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# **S300**

## SIMPLIFIED MANUAL

(QY8-1377-000)

- 1 PRODUCT LIST
- 2 PRODUCT SPECIFICATIONS
- 3 ERROR CODE LIST
- 4 SERVICE MODE (Test Printing, EEPROM Initialization, Destination Setting)
- 5 EXTERNAL VIEW AND PARTS LIST
- 6 FLOW CHART FOR JUDGING PRINTERS NORMAL OR DEFECTIVE
- 7 SERVICE TIP

APPENDIX: SHIPMENT INSPECTION PATTERN PRINT SAMPLE

## 1. PRODUCT LIST

## 1.1 Printer main units

Product Name	Product Code	Sales Territory	Remarks
Canon Bubble Jet Printer	6649A001AA	USA	
S 300	6649A002AA	CANADA	
	6649A003AA	LATIN(LV)	
	6649A004AA	LATIN(HV)	
	6649A005AA	EUR	
	6649A006AA	GER	
	6649A007AA	FRN	
	6649A008AA	ASIA(HV)	
	6649A009AA	AUST	
	6649A010AA	KRN	
	6649A011AA	GB	
	6649A013AA	TWN	
	6649A014AA	HK	
	6649A015AA	CHN	
Canon Bubble Jet Printer	6649A012AA	JPN	
BJ \$300			

## 1.2 Consumables

Product Name	Product Code	Remarks
Canon Ink Cartridge	6881A001AA	JPN
BCI-24BK	6881A002AA	EUR
	6881A003AA	USA/CAN
	6881A004AA	ASIA/AUST
Canon Ink Cartridge	6882A001AA	JPN
BCI-24CL	6882A002AA	EUR
	6882A003AA	USA/CAN
	6882A004AA	ASIA/AUST
Canon Ink Cartridge	6881A008AA	JPN
BCI-24BK TwinPack	6881A009AA	EUR
	6881A010AA	USA/CAN
	6881A011AA	ASIA/AUST
Canon Ink Cartridge	6882A008AA	JPN
BCI-24CL TwinPack	6882A009AA	EUR
	6882A010AA	USA/CAN
	6882A011AA	ASIA/AUST

## 2. Product Specifications

## 2.1 Specifications

2.1 Specific				
Paper feeding m	ethod	ASF		
		2400 dpi X 1200 dpi		
Print speed	HQ Color	4ppm (Color throughput pattern)		
	Monochrome	9ppm (Monochrome throughput pattern)		
	HS Color	7.5ppm (Color throughput pattern)		
	Monochrome	11ppm (Monochrome throughput pattern)		
Printing direction	1	Bi-directional (automatically adjusted according to print data, print		
		mode, and print head)		
Printing width		203.2mm (8 inch)		
Interface		USB		
ASF capacity	Plain paper	Max. 10mm or less (64 to 105 g/m² paper)		
	High resolution paper	Max. 80 sheets or less		
	Glossy photo paper	Max. 10 sheets		
	Photo paper	Max. 1 sheet		
	Glossy film	Max. 1 sheet		
	Transparency	Max. 30 sheets or less		
	Banner paper	Max. 1 sheet		
	T-shirt transfer	Max. 1 sheet		
	Mouse pad	Max. 1 sheet		
	Glossy card	Max. 20 sheets		
	Glossy photo card	Max. 20 sheets		
	Postcard	Max. 40 sheets		
	Postcard for inkjet printers	Max. 40 sheets		
	Photo card	Max. 20 sheets		
	Envelope (COM#10, DL-size)	Max. 10 sheets		
	Envelope (European size 4 and 6)	Max. 10 sheets		
Detection	Paper out	Available		
functions	Print head installed	Available		
	Ink out	Available		
	Remaining amount of ink	Available		
	Waste ink amount	Available		
	Cover open	Available		
Acoustic noise	T	45 dB (FINE Mode)		
Environmental	Operation	Temperature 5°C to 35°C (41°F to 95°F)		
conditions		Humidity 10% to 90%RH (no condensation)		
	Standby	Temperature 0°C to 35°C (32°F to 95°F)		
		Humidity 5% to 90%RH (no condensation)		
Power supply	Voltage/frequency	AC100V/120V 50/60Hz (LV) Japan,USA,Canada		
		AC220/240V 50Hz (HV) Europe,Asia		
	Power consumption	30W		
	Standby	2W		
External	Paper feed and delivery trays installed	390(W) X 248(D) X 185(H)		
dimension	Paper feed and delivery trays not installed			
Weight		3.4Kg (not including print head)		
Certification				
	Electromagnetic radiance	VCCI, FCC, IC, CE-Mark, C-Tick, Taiwan EMC, Korean EMC, CCIB(EMC)		
	Electrical safety	Dentori, UL, CUL, SASO, CE-Mark, TUV, FIMKO, Energy Authority, PSB,		
		Korean Dentori, CB, CCIB, GOST-R		

## 2.2 Product Life

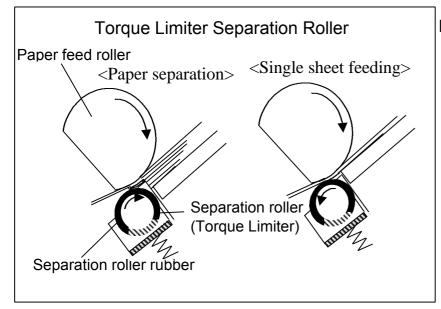
Product life is whichever comes first 5 years, or 5,000 pages of color printing, or 10,000 pages of monochrome printing.

### 2.3 ASF Specifications

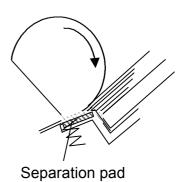
## **New ASF Torque Limiter Separation Roller System**

New ASF system with improved paper pick-up capability (paper separation ability)

- <Greater paper pick-up capability than S600>
- 1. Greater paper pick-up capability
- ->A higher friction coefficient of the paper feed roller rubbers can be achieved.
- 2. Greater paper separation ability
- ->A higher friction coefficient of the paper feed roller rubbers can be achieved.
- ->Reverse rotation of the coil spring of the separation roller (Torque Limiter) works instantaneously.



Paper feeding system of the S600 (Duplo method)



## 3. ERROR CODE LIST

Error codes are displayed on the monitor of the host computer connected to the printer. For error code display, keep the status monitor open.

Error Code	Error	Corrective Action	
1000	Paper out error	Load paper, and press RESUME button.	
1200	Front cover open error	Close front cover.	
1300	Paper jam error	Remove jammed paper, and press RESUME button.	
1401	Head ID error	Replace print head, as it has failed.	
1403	Head temperature sensor rank error	Replace printer, as it has failed.	
1405	Head EEPROM error	Replace print head or printer, as one of the two has failed.  Replace printer, as it has failed.  Replace printer, as it has failed.  Replace printer, as it has failed.	
1700	Waste ink near-full error		
5100	Carriage error		
	Head temperature rise error		
5400	Printer temperature rise error	Replace printer, as it has failed.	
5B00	Waste ink full error	Replace printer, as it has failed.	
5C00 Purging operation error		Replace printer, as it has failed.	
6800	EEPROM/NVRAM error	Replace printer, as it has failed.	
6810 EEPROM print head information error		Replace printer, as it has failed.	

### **Operator Call Error**

Orange lamp	Error	Corrective Action	
2 times	Paper out error	Load paper, and press RESUME button.	
3 times	Paper jam error	Remove jammed paper, and press RESUME button.	
6 times	Print head not-installed error	Install print head.	
7 times	Print head error	Replace print head, as it has failed.	
8 times	Waste ink near-full error	Replace printer, as it has failed.	

#### **Service Call Error**

Toggle		
blinking	Error	Corrective Action
2 times	Carriage error	Replace printer, as it has failed.
4 times	Purge error	Replace printer, as it has failed.
6 times	Internal temperature rise error	Replace printer, as it has failed.
7 times	Waste ink full error	Replace printer, as it has failed.
8 times	Print head abnormal temperature rise error	Replace printer, as it has failed.
9 times	EEPROM error	Replace printer, as it has failed.
10 times	EEPROM print head information error	Replace print head or printer, as one of the two has failed.

### 4. SERVICE MODE

Function	Procedure	Remarks	
Manual purging of print head	Hold down the RESUME button for 2 seconds	Purging period:	
	or more. (while the printer is powered on).	Approx. 60 seconds	
Test printing			
Shipment inspection pattern     ROM version     No. of pages fed     Waste ink amount     Destination setting		Refer to the print sample, *1 on the next page.	
EEPROM information printing		Refer to the print sample, *2 on the next page.	
EEPROM initialization	Press the RESUME button 3 times.		
Waste ink counter clear	Press the RESUME button 4 times.		
Destination setting (overseas / Japan)	Press the RESUME button 5 times.		
PTH value information printing	Press the RESUME button 6 times.		

#### 1 Shipment inspection pattern printing

- a While the printer is powered off, hold down the RESUME button, then press the POWER button.
- b When the POWER LED lights up, hold down the POWER button, and press the RESUME button twice.
- c Release both the POWER and RESUME buttons, and the service mode is entered.
- d Press the RESUME button once.
- e Press the POWER button.
  - ==>Shipment inspection pattern will be printed.

#### 2 EEPROM information printing

- a While the printer is powered off, hold down the RESUME button, then press the POWER button.
- b When the POWER LED lights up, hold down the POWER button, and press the RESUME button twice.
- c Release both the POWER and RESUME buttons, and the service mode is entered.
- d Press the RESUME button twice.
- e Press the POWER button.
  - ==>EEPROM information printing pattern will be printed.

#### 3 Destination setting

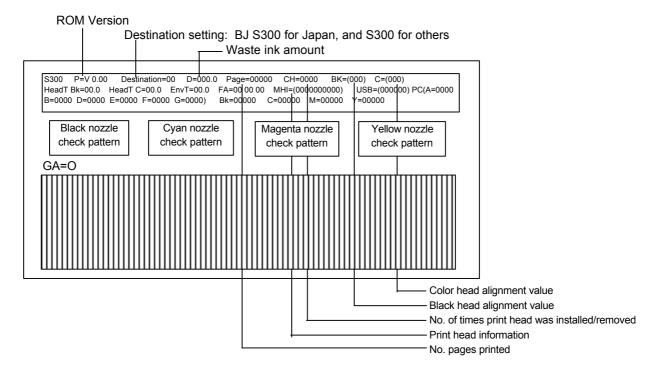
- a While the printer is powered off, hold down the RESUME button, then press the POWER button.
- b When the POWER LED lights up, hold down the POWER button, and press the RESUME button twice.
- c Release both the POWER and RESUME buttons, and the service mode is entered.
- d Press the RESUME button 5 times.
- e Press the POWER button.
- f Select the destination by the number of times the RESUME button is pressed. (Overseas: once, Japan: twice)
- g Press the POWER button.
  - ==>Destination will be set.

#### 4 PTH value information printing (for reference only)

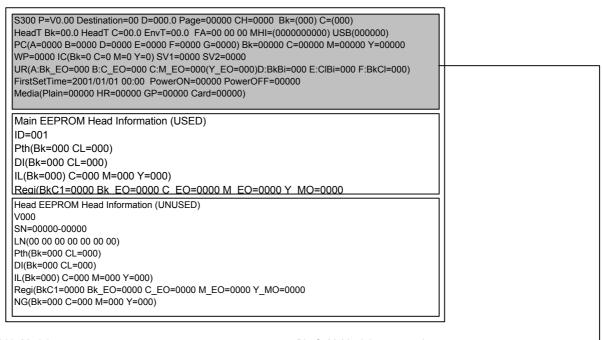
- a While the printer is powered off, hold down the RESUME button, then press the POWER button.
- b When the POWER LED lights up, hold down the POWER button, and press the RESUME button twice.
- c Release both the POWER and RESUME buttons, and the service mode is entered.
- d Press the RESUME button 6 times.
- e Press the POWER button.

#### \*1 Shipment inspection pattern print sample

EEPROM content can be confirmed by a print of the shipment inspection pattern.



#### \*2 EEPROM information print sample



S300=Model name

P=ROM version installed in the printer

Destination=Destination

D=Waste ink count

Page=No. of pages printed

CH=No. of times the print head has been installed/removed

Bk, C=Bi-directional head alignment value

HeadT = Head temperature

EnvT = Thermistor, internal temperature

FA=Factory process inspection information

MHI = Print head information

USB = USB serial number

PC = No. of times each purging operation has been performed

A=Manual / 5-day timer / dot counter purging

B=Long timer purging (6 months)

D=Purging per ink cartridge replacement

E=Long timer purging (14 days)

F=Purging per print head replacement

G=Refreshing

Bk, C, M, Y = Ink consumption

WP=No. of times wiping has been performed

IC = Amount of each ink remaining

SV1, SV2 = Service error code

UR = Head alignment by user

FirstSetTime = Installation date

PowerON/OFF=No. of times the printer has been powered on/off

Media=No. of pages printed by print media

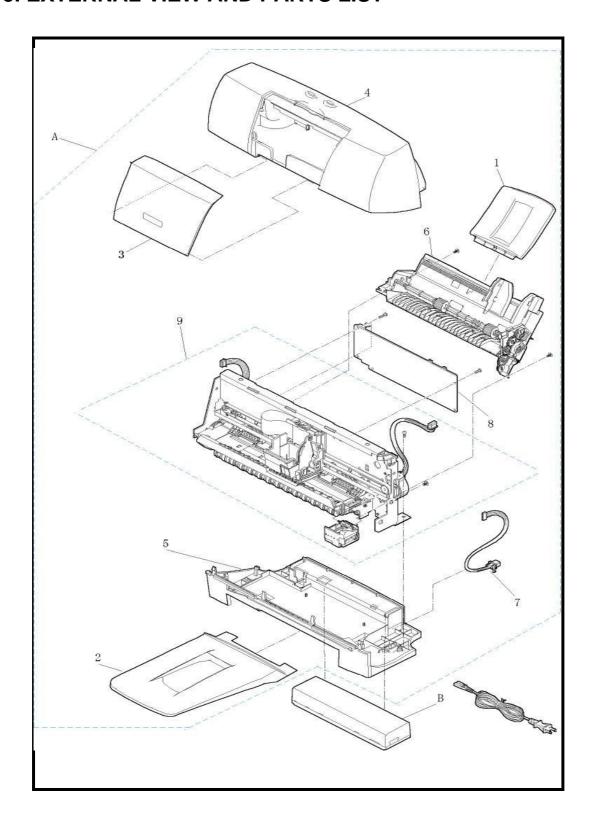
Plain=Plain paper

HR = High resolution paper

GP = Glossy paper

Card=Postcard

## **5. EXTERNAL VIEW AND PARTS LIST**

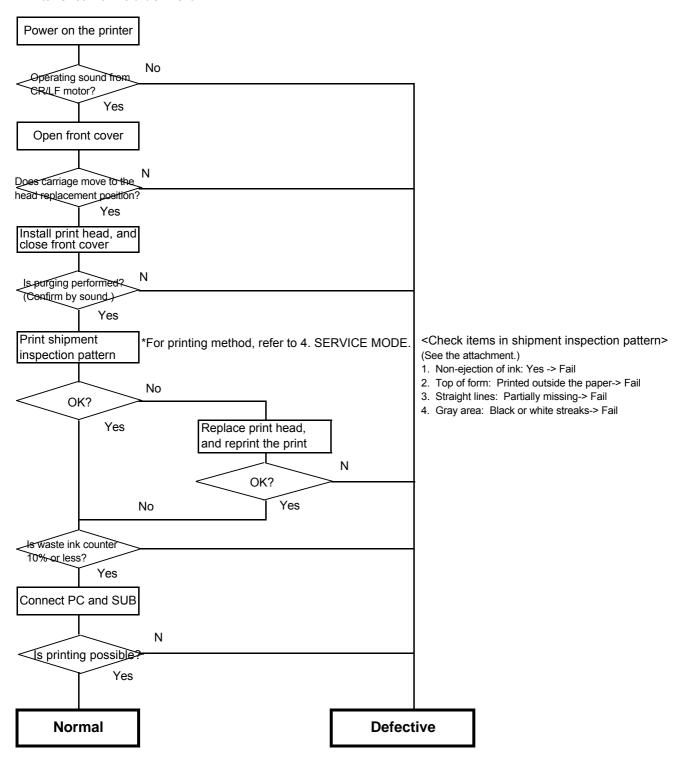


**Parts List** 

Key	Part Number	Rank	Q'ty	Description	Remark
Α	Q10-1002-710	N	1	WHOLE UNIT, W/O POWER SUPPLY UNIT	
В	QH3-3471		1	AC Adapter 100/120V 50/60HZ	LV(USA,CAN,JPN)
	QH3-3477		1	AC Adapter 220/240V 50/60HZ	HV(EUR)
	QH3-3478		1	AC Adapter 220/240V 50/60HZ	HV(CHN,ASIA,AUST)
	QH3-3474		1	AC Adapter 100/120V 50/60HZ	LV(TWN)
	QH3-3479		1	AC Adapter 220/240V 50/60HZ	HV(KRN)
	QY6-0037		1	Print Head	

## 6. FLOW CHART FOR JUDGING PRINTERS NORMAL OR DEFECTIVE





< Precaution with refurbishment of normal products >

When refurbishing normal products, be sure to set the flag for purging at arrival by following the EEPROM initialization procedure in 4. SERVICE MODE. The flag is set by performing EEPROM initialization. Thereafter, unplug the power cable, and do not perform printing. (Flag for purging at arrival: Set at factory default so that purging operation is performed twice only when the print head is

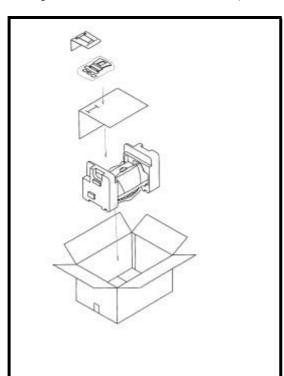
## 7. Service Tip

### 7.1 Product Exchange with Service Part Printer Unit

With product exchange by using the service part printer unit (WHOLE UNIT, W/O POWER SUPPLY UNIT:Q10-1002-710), follow the procedure below.

- 1 Remove the AC adapter from the returned printer unit.
- 2 Connect the removed AC adapter to the new printer unit.
- 3 Attach the name label on the new printer. (The name label is packaged with the new printer.)
- 4 Set the destination. (For the setting method, refer to "SERVICE MODE".)

Configuration of Service Part Printer Unit (WHOLE UNIT, W/O POWER SUPPLY UNIT)



Service part printer unit components:
Printer unit (without model name and AC adapter)
Paper feed tray
Paper delivery tray
Product name label
Packaging foam

### 7.2 Print Head Replacement Method

In User Mode: Open the front cover, and hold down the RESUME button for 3

> seconds. The carriage will move to the center position for print head replacement. (In the User Mode, after the initial print head installation, the carriage stops only at the left of print head replacement position,

that is, at the ink cartridge replacement position.)

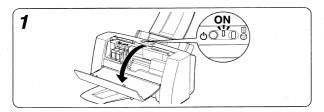
Open the front cover. The carriage will move to the center position. In Service Mode:

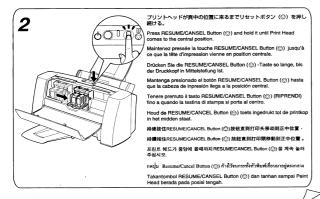
<Print Head Replacement Method User's Manual>

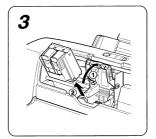
#### Canon

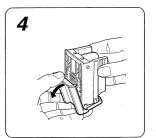
プリントヘッドの交換方法 How to Replace Print Head Comment remplacer la tête d'impression Austausch des Druckkops Cómo cambiar la cabeza de impresión Modalità di sostituzione della testina di stampa

更换打印头的方法 更換打印頭的方法 프린트 헤드 교환 방법 วิธีการเปลี่ยนหัวพิมพ์ Cara mengganti Print Head













プリントヘッドを交換した後は必ずかんたんスタートガイドを参照しプリンタヘッドの位置調整を行ってください。 After replacing the Print Head, be sure to refer to the Quick Start Guide and align the print head. Après avoir remplacé la tête d'impression, veuillez vous reporter au Guide de démarrage rapide et aligner la tête d'impression.

Dopo aver sostituito la testina di stampa, far riferimento alla Guida rapida e allineare la testina di stampa. Nadat de printkop vervangen is, dient u de Aan de slag-gids te raadplegen en de printkop uit te lijnen. 更换打印头后,请务必参照快速安装指南,调整打印头的位置。 更换打印頭後,請務必參照快速安裝指南,調整打印頭的位置

프린트 헤드를 교환한 후에는 반드시 사용자 설명서를 참조해서 프린트 헤드의 위치를 조정하십시오.

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## 7.3 Problems in Evaluation

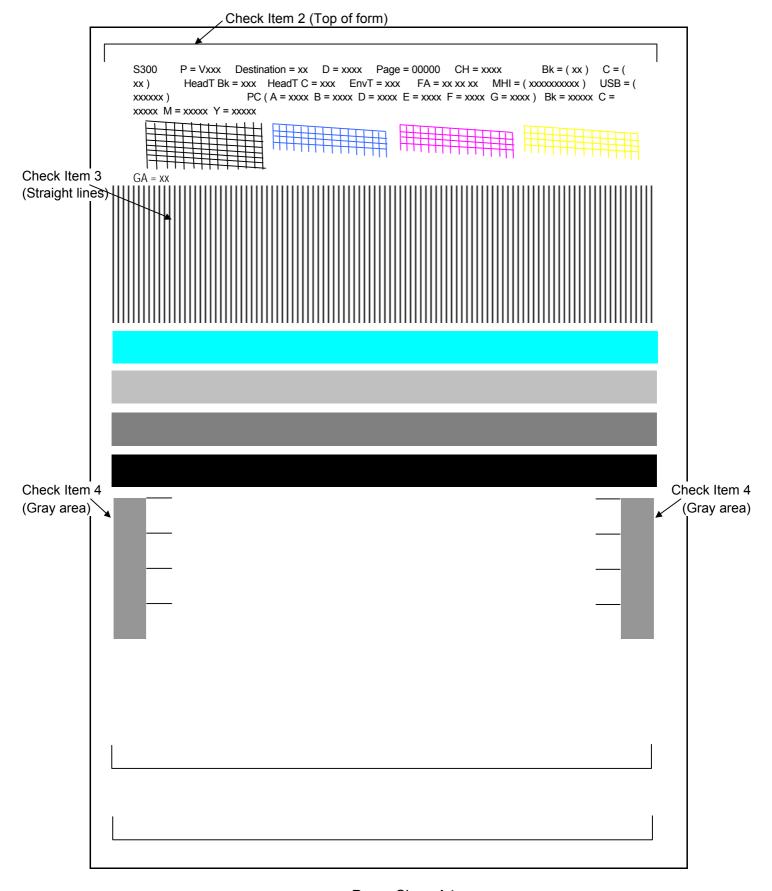
	Problem	Phenomenon	Cause	Countermeasure / Call Support
1	Boundary smudge due to settling of ink	after ink settles, and the print head is capped for a long period, clogging	Characteristics of pigment ink: Although pigments and additives are mixed in ink, when ink is left for a long period, pigments settle due to their weight, and density increases from 4% to 8.9% or more.	<countermeasure> Ink tank orientation when packaged with the printer has been changed form vertical to horizontal in order to prevent ink from settling. 2. The packaging orientation of consumable ink tanks has also been changed as above. 3. Auto long timer purging has been set on the assumption of long term storage (6 months). <call support=""> Replace the print head.</call></countermeasure>
2	Paper feed problem with letter size banner paper	When letter-sized banner paper is loaded, it cannot be picked up.	The cutoff line of banner paper is caught by the top of paper feed tray, and the paper does not reach the paper feed roller.	<countermeasure> As a permanent countermeasure, the height of the paper feed tray has been reduced by approximately 18mm. <call support=""> Confirm that paper is set properly in the ASF.</call></countermeasure>
3	mis-alignment of color inks	2. With the maximum head-to-paper distance, when three pages or more	Divided dots occur due to bubbles building up in the nozzles.     Initial bubble formation becomes unstable due to temperature rise, causing dot mis-alignment.	<countermeasure> No countermeasures will be implemented for the following reasons:  1. The degree of the problem is within tolerance, and printed images are not affected.  2. The image quality recovers after leaving the printer for approximately 10 minutes.  <call support="">  1. Perform the cleaning operation.  2. Leave the printer for approximately 10 minutes, then perform the cleaning operation.</call></countermeasure>
4	Inx mixing problem with yellow		It is suspected that ink such as ink mist remaining on the head face is accidentally sucked into the nozzles.	<countermeasure> No countermeasure will be implemented as the occurrence ratio is low at 13/15,000, and the degree of ink mixing is fairly slight. <call support=""> Perform the cleaning operation.</call></countermeasure>
5	Spur marks on GP-301		When the gates on the molded spur contact and press the spur base, the rotating load increases, causing the spur marks on the GP-301's delicate surface.	<countermeasure> The following countermeasures have been implemented on a running change basis as a permanent countermeasure. <ol> <li>The spur has been produced with its molded gates facing inside.</li> <li>A round rib has been established on the spur, so that the spur contacts the platen vertically, and does not move suddenly.</li> </ol></countermeasure>
6	Mistake with head abnormal temperature rise error	a mis-set resistor activates and the abnormal head temperature rise error occurs despite normal temperature.	Setting mistake of HeatWindow The print area was set despite not eing necessary.     Setting mistake of cyclic resistor The initial setting value was 0, but it should have been 3 or more. (It is predicted that the occurrence rate is higher at purging on arrival and by the long-timer. The rate is 0.3% at maximum.)	<countermeasure> Tentative countermeasure: Powering the printer off and then back on by pressing the POWER button can rectify the problem. Permanent countermeasure: The ROM will be upgraded on a running change basis from August. <call support=""> Power the printer off and then back on by pressing the POWER button.</call></countermeasure>

## **Reference Information**

ſ	7	Grease on the encoder film	The problem did not occur in the	<suspected cause="" in<="" of="" problem="" th="" the=""><th><countermeasure></countermeasure></th></suspected>	<countermeasure></countermeasure>
		(The same encoder film as	S300 evaluation, as oil rather than	S600>	1. In the S300, oil has been used for the
		that of the S600 is used in	grease is used for the S300 guide	Production error, or vibration during	guide shaft from the commencement of mass
		the S300.)	shaft. If dust attaches to the shaft,	transportation	production.
			the LF error may occur.		2. Instructions have been given to the factory.
ı					<call support=""></call>
ı					If the amount of oil is small, wipe it off. If it is
					large, replace the printer main unit.

## **APPENDIX: SHIPMENT INSPECTION PATTERN**

Check Item 1 (Non-ejection of ink): Whole Print



Paper Size: A4