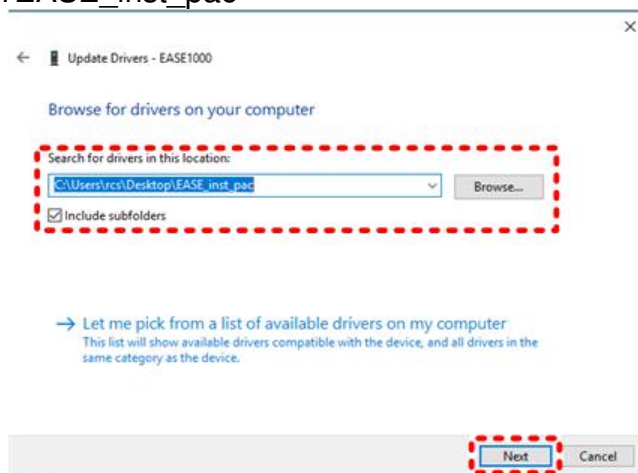
No.: RJ089018

STEP8 The following dialog will be displayed. Then Select [Browse my computer for driver software].



j361z0034

STEP9 Select the folder extracted in Step 1, and then click "Next".
¥EASE_inst_pac



j361z0035

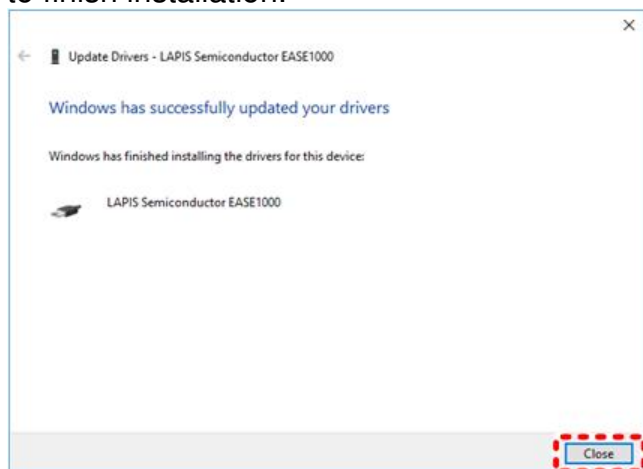
STEP10 The dialog box for confirming installation will be displayed. Click the [Install] button.
Installation starts and the progress bar will be displayed.

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

STEP11 The following dialog box will be displayed if installation is successful. Click [Close] to finish installation.



j361z0036

STEP12 Remove the USB cable from the computer's USB port.

Connecting EASE1000 V2 and the Machine

The machine's connector is on the main PCB, so it is necessary to remove the operation panel.

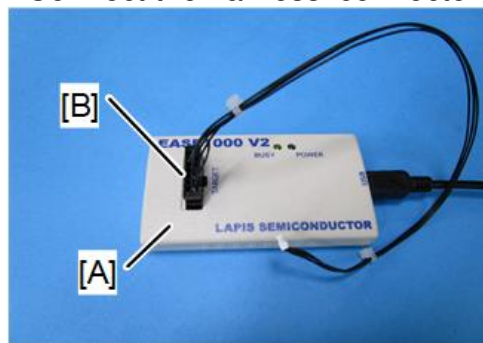
Note

Before removing the operation panel, be sure to turn the machine's power off and disconnect the power cable. And, be sure to keep disconnecting the power cable while updating the firmware by EASE1000 V2.

When connecting the main PCB to a PC via EASE1000 V2, connect EASE1000 V2 to the main PCB first. If you connect EASE1000 V2 to the PC first, because of the power supply from the PC, you might receive an electric shock when connecting EASE1000 V2 and the machine.

Be sure to install the EASE1000 V2 driver on the computer in advance. (Installing the USB Driver for EASE1000 V2)

STEP1 Connect the harness' connector [B] to the EASE 1000 V2 [A].



j361z0018

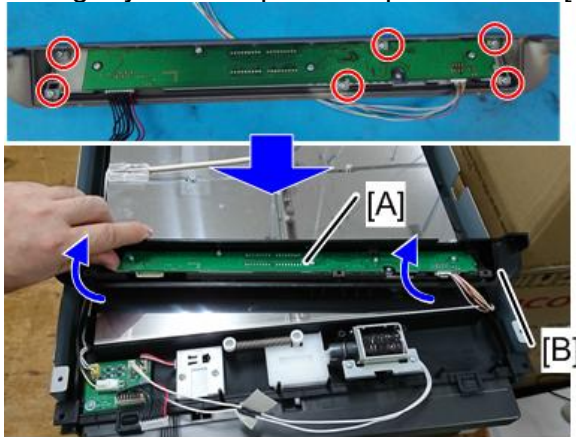
Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

STEP2 Remove the operation panel Assy. (Operation Panel Assy. See the Field Service Manual.)

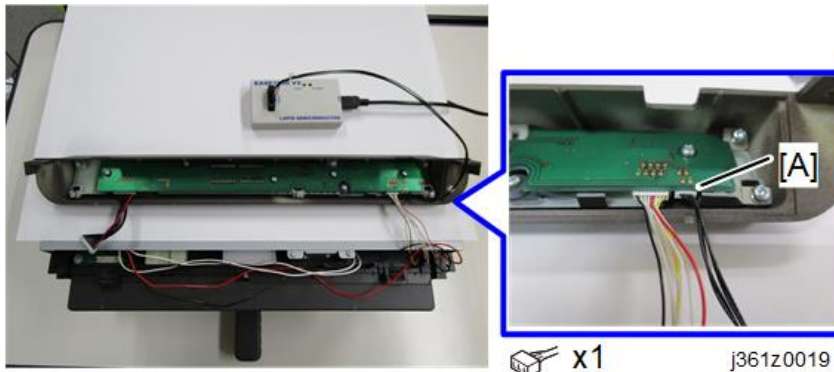
STEP3 Place the operation panel Assy face down, remove the 6 screws, and then remove or slightly lift the operation panel board [A] and its bracket from the cover [B].



x6

j361m0070

STEP4 Connect the harness [A] connected to the EASE 1000 V2 to the terminal of the main PCB.



x1

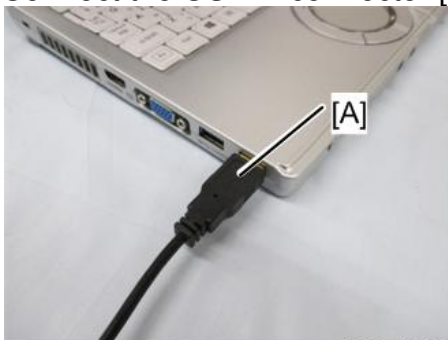
j361z0019

Note

Do not touch the patterned side of the main PCB.

Connecting the EASE1000 V2 and the PC

STEP1 Connect the USB-A connector [A] to the PC's USB port.



j361m5002

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

Firmware Update Procedure

STEP1 Carry out preparation. (Preparation)

STEP2 Log on a PC with an administrator account.

★ Important

If you log on with an account name that includes “&”, the firmware update may not be done properly. To ensure updating is done properly, be sure to log on with an account name that does not include “&”.
Be sure to turn the machine’s power off and disconnect the power cable while updating the firmware by EASE1000 V2.

STEP3 Download the machine’s Firmware, “A16096_ML620153B_vx.xx.HEX” to your PC’s desktop. (“vx.xx” is firmware version No.)

STEP4 Click the Start Menu - [U8 Tools] - [MWU 16 Multiple Flash Writer].
The MWU 16 Multiple Flash Writer starts.



j361z0037

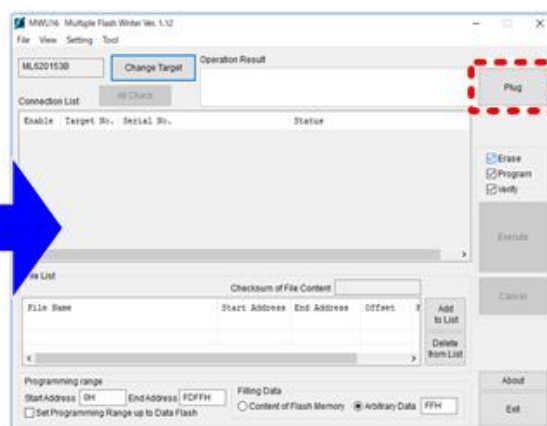
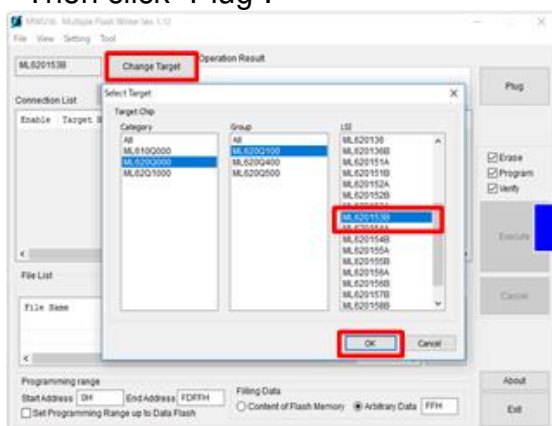
From the “Change Target” pull-down menu, select the below.

Category: ML620Q000

Group: ML620Q0100

LSI: ML620153B

Then click “Plug”.



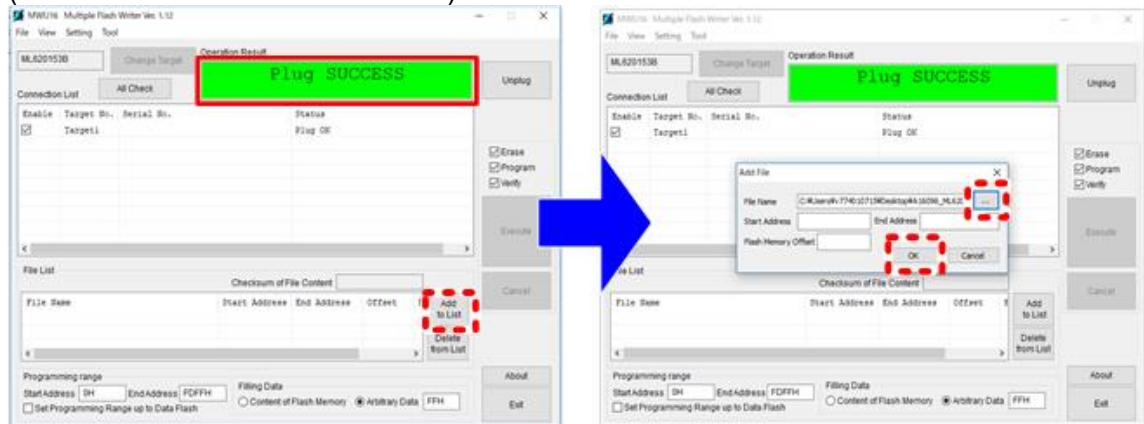
j361z0021

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

- STEP5** If “Plug SUCCESS” appears in “Operation Result”, select the update file (A16096_ML620153B_vx.xx.HEX,), and then click “OK”. (“vx.xx” is firmware version No.)

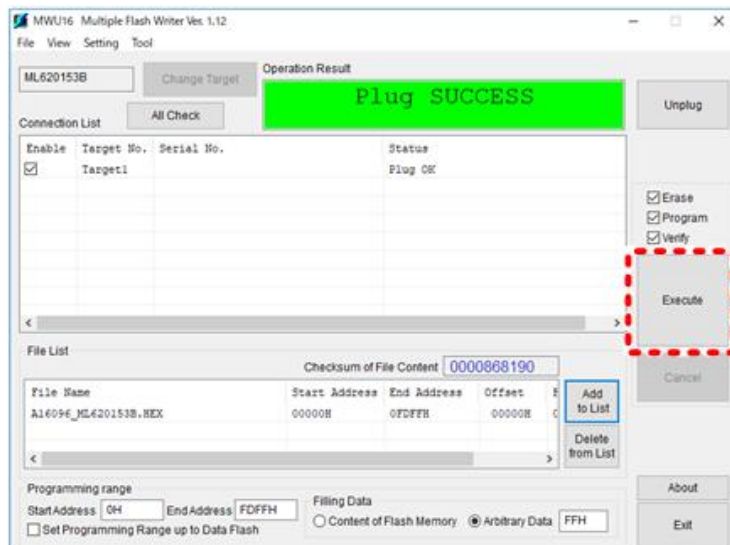


j361z0022

Note

If “Plug Failure” appears, the device information file may not have been installed correctly, so try installing it again (see Software Installation).

- STEP6** Click “Execute”.



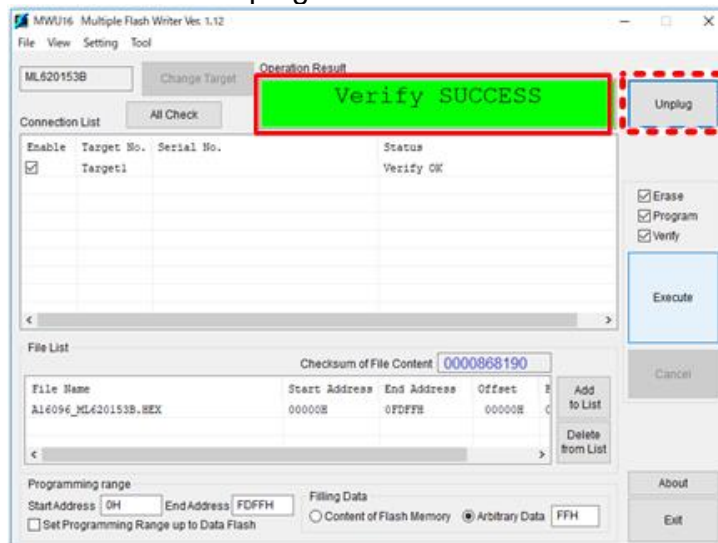
j361z0023

Model: Haokan-P1

Date:11-Oct.-19

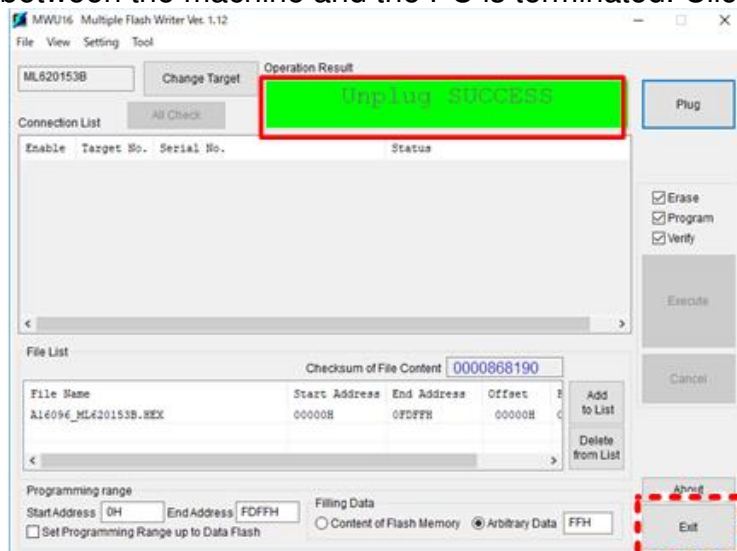
No.: RJ089018

STEP7 If the update is successful, “Verify SUCCESS” is displayed under the “Operation Result”. Click “Unplug”.



j361z0024

STEP8 “Unplug SUCCESS” is displayed under the “Operation Result” and the connection between the machine and the PC is terminated. Click “Exit”.



j361z0025

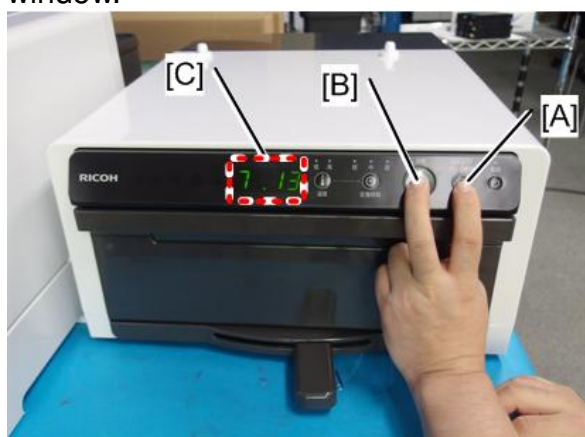
STEP9 Remove the EASE1000 V2 USB cables from the computer’s USB ports.

STEP10 Disconnect the harness connected to the main PCB.

Version Check after Updating

STEP1 Assemble the machine and connect it to the AC power source.

STEP2 With the machine power off, hold down the [Stop] button [A] and [Preheat] button [B] at the same time. While you are holding them down, the firmware version [C] appears in the display window.



j361m0044

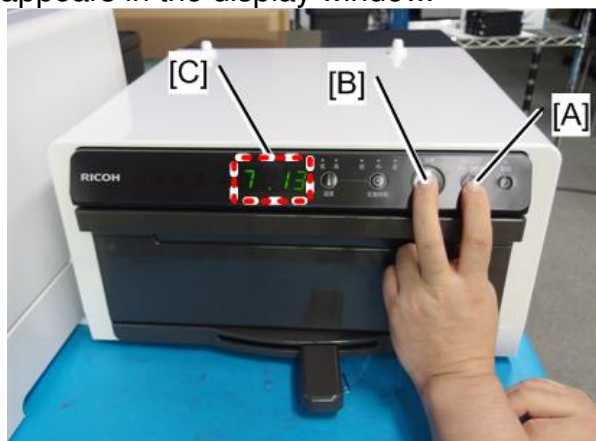
(The version number displayed in the photo above is not the most recent.)

Reset Procedure to Confirm Rewrite

Do the reset operation to complete rewriting the firmware. If you don't do the procedure, the fixing heat will rise around 190°C. This may cause to damage the heater.

STEP1 Assemble the machine and connect it to the AC power source.

STEP2 With the machine power off, hold down the [Stop/Unlock] key [A] and [Preheat] key [B] at the same time. While you are holding them down, the firmware [C] appears in the display window.



j361m0044

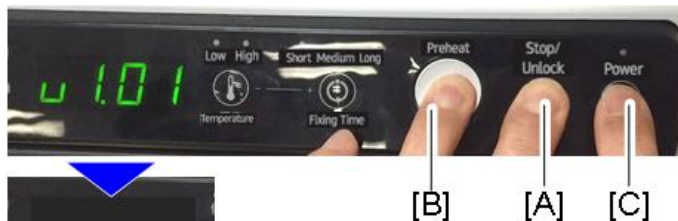
Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

STEP3 While holding down [Stop/ Unlock] [A] and [Preheat] [B], press and hold down the [Power] key [C].

The firmware version flashes once.



j089c9004en

Note

- The version number displayed in the photo above is not the most recent.

STEP4 Release all the keys.
The firmware version notice goes off and the power turns off.

Note

If the heat temperature rises to about 190 °C, the reset procedure was failed. Do the reset procedure again.

How to Confirm Completion of the Reset

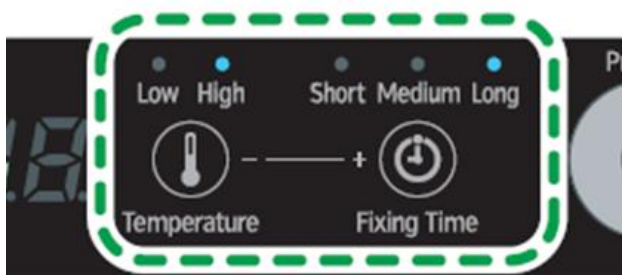
STEP1 Switch the mode to Pro2.
Standard mode -> Professional mode -> Professional 2 mode



j089c9005

Note

Switch the mode by pressing the [Temperature] key and [Time]* key simultaneously for 2 seconds or more.



J089m720_en

*: Depend on the machine version, the key name is [Time] or [Fixing Time].

Model: Haokan-P1

Date:11-Oct.-19

No.: RJ089018

STEP2 Make sure the Temperature and Time are set as shown below.

Item		Setting
Temperature	Low	150 °C
	High	180 °C
Time (Fixing Time)	Short	30 sec
	Medium	3 min
	Long	4 min

Note

- The settings in the table above are for Pro2 mode (the settings for Std/Pro mode are different).
- In the Pro2 mode, the time for “Press mode state (lever = left)” is displayed.
- In the Pro/Std mode, the time for “Fix mode state (lever = right)” is displayed.

That's all.

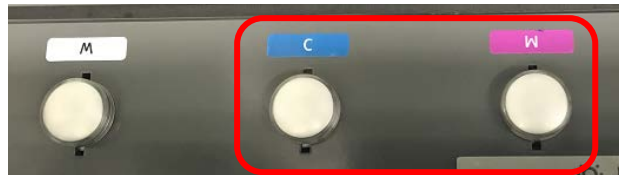
Model: Shepherd-P1		Date: 2-Oct-19	No.: RJ093021
subject: Troubleshooting "Ink end lamps lit darker or do not lit when more than 2 ink tanks empty occurring".			Prepared by: D.Kobayashi
From: Regional Sales Department, Global IP Sales Center			
Classification:	<input checked="" type="checkbox"/> Troubleshooting <input type="checkbox"/> Mechanical <input type="checkbox"/> Paper path <input type="checkbox"/> Product Safety	<input type="checkbox"/> Part information <input type="checkbox"/> Electrical <input type="checkbox"/> Transmit/receive <input type="checkbox"/> Other ()	<input type="checkbox"/> Action required <input type="checkbox"/> Service manual revision <input type="checkbox"/> Retrofit information <input checked="" type="checkbox"/> Tier 2 <input type="checkbox"/> Tier 0.5

Symptom

Ink end lamps lit darker or do not lit when more than 2 ink tanks empty occurring at the same time.



Only Cyan is empty



Cyan and Magenta are empty

Cause

It will not be possible to supply enough current for the several lamps at the same time.

Workaround

1. Darken around the machine and check the lamps status.
2. If could not check the lamps status then check amount of remaining ink by open the ink tank one by one.

Production line engineering changes

Enhanced machine is added the diode circuit like below picture and schematic which is for enhancing visibility of ink end lamps.

Cut in S/N R868XA00002 or later

Note

This change is not available for earlier machine than S/N above.

