OKI
PRINTING SOLUTIONS

B412dn / B432dn / B512dn / MB472w / MB492 / MB562dnw ES5112 / ES5162

Option Tray Maintenance Manual

110614A

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PREFACE

This manual explains the maintenance methods of OptionTray unit optionally Installed in the B412dn/B432dn/B512dn/MB472dnw/MB492dn/MB562dnw/ ES4132dn/ES4192dn/ES5112dn/ES5162dnw.
This manual is prepared for the maintenance person. In regard to the handling methods of B412dn/B432dn/B512dn/MB472dnw/MB492dn/MB562dnw/ ES4132dn/ES4192dn/ES5112dn/ES5162dnw, please refer to the User's Manual.

Note!
- The descriptions in this manual are subject to change without prior notice.
- While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy of the information contained herein. Oki Data assumes no responsibility to the damages caused or claimed to have been caused by the user as a result of repair, adjustment and/or change using this manual.
- Parts of this product are delicate and can be damaged unless properly handled. We strongly recommend the user to maintain the product at the hand of the registered maintenance person of our company

- Before starting the maintenance work, please neutralize the static electricity.

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1. Maintenance of Option-Tray

This chapter describes the procedures of the field replacement of parts, assemblies and units. The procedures are to detach them. Reverse the procedures to attach them.
The reference part numbers used in this manual (such as ① and ②) do not identical to the part numbers in the maintenance disassembly configuration diagram (44575713TL) and RSPL (44575713TR) for the manual.

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1.1 Overview

1.1.1 Function

The extended paper feed unit is installed under the printer. the device performs the auto paper feed by the operation of the pulse motor (hopping) to control a signal from the printer.

The main function is as follows:

- Available paper:

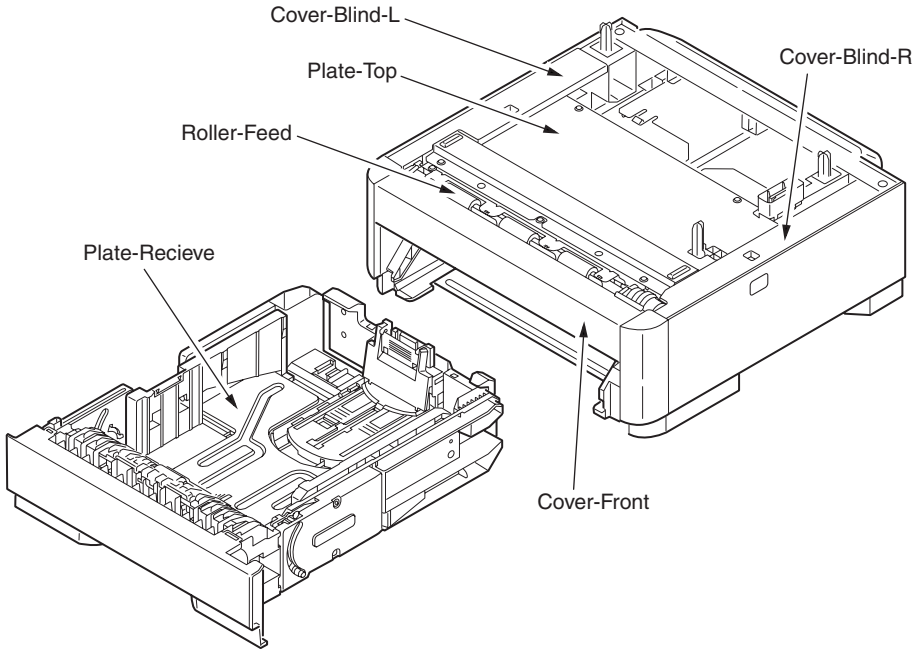
[Paper Type]

- Standard paper : (Ream weight 55 to 105 kg) A4, A5, B5, Custom, LETTER, Executive, LEGAL 13, LEGAL 13.5, LEGAL14, 16K
  *The custom is 148 to 215.9mm for width and 210 to 355.6 mm for length.

[Weight/ Thickness]

- Standard paper (Ream weight 55 to 105kg)

1.1.2 Exterior and Parts Name

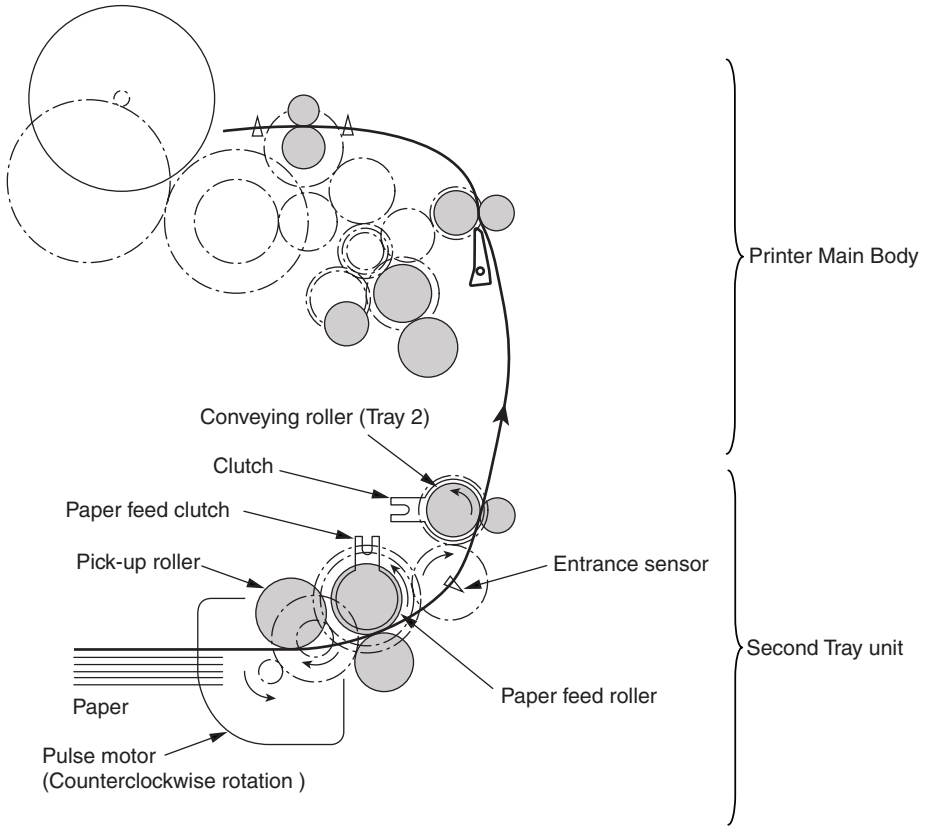


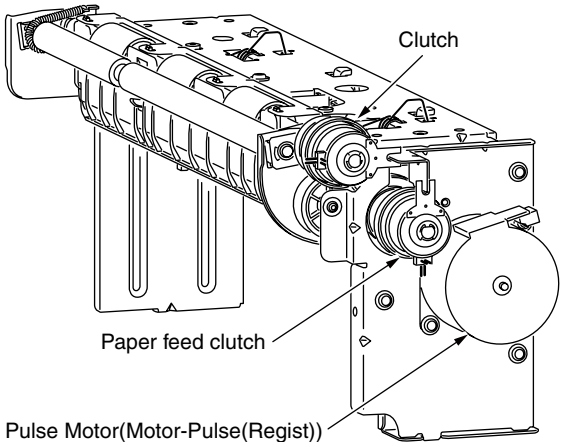
1.2 Description for Operation of Second Tray unit

Second Tray unit receives a signal from the printer main body and feeds paper to the printer main body.

Paper Feed from the Second Tray unit (Tray2)

1. When a signal is received from the printer main body, the pulse motor is rotated (Counterclockwise rotation), and by setting the paper feed clutch to ON, the paper feed roller and pick-up roller are rotated. Therefore, paper in a tray is fed.
2. After hitting the entrance sensor lever and switching the sensor to ON, the paper runs into the conveying roller (Tray 2) that is at rest, and then it is conveyed further by a certain amount. (This action corrects the paper skew.)
3. By setting the regist clutch to ON, the paper is carried by the regist roller.





1.3 Part Replacement

This section describes how to disassemble/ assemble/ install in the field. This section describes how to disassemble, however, as for the assembly, take the opposite sequence to the disassembling procedure.

1.3.1 Precautions on replacing parts

(1) Make sure to turn off the printer switch and remove the printer from the device before the part replacement.

(2) Do not disassemble the printer while it operates normally.

(3) Do not disassemble beyond the range. (Do not remove parts other than parts shown in the part replacement procedure.)

(4) Use specified maintenance tools.

(5) Disassemble the parts in the specified order. Parts may be damaged if they are not disassembled in proper order.

(6) Set small items such as screws and collars in their original position temporarily since they can be lost easily.

(7) Do not use gloves that build up static electricity when treating a print circuit board

(8) Do not place the print circuit board on the device or floor directly.

[Maintenance Tool]

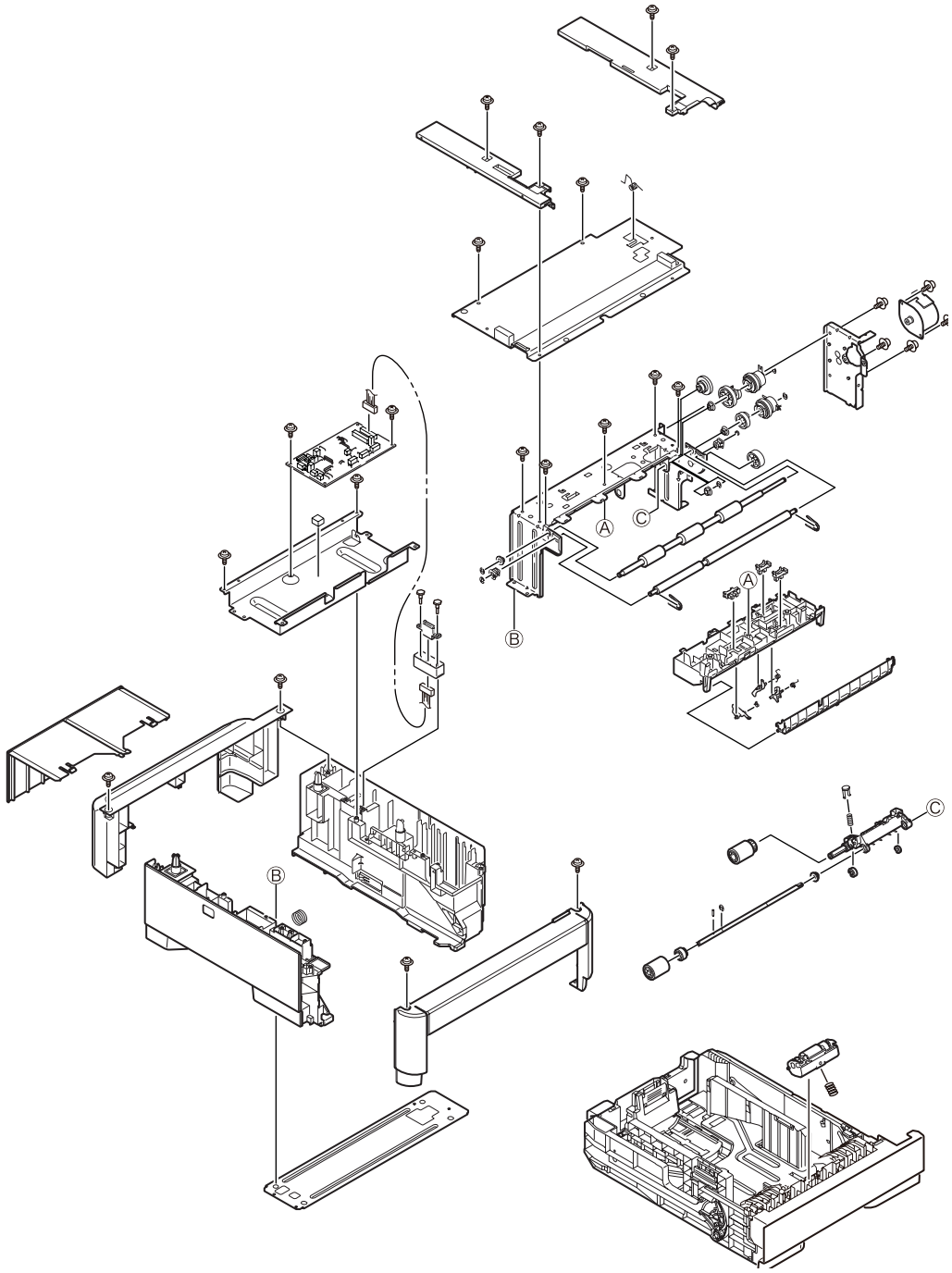
The following table shows the tools for the print board/ Assy/ Unit replacement in the field.

Table 1-1 Maintenance Tools

No.	Maintenance Tool		Amount	Purpose	Remarks
1		No.2-220 + Magnetic driver	1	3~5 mm screw	
2		No.3-200 driver	1		
3		Digital multi-meter	1		
4		Pliers	1		
5		E-ring plier	1	For E ring removing	

1.3.2 Arrangement of Parts

The arrangement of main parts is as shown in the following figure.



1.3.3 How to Replace Parts

This section describes how to replace parts shown in the following disassembling procedure.

- Second Tray unit
  - Roller-Pick-Up, Roller-Feed-Now (1.3.3.1)
  - Guard-Connector, Connector(9715S-08Z02-G4C) (1.3.3.2)
  - Board-GOG (1.3.3.3)
  - CONN Cord-AMP8P-AMP8P (1.3.3.4)
  - Gear-Assy-Clutch (Hop , Regist) , Motor - Pulse (1.3.3.5)
  - Frame-Assy-Retard, Spring-Retard (1.3.3.6)

1.3.3.1 Roller-Pick-Up, Roller-Feed-Now

(1) Remove Cassette-Assy.

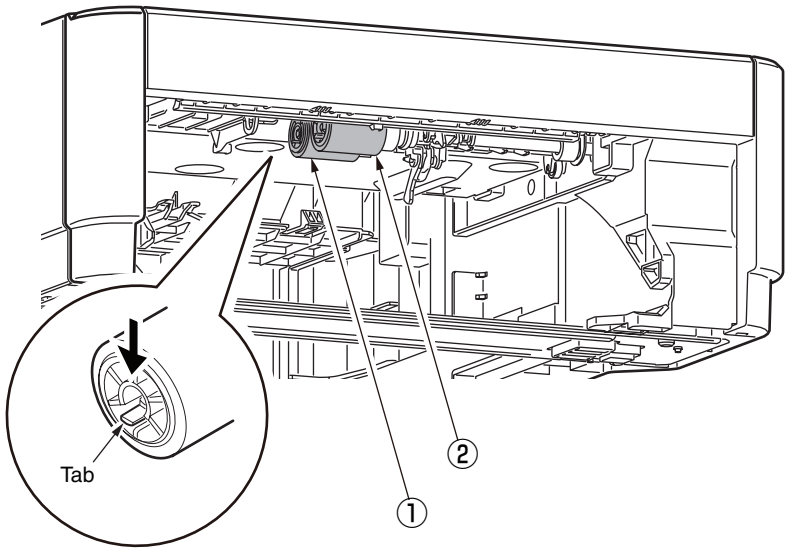
(2) Push the tab in the direction of the arrow to remove Roller-Pick-Up ① .

(3) Push the tab in the direction of the arrow to remove Roller-Feed-NOW ② .

(4) As for reinstalling, take the opposite sequence to removal sequence.

(Precautions on reinstalling)

1. When reinstalling Roller-Pick-Up ① , push it until it clicks.
2. When installing Roller-Feed-Now ② , push it until it clicks.



1.3.3.2 Guard-Connector, Connector (9715S-08Z02-G4C)

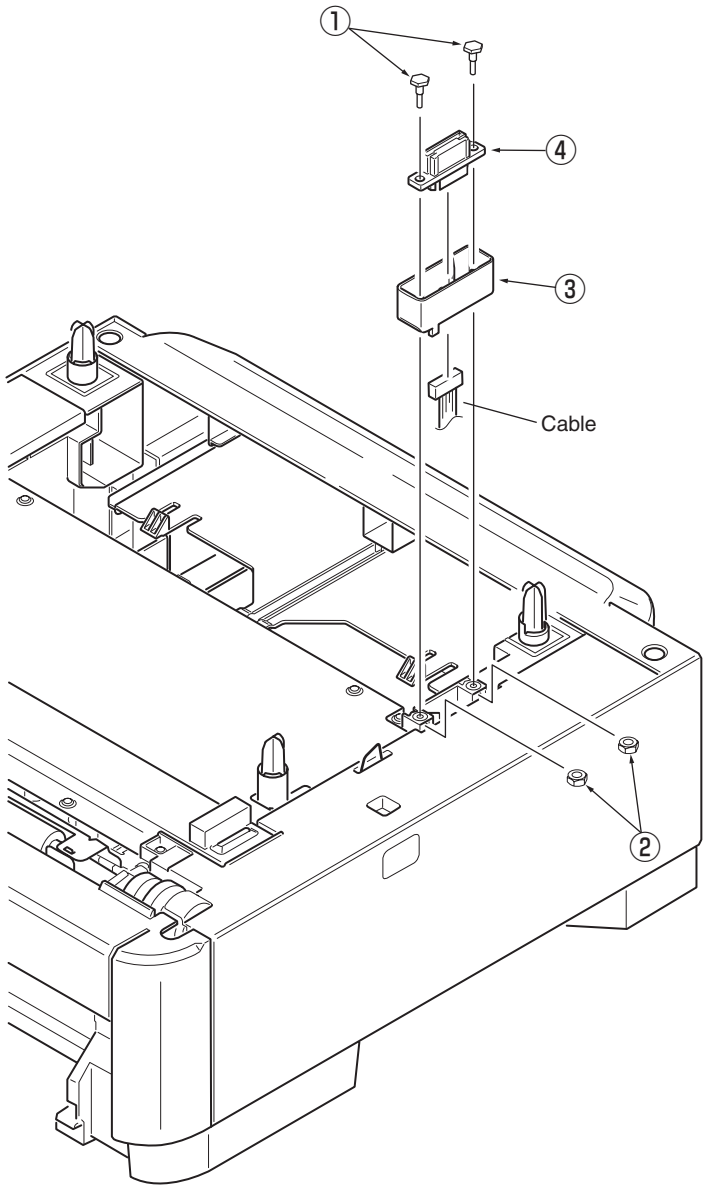
(1) Remove the two screws ① . Remove the two nuts ② .

(2) Disconnect the cable, and remove Guard-Connector ③ and Connector (9715S-08Z02-G4C) ④ .

(3) Installing is performed by the inverse procedure with removing.

(Note on removing / installing)

1. Be careful not to lose the nuts ② .



1.3.3.3 Board-GOG

(1) Remove the two screws (Black) ① . Remove the Cover-Rear ② .

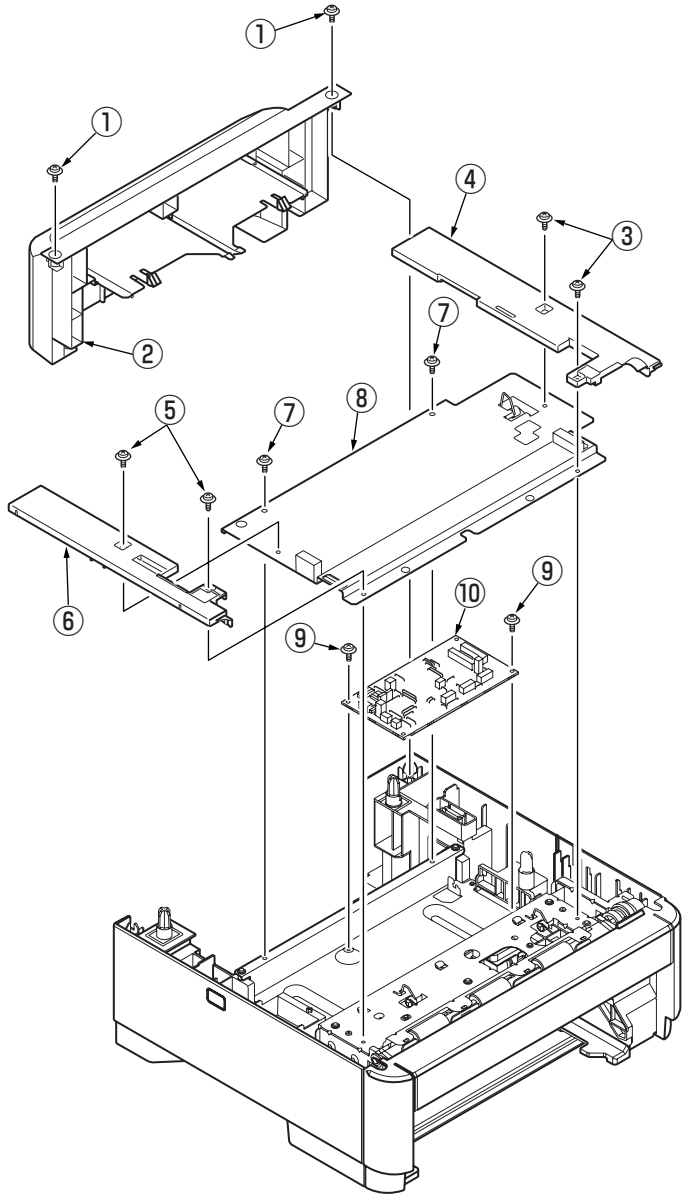
(2) Remove the two screws (silver) ③ . Remove the Cover-Blind-R ④ .

(3) Remove the two screws (silver) ⑤ . Remove the Cover-Blind-L ⑥ .

(4) Remove the two screws (silver) ⑦ . Remove the Plate-Top ⑧ .

(5) Disconnect the six connectors, and remove the two screws (silver) ⑨ and Board-GOG ⑩ .

(6) Installing is performed by the inverse procedure with removing.



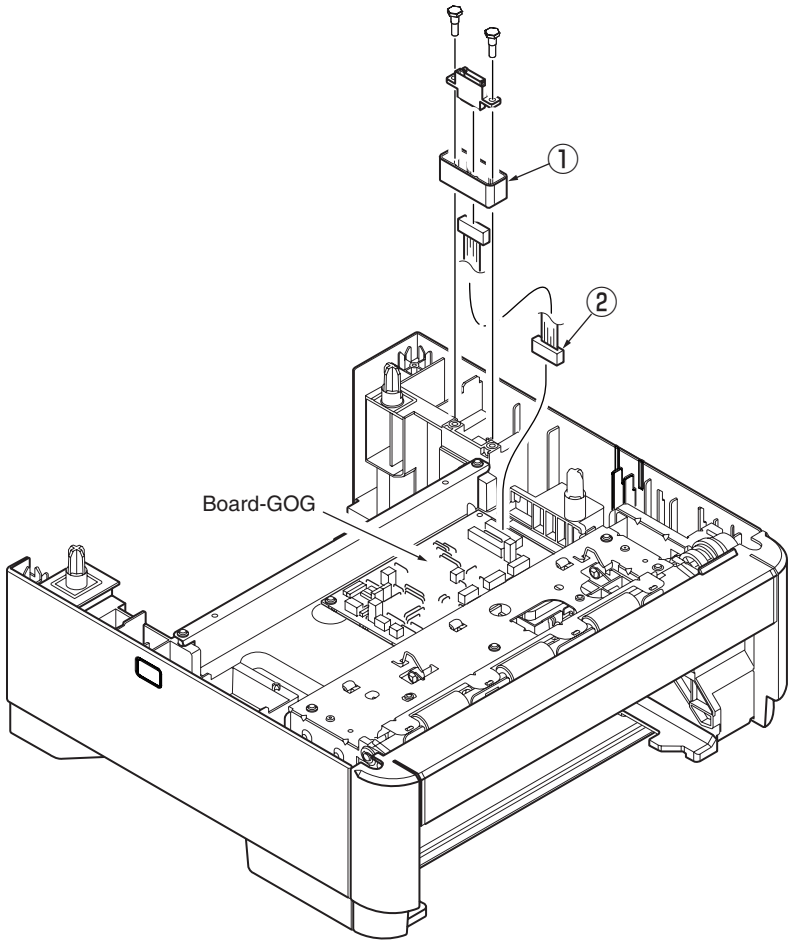
1.3.3.4 CONN Cord-AMP8P-AMP8P

(1) Remove the Guard-Connector ① . (Refer to 1.3.3.2)

(2) Remove the Cover-Rear, Cover-Blind-R/L, Plate-Top. (Refer to 1.3.3.3)

(3) Remove CONN-Cord-AMP8P-AMP8P ② from Board-GOG.

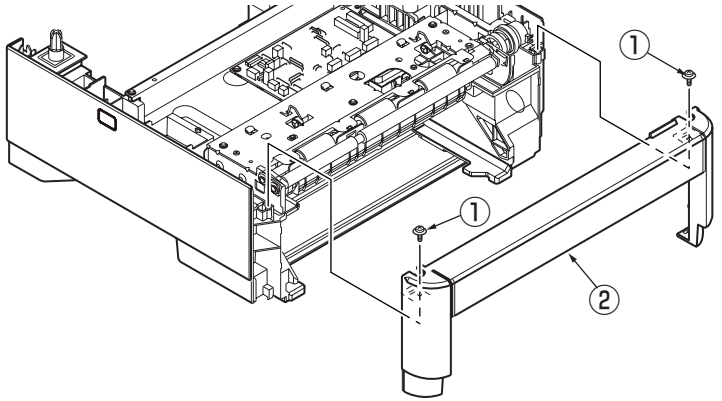
(4) Installing is performed by the inverse procedure with removing.



1.3.3.5 Gear-Assy-Clatch (Hop, Regist), Motor-Pulse

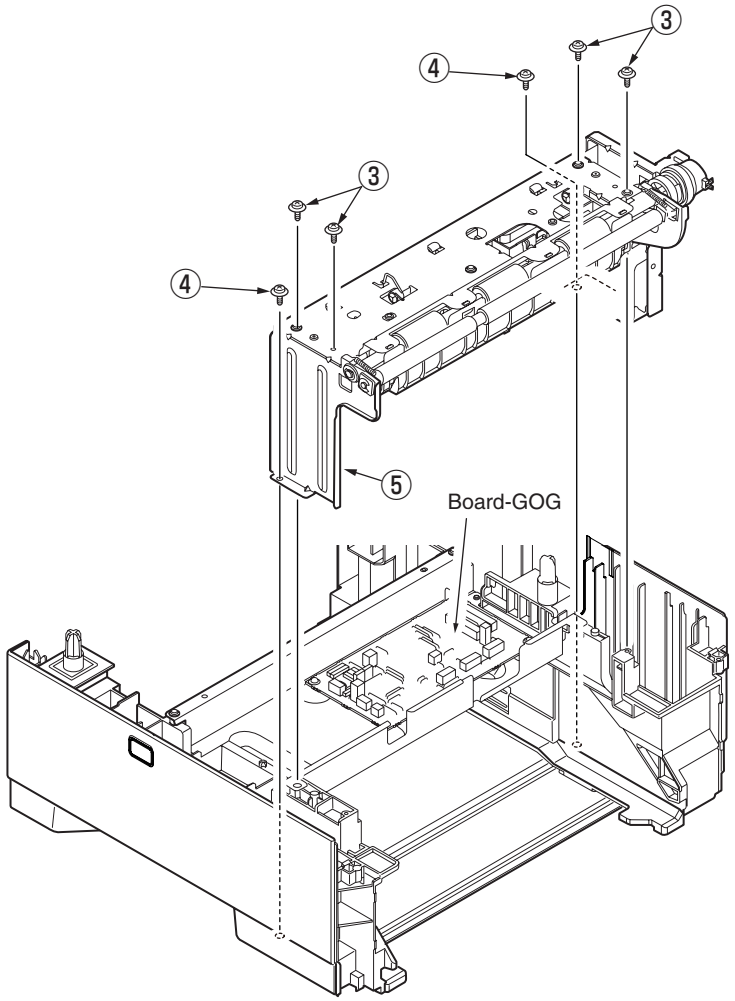
(1) Remove the Cover-Rear, Cover-Blind-R/L, Plate-Top. (Refer to 1.3.3.3)

(2) Remove the two screws (Black) ① , disengage the two tabs, and remove Cover-Front ② .



(3) Remove the four screws (Black) ③ . Remove the two screws (Silver) ④ .

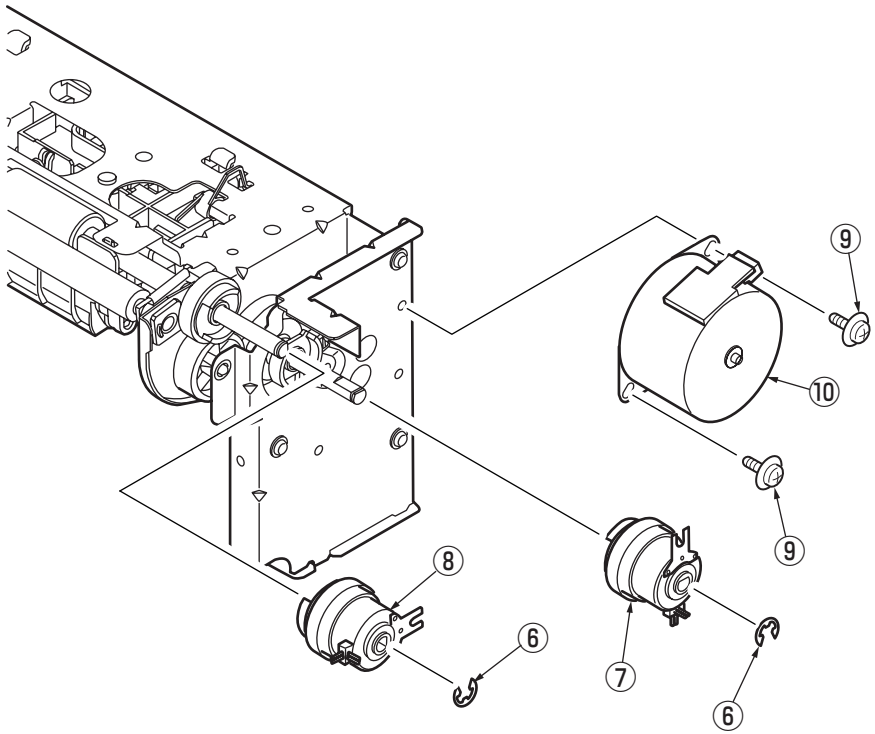
(4) Disconnect the five connectors from Board-GOG, and remove Frame-Assy-Hop ⑤ .



(5) Remove the E-ring ⑥ , Gear-Assy-Clutch (Hop) ⑦ and Gear-Assy-Clutch (Regist) ⑧ .

(6) Remove the two screws (Silver) ⑨ . Remove the Motor-Pulse ⑩ .

(7) Installing is performed by the inverse procedure with removing.



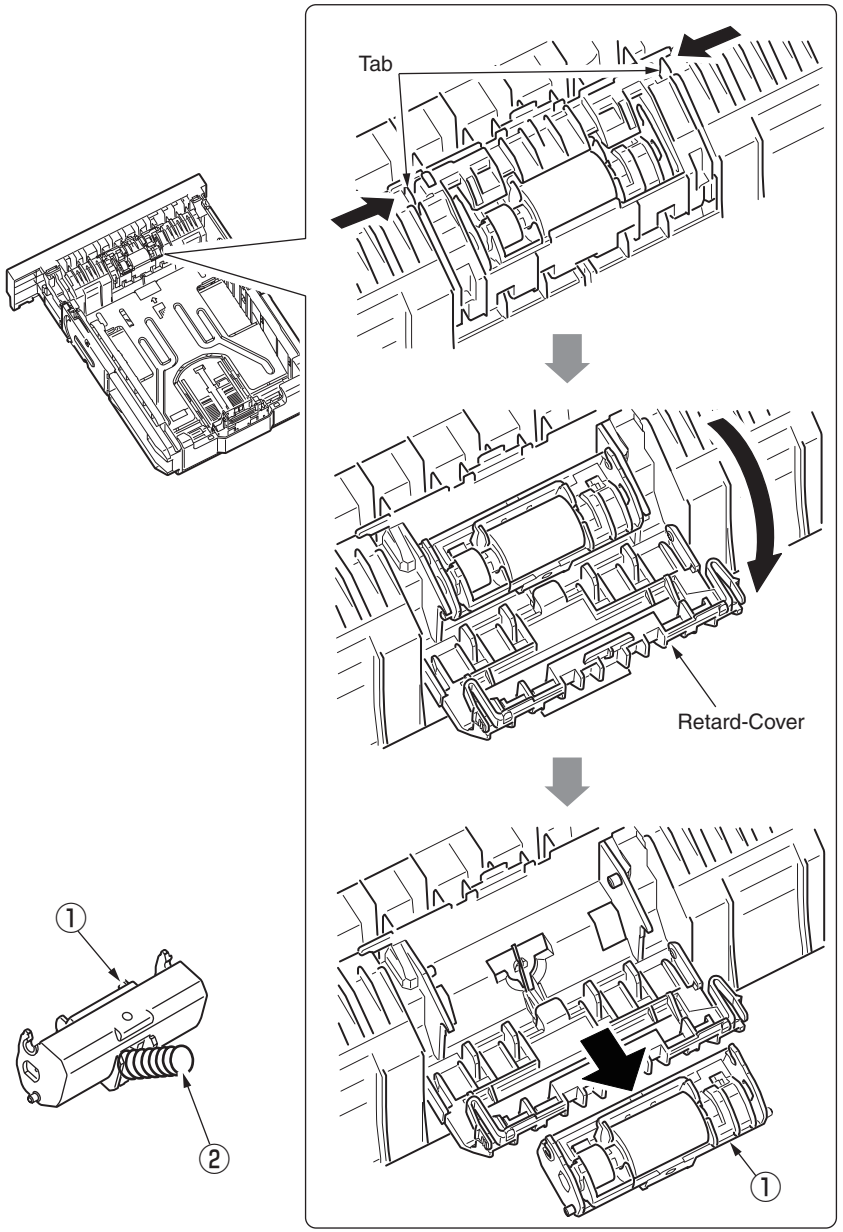
1.3.3.6 Frame-Assy-Retard, Spring-Retard

(1) Detach Cassette-Assy.

(2) Push two tabs in the direction of the arrow to remove Retard-Cover.

(3) Push Frame-Assy Retard ① in the direction of the arrow. (Spring-Retard ② is also removed together.)

(4) Installing is performed by the inverse procedure with removing.

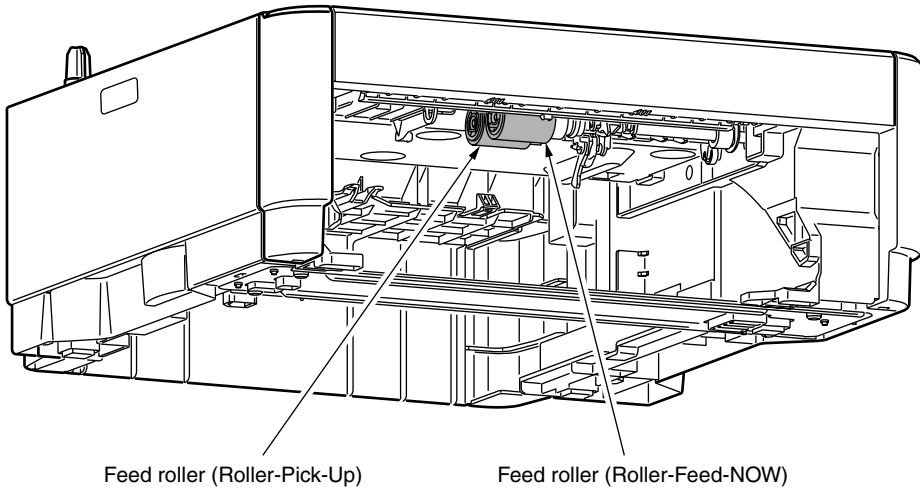


1.3.4 Cleaning of Paper Feed Roller and Separation Roller

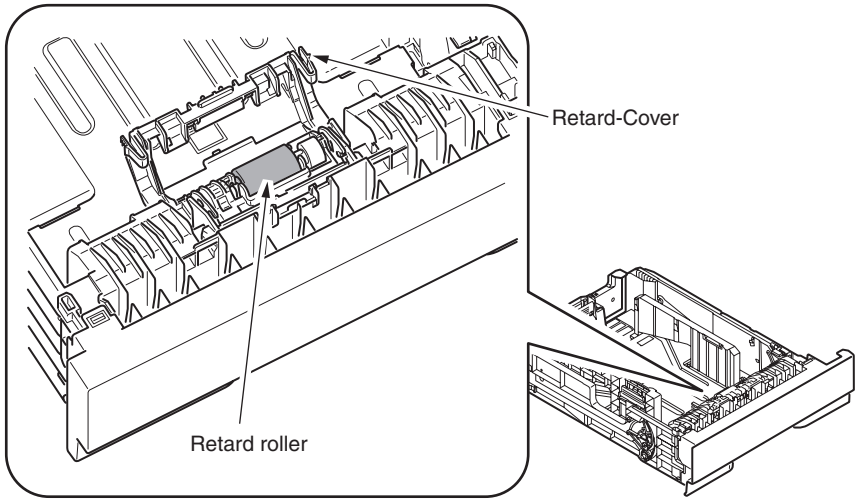
Clean the rollers when [392: Paper Jam] often occurs.

(1) Pull the paper cassette.

(2) Wipe the two feed rollers with a tightly wrung cloth soaked in water through the opening for installation of a paper cassette.



(3) Open Retard-Cover of the paper cassette and wipe the retard roller with a tightly wrung cloth soaked in water. (Refer to 1.3.3.6 for how to open Retard-Cover.)



1.4 Procedure for Troubleshooting

1.4.1 Precautions for Troubleshooting

(1) Check the basic items to be checked in the user's manual.

(2) Obtain detail information at the failure from customers as much as possible.

(3) Inspect the status which is close to the status at the failure.

1.4.1.1 Preparation before Troubleshooting

(1) Display of Operator Panel

The failure status is displayed on the LCD (Liquid crystal display) of the operator panel. Follow the message displayed on LCD and make appropriate repairs.

B412dn/B432dn/B512dn/ES4132dn/ES5112dn

MB472dnw

MB492dn/MB562dnw/ES4192dn/ES5162dnw

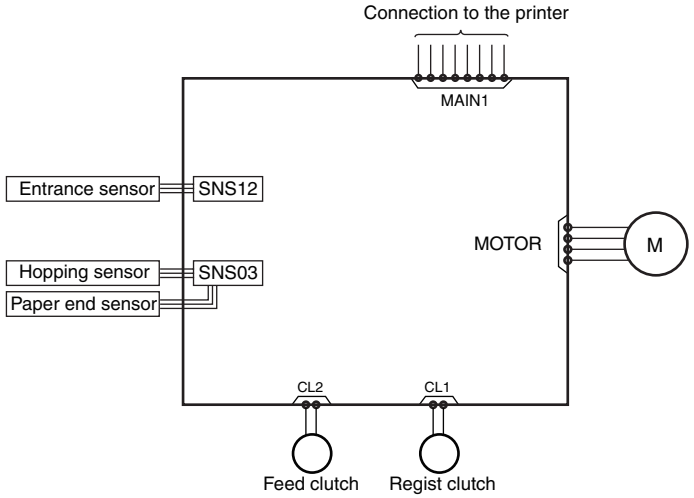
- (Jam Error)

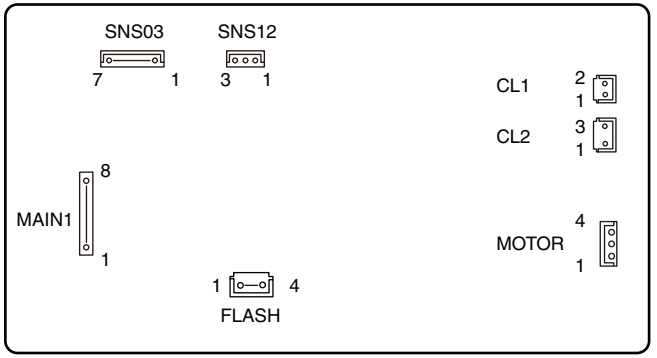
Paper Feed Jam

- Does a jam occur around the entrance when turning on the power?
  - Yes — Is the paper on the entrance sensor lever?
    - Yes — Remove the paper.
  - No — Does the entrance sensor lever work normally?
    - No — Replace the entrance sensor lever.
  - Yes — Replace the main board or entrance sensor.
- NO — Does the paper inlet jam occur when paper is fed.
  - Yes — Is the paper on the entrance sensor lever?
    - Yes — Does the entrance sensor plate work normally?
      - No — Replace the entrance sensor lever.
    - Yes — Clean the entrance sensor, or replace the main board or entrance sensor.
  - No — Replace the hopping roller shaft Assy or paper cassette.
- No — Are the hopping roller and paper feed roller rotated?
  - Yes — Load the paper appropriately.
- No — Is the pulse motor rotated?
  - Yes — Replace the hopping roller shaft Assy or the one-way clutch gear of the paper-feed roller Assy.
- No — Is the connector appropriately connected?
  - No — Connect the connector appropriately.
- Yes — Check the coil resistance of the pulse motor.Is it normal (3.4Ω or 5Ω)?
  - No — Replace the stepping motor.
- Yes — Replace the GOG board.

1.4.2 Connection Diagram

1.4.2.1 Connection diagram



1.4.2.2 Board Arrangement

GOG board