

MG2400 series, MG2500 series Technical Reference

(MG2440, MG2450, MG2540, MG2550)

This manual provides technical information necessary for servicing the applicable product. Since the manual contains confidential information, limit the use of this manual within the sales companies.

Information on maintenance of the applicable product is given in the separate Simplified Service Manual. Please refer to it when necessary.

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1. SERVICE MODE

For details of each service mode, refer to the "Simplified Service Manual" of the applicable model. This section provides details of the Service Test Print and EEPROM Information Print.

1-1. Service Test Print

1) EEPROM information contents

On the Service Test Print (sample below), confirm the EEPROM information.

- Bottom area (Check 4 area):


- (a) Model name
- (b) Printer serial number (4 digits of alphabets + 5 digits of number)
- (c) Destination
- (d) ROM version (V#.###)
- (e) Main ink absorber counter value (D=###.#)

2) Print check items

On the service test print (sample below), confirm the following items:

- Check 1: Top of form accuracy, skewed paper feeding, left margin, and carriage (outermost) accuracy
- Check 2: Nozzle Check Pattern print (Ink must be ejected from all nozzles.)
- Check 3: Straight line accuracy (There must be no remarkable dot mis-alignment on a line.)
- Check 4: EEPROM information

3) Service test print sample (MG2400 series)



The image shows a service test print for an MG2400 series printer. It is divided into several sections for inspection:

- Check 1:** Top of form accuracy, skewed paper feeding, left margin, and carriage (outermost) accuracy.
- Check 2:** Nozzle Check Pattern print (Ink must be ejected from all nozzles.).
- Check 3:** Straight line accuracy (There must be no remarkable dot mis-alignment on a line.).
- Check 4:** EEPROM information.

The EEPROM information is printed as follows:

```
(a) MG2400 (b) SN=xxxx00001 (c) EMB V0.500 (d) ST=2013/04/08-09:58 LPT=2013/04/09-11:35
(e) D=002.0
DF=00049
ER(ER0=1300 ER1=1203 ER2=1000 ER3=5100 ER4=5011)
PC(M=000 R=000 T=001 D=000 C=001 I=001)
TPAGE(TTL=00009 COPY=00001)
CH_NEW_BK(ST4=00000 ST3=00000 MN=00001 XS=00000)
CH_NEW_CL(STD=00000 MN=00001 XS=00000)
CH_BK=001
CH_CL=001
IL(BK=03 Y=01 M=01 C=01)
P_ON(S=00009)
A_REG=1 M_REG=1
ASF_PAGE(All=00009 PP=00009 Photo1=00000 Photo2=00000 Photo3=00000
Matto=00000 PC=00000 EV=00000)
INK_OFF(BK=0 CL=0)
SC(TTL=00001 PC=00000 COPY=00000)
```

1-2. EEPROM Information Print

1) Printed items

Model name

Printer serial number (SN = Serial Number)

Destination

ROM version

Installation date & time (ST = Set Time)

Last printing time without any errors (LPT = Last Print Time)

Ink amount in the main ink absorber (% , D = Drain sheet)

Ink absorber life (in units of months, DF = Drain sheet Full)

Operator call/service call error record (the last five errors, ER0 = the last error, ER1 = the one before the last,, ER4 = the 4th before the last)

If the same errors occur successively, only the latest one is recorded.

Purging count (PC = Purge Count, M = Manual cleaning, R = deep cleaning, T = cleaning by Timer, D = cleaning by Dot count, C = cleaning at ink cartridge replacement, I = faulty termination)

Total print pages (TPAGE, TTL = total, COPY = copy)

New Black ink cartridge installation count (CH_NEW_BLK = the times new Black installed)

New Color ink cartridge installation count (CH_NEW_CLR = the times new Color installed)

Black ink cartridge removal / install-back count (CH_BLK = the times Black removed and installed)

Color ink cartridge removal / install-back count (CH_CL = the times Color removed and installed)

Remaining ink level (IL = Ink Level, BK=Black, Y=Yellow, M=Magenta, C=Cyan)

Power-on count (soft, P_ON = Power On)

Automatic print head alignment by user (A_REG)

Manual print head alignment by user (M_REG)

Rear tray feed pages (ASF PAGE, All = total, PP = plain paper, Photo1,2,and 3 = Photo Paper Plus Glossy, Matto = Matte photo paper, PC = postcard, EV = envelope)

Disabling of the remaining ink amount detection function (INK_OFF, BK = Black, CL = Color)

Total scan count (SC, TTL =total, PC = scanning from a computer, COPY = scanning at copying)

2. FAQ (Possible Problems and Corrective Actions)

No.	* Function	Phenomenon	Condition	Cause	Corrective action	Possible call or complaint
1	A Setup	Smearing inside of the machine is smeared with ink mist		Due to ink mist attached to the inside of the machine	Using a dry cloth, wipe the inside of the tray, when necessary.	- Hands or clothes get smeared when replacing the ink cartridge or when removing the jammed paper.
2	B Print results	Smearing of the print side of the paper		When paper is curled, the edge of paper rises, causing the print head to rub against the printed surface of paper, resulting in smearing.	1. Correct the paper curl. 2. Recommend printing in the print quality assurance area.	- Smear on the printed side of paper - Cannot print properly. - Paper edge crease.
3	B Setup	Cover not fully opened, preventing ink cartridge removal or installation	The Paper Output Tray is open.	When the Paper Output Tray is open or its extension is extended, it prevents the Cover from open completely.	Close the Paper Output Tray before opening the Cover.	- Cannot remove the ink cartridge(s). - The Cover cannot be opened.
4	B Operability	“Cover open” error (three blinks of the Alarm lamp, error code 1203) not cleared	The Cover is opened during printing.	The Cover has the paper ejection mechanism. Opening or closing of the Cover during printing prevents proper paper ejection, thus the error is not cleared only by closing of the Cover.	i) Remove the paper, if any inside the machine, ii) close the Cover, and iii) press the Color or Black button. The error will be cleared and printing will be resumed with the next page.	- Printing does not resume after the Cover is opened or closed. - “Cover open” error is not cleared.
5	C Setup	- Misunderstanding that parts came off - “Packing material not removed” error (nine blinks of the Alarm lamp, error code 1890)	During removal of the packing material	- Since the color of the packing material is similar to the machine body color (see the photo below), users can misunderstand that the parts came off. - If the packing material is not removed, the error will occur at power-on.	Remove the packing material (and discard it) during setup.	- The parts came off. - “Packing material not removed” error

* Occurrence level:

A: The symptom is likely to occur frequently. (Caution required)

B: The symptom may occur under certain conditions, but likeliness is assumed very low in practical usage.

C: The symptom is unlikely to be recognized by the user, and no practical issues are assumed.

Packing material attached to the machine:



Packing Material to fix the carriage