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**brother**®

**FACSIMILE EQUIPMENT  
SERVICE MANUAL**

**MODEL: FAX560/FAX580MC/MFC660MC  
FAX-T72/FAX-T74/FAX-T76**

Product: 2000 Brother FAX560/FAX580MC/MFC660MC,FAX-T72/FAX-T74/FAX-T76 FACSIMILE EQUIPMENT Fax Service  
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## PREFACE

This publication is a Service Manual covering the specifications, construction, theory of operation, and maintenance of the Brother facsimile equipment. It includes information required for field troubleshooting and repair--disassembly, reassembly, and lubrication--so that service personnel will be able to understand equipment function, to rapidly repair the equipment and order any necessary spare parts.

To perform appropriate maintenance so that the facsimile equipment is always in best condition for the customer, the service personnel must adequately understand and apply this manual.

This manual is made up of six chapters and appendices.

|                     |   |
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| <b>CHAPTER I.</b>   | <b>GENERAL DESCRIPTION</b>                    |
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| <b>CHAPTER V.</b>   | <b>MAINTENANCE MODE</b>                       |
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This manual describes the models and their versions to be destined for major countries. The specifications and functions are subject to change depending upon each destination.

**CHAPTER I.**  
**GENERAL DESCRIPTION**

# CHAPTER I. GENERAL DESCRIPTION

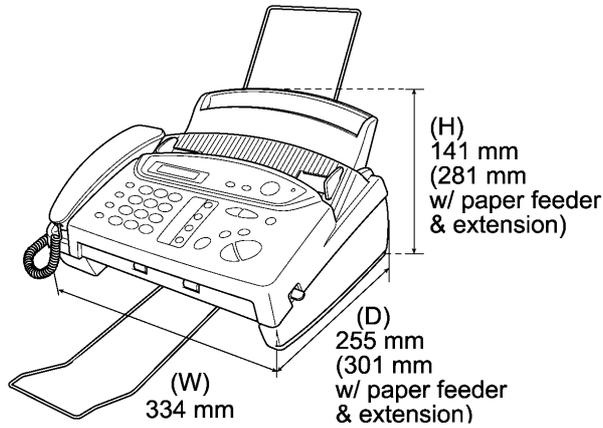
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# 1. EQUIPMENT OUTLINE

## 1.1 External Appearance and Weight

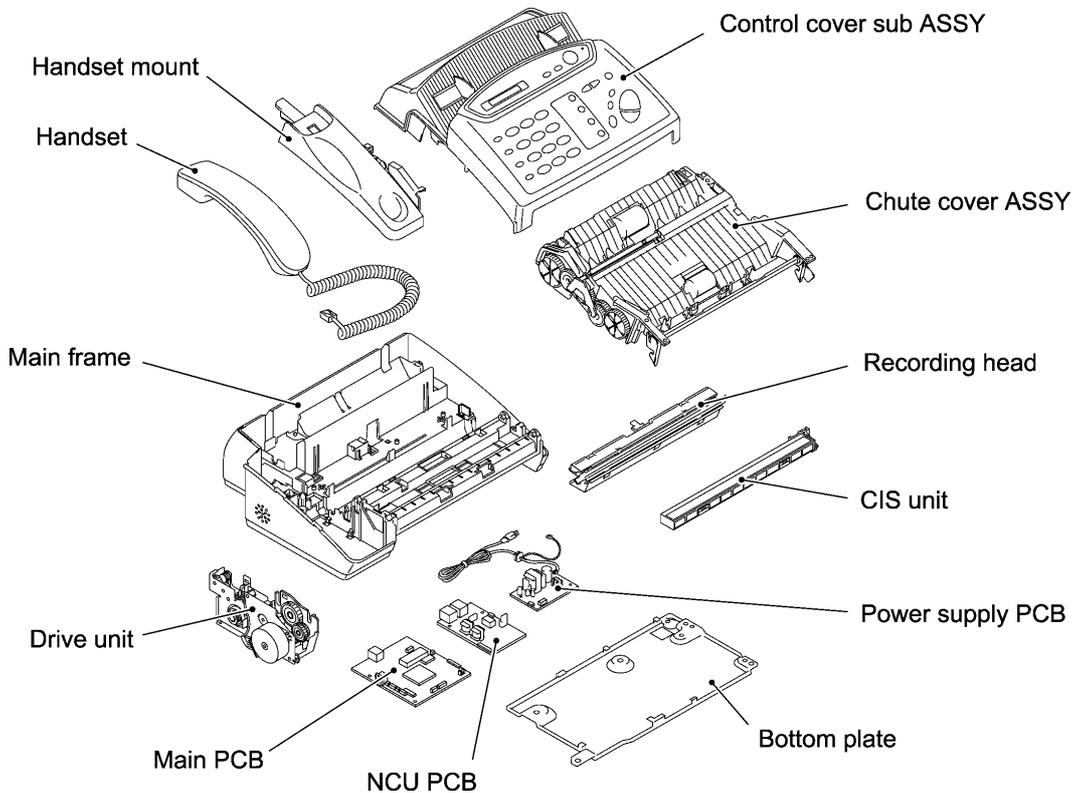
The figure below shows the equipment appearance and approximate dimensions.



|         |  |                |
|---------|--|----------------|
| Weight: | Machine proper (excluding accessories) | Approx. 2.9 kg |
|         | In package                             | Approx. 4.5 kg |
|         | MFC660MC<br>Other models               | Approx. 4.1 kg |

## 1.2 Components

The equipment consists of the following major components:



## 2. SPECIFICATIONS

(1/2)

| Model Name                         | FAX560   | FAX580MC   | MFC660MC   |
|------------------------------------|--|--|--|
| Engine                             | Thermal transfer                                     | Thermal transfer                                     | Thermal transfer                                 |
| Color                              | Upper: New Personal white (1485)<br>Lower: 1473 gray | Upper: New Personal white (1485)<br>Lower: 1473 gray | Upper: MFC white (1495 gray)<br>Lower: 1473 gray |
| Transmission Speed (sec)           | 15   | 9  | 9  |
| Modem Speed (bps)                  | 9600   | 14,400   | 14,400   |
| Group Compatibility                | G3   | G3   | G3   |
| Input/Output Width                 | 8.5"/8.5"  | 8.5"/8.5"  | 8.5"/8.5"  |
| ADF (pages)                        | 10   | 10   | 10   |
| Paper Feeder (sheets)              | Letter: 50*, Legal: 30                               | Letter: 50*, Legal: 30                               | Letter: 50*, Legal: 30                           |
| Ribbon Yield (letter-size)         | 150 pages (47 m)                                     | 150 pages (47 m)                                     | 150 pages (47 m)                                 |
| Starter Ribbon Yield (letter-size) | 30 pages (10 m)                                      | 30 pages (10 m)                                      | 30 pages (10 m)                                  |
| Replacement Roll                   | PC401: 47 m (150 pages)                              | PC401: 47 m (150 pages)                              | PC401: 47m (150 pages)                           |
| LCD Size                           | 16 x 1   | 16 x 1   | 16 x 1   |
| On-Screen Programming              | Yes  | Yes  | Yes  |
| Super Fine                         | Yes  | Yes  | Yes  |
| Smoothing                          | Yes  | Yes  | Yes  |
| Gray Scale (levels)                | 64 by Dithered                                       | 64 by Dithered                                       | 64 by Dithered                                   |
| One Touch                          | 4  | 4  | 4  |
| Speed Dial                         | 50   | 50   | 50   |
| Telephone Index                    | Yes as "Search"                                      | Yes as "Search"                                      | Yes as "Search"                                  |
| Speaker Phone                      | Monitor  | Full duplex (digital)                                | Full duplex (digital)                            |
| Handset                            | Yes  | Yes  | Yes  |
| FAX/TEL Switch                     | Yes  | Yes  | Yes  |
| Distinctive Ring Detection         | Yes  | Yes  | Yes  |
| Caller ID                          | Yes  | Yes  | Yes  |
| Call Waiting Caller ID             | Yes  | Yes  | Yes  |
| TAD Interface                      | Yes  | Yes  | Yes  |
| Enhanced Remote Activation         | Yes  | Yes  | Yes  |
| Automatic Redial                   | Yes  | Yes  | Yes  |
| Next-FAX Reservation               | Yes  | Yes  | Yes  |
| Multi-Resolution Transmission      | Yes  | Yes  | Yes  |
| Polling Type                       | Sim/Seq  | Sim/Seq  | Sim/Seq  |
| Delayed Transmission               | 3-timer  | 3-timer  | 3-timer  |
| Call Reservation                   | Yes  | Yes  | Yes  |
| Electronic Coverpage               | Yes-Super  | Yes-Super  | Yes-Super  |
| Call Back Message                  | Yes  | Yes  | Yes  |
| Activity Report                    | Yes  | Yes  | Yes  |
| TX Verification Report             | Yes  | Yes  | Yes  |
| Memory Capacity (pages)            | 512 KB<br>(up to 25 pages for OPR**)                 | 512 KB<br>(up to 25 pages for OPR**)                 | 512 KB<br>(up to 25 pages for OPR**)             |
| ECM                                | Yes  | Yes  | Yes  |
| Broadcasting                       | Yes  | Yes  | Yes  |
| Quick Scan                         | Yes  | Yes  | Yes  |
| Out-of-Paper Reception             | Yes  | Yes  | Yes  |

\*Paper feeder: 50 sheets for US/Canada

\*\*Page memory: 25 pages in OPR (out-of-paper reception), 22 pages in quick scan

| <b>Model Name</b>             | <b>FAX-T72<br/>(Ger &amp; Fra Only)</b>         | <b>FAX-T74</b>                                  | <b>FAX-T76</b>                                 |
|-------------------------------|---|---|--|
| Engine                        | Thermal transfer                                | Thermal transfer                                | Thermal transfer                               |
| Color                         | New Personal black (1293)                       | New Personal black (1293)                       | New Personal black (1293)                      |
| Transmission Speed (sec)      | 15  | 15  | 9  |
| Modem Speed (bps)             | 9600  | 9600  | 14,400   |
| Group Compatibility           | G3  | G3  | G3   |
| Input/Output Width            | 8.5"/8.5"                                       | 8.5"/8.5"                                       | 8.5"/8.5"                                      |
| ADF (pages)                   | 10  | 10  | 10   |
| Paper Feeder (A4-size)        | 30 sheets                                       | 30 sheets                                       | 30 sheets                                      |
| Ribbon Yield (A4-size)        | 130 pages (47 m)                                | 130 pages (47 m)                                | 130 pages (47 m)                               |
| Starter Ribbon (A4-size)      | Yes-10 m (30 pages)                             | Yes-10 m (30 pages)                             | Yes-10 m (30 pages )                           |
| Replacement Roll              |   |   |  |
| LCD Size                      | 16 x 1  | 16 x 1  | 16 x 1   |
| On-Screen Programming         | Yes   | Yes   | Yes  |
| Super Fine                    | Yes   | Yes   | Yes  |
| Smoothing                     | Yes   | Yes   | Yes  |
| Gray Scale (levels)           | 64 by Dithered                                  | 64 by Dithered                                  | 64 by Dithered                                 |
| One Touch                     | 4   | 4   | 4  |
| Speed Dial                    | 50  | 50  | 50   |
| Telephone Index               | Yes as "Search"                                 | Yes as "Search"                                 | Yes as "Search"                                |
| Speaker Phone                 | Monitor   | Monitor   | Full duplex (digital)                          |
| Handset                       | No  | Yes   | Yes  |
| FAX/TEL Switch                | Yes   | Yes   | Yes  |
| Caller ID                     | Yes<br>HOL/SWE/UK/IRE/ FRA/<br>NOR/BEL/ DEN/SPA | Yes<br>HOL/SWE/UK/IRE/ FRA/<br>NOR/BEL/ DEN/SPA | Yes<br>HOL/SWE/UK/IRE FRA/<br>NOR/BEL/ DEN/SPA |
| Call Waiting Caller ID        | No  | No  | No   |
| Distinctive Ring Detection    | Yes for DEN/UK                                  | Yes for DEN/UK                                  | Yes for DEN/UK                                 |
| TAD Interface                 | Yes   | Yes   | Yes  |
| Enhanced Remote Activation    | Yes   | Yes   | Yes  |
| Automatic Redial              | Yes   | Yes   | Yes  |
| Next-FAX Reservation          | Yes   | Yes   | Yes  |
| Multi-Resolution Transmission | Yes   | Yes   | Yes  |
| Polling Type                  | Sim/Sec/Del/Seq                                 | Sim/Sec/Del/Seq                                 | Sim/Sec/Del/Seq                                |
| Delayed Transmission          | 3-timer   | 3-timer   | 3-timer  |
| Call Reservation              | Yes   | Yes   | Yes  |
| Electronic Coverpage          | Yes-Super                                       | Yes-Super                                       | Yes-Super                                      |
| Callback Message              | Yes   | Yes   | Yes  |
| Journal Report                | Yes   | Yes   | Yes  |
| TX Verification Report        | Yes   | Yes   | Yes  |
| Memory Capacity               | 512 KB<br>(up to 20 pages for OPR*)             | 512 KB<br>(up to 20 pages for OPR*)             | 512 KB<br>(up to 20 pages for OPR*)            |
| ECM                           | Yes   | Yes   | Yes  |
| Broadcasting                  | Yes   | Yes   | Yes  |
| Quick Scan                    | Yes   | Yes   | Yes  |

\*Page memory: 20 pages ITU-T No.1 chart in OPR (out-of-paper reception) in the ECM mode

(2/2)

| <b>Model Name</b>           | <b>FAX560</b>       | <b>FAX580MC</b>     | <b>MFC660MC</b>     |
|-----------------------------|---------------------|---------------------|---------------------|
| Multi-Copying w/ Sorting    | Yes                 | Yes                 | Yes                 |
| Enlargement/Reduction Ratio | Yes (50-150%)       | Yes (50-150%)       | Yes (50-150%)       |
| Multi-Transmission          | No                  | No                  | No                  |
| Confidential Mailbox        | No                  | No                  | No                  |
| Auto Reduction              | Yes                 | Yes                 | Yes                 |
| Message Center              | No                  | Yes                 | Yes                 |
| TAD Recording Time          | No                  | 15 minutes          | 15 minutes          |
| Fax Forwarding/Paging       | Yes                 | Yes                 | Yes                 |
| Fax Retrieval               | Yes                 | Yes                 | Yes                 |
| Fax-/Voice-on-Demand        | No                  | No                  | No                  |
| Fax & Voice Mailbox         | No                  | No                  | No                  |
| Help List                   | Yes                 | Yes                 | Yes                 |
| Missing Link                | No                  | Ready               | Included            |
| Optional Memory             | No                  | No                  | No                  |
| Voice Alarm                 | No                  | No                  | No                  |
| Output Tray                 | Yes, wire included. | Yes, wire included. | Yes, wire included. |
| Others                      | Call Manage         | Call Manage         | Call Manage         |
|                             |                     |                     |                     |

| Model Name                  | FAX-T72<br>(Ger & Fra Only)           | FAX-T74                               | FAX-T76                               |
|-----------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Out-of-Paper Reception      | Yes                                   | Yes                                   | Yes                                   |
| Multi-Copying w/ Sorting    | Yes                                   | Yes                                   | Yes                                   |
| Enlargement/Reduction Ratio | Yes (50-150%)                         | Yes (50-150%)                         | Yes (50-150%)                         |
| Multi-Transmission          | No (w/o SHIFT key)                    | No (w/o SHIFT key)                    | No (w/o SHIFT key)                    |
| Confidential Mailbox        | No                                    | No                                    | No                                    |
| Auto Reduction              | Yes                                   | Yes                                   | Yes                                   |
| Message Manager             | No                                    | No                                    | Yes                                   |
| TAD Recording Time          | No                                    | No                                    | 15 minutes                            |
| Fax Forwarding/Paging       | Yes-Only Fax Forwarding               | Yes-Only Fax Forwarding               | Yes-both                              |
| Fax Retrieval               | Yes                                   | Yes                                   | Yes                                   |
| Fax-/Voice-on-Demand        | No                                    | No                                    | No                                    |
| Fax & Voice Mailbox         | No                                    | No                                    | No                                    |
| Help List                   | Yes                                   | Yes                                   | Yes                                   |
| MFL PRO for FAX             | No                                    | No                                    | Ready                                 |
| Optional Memory             | No                                    | No                                    | No                                    |
| Memo Manager                | No                                    | No                                    | No                                    |
| Mute Key                    | No                                    | Yes-music on hold;<br>Green Sleeves   | Yes-music on hold;<br>Green Sleeves   |
| Backup for Clock            | 9 hours                               | 9 hours                               | 15 hours                              |
| Output Tray                 | Not available                         | Not available                         | Not available                         |
| Backup for Page Memory      | No                                    | No                                    | 6 hours                               |
| Power Consumption           | Standby: Less than 2 W<br>Peak: 150 W | Standby: Less than 2 W<br>Peak: 150 W | Standby: Less than 2 W<br>Peak: 150 W |
|                             |                                       |                                       |                                       |

**Remarks**

|                 | Base models |            | MC models         |
|-----------------|-------------|------------|-------------------|
|                 | w/o handset | w/ handset |                   |
| American models | —           | FAX560     | FAX580MC/MFC660MC |
| European models | FAX-T72     | FAX-T74    | FAX-T76           |

# **CHAPTER II.**

## **INSTALLATION**

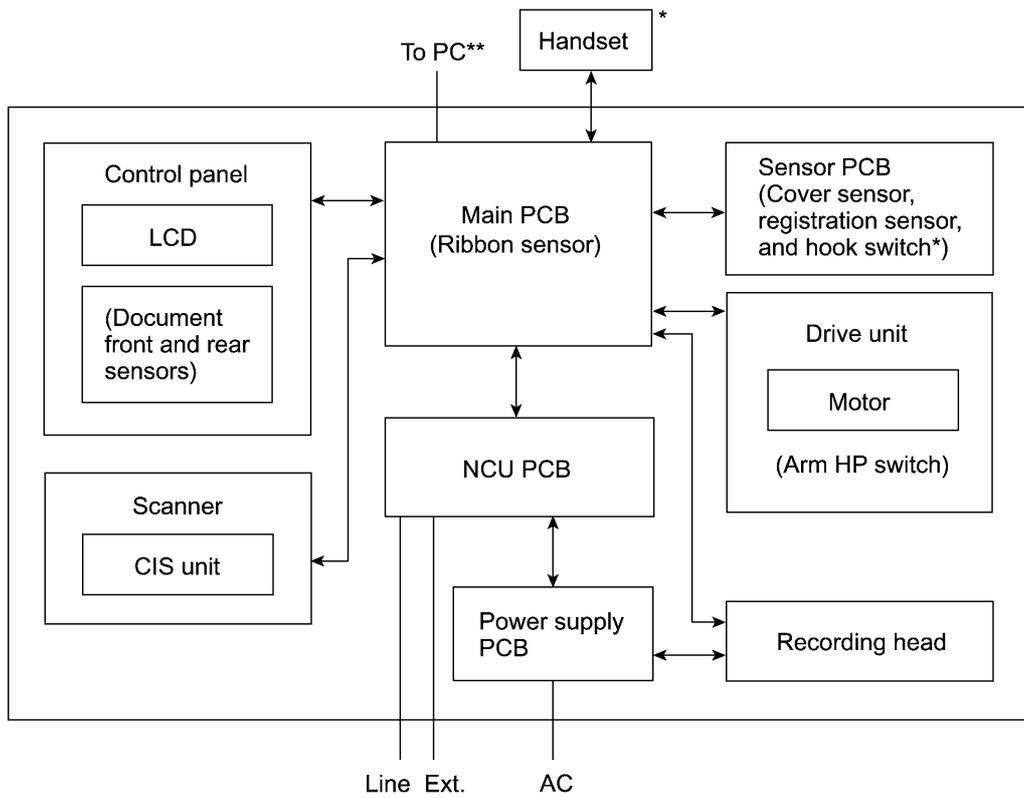
**CHAPTER III.**  
**THEORY OF OPERATION**

# CHAPTER III. THEORY OF OPERATION

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# 1. OVERVIEW

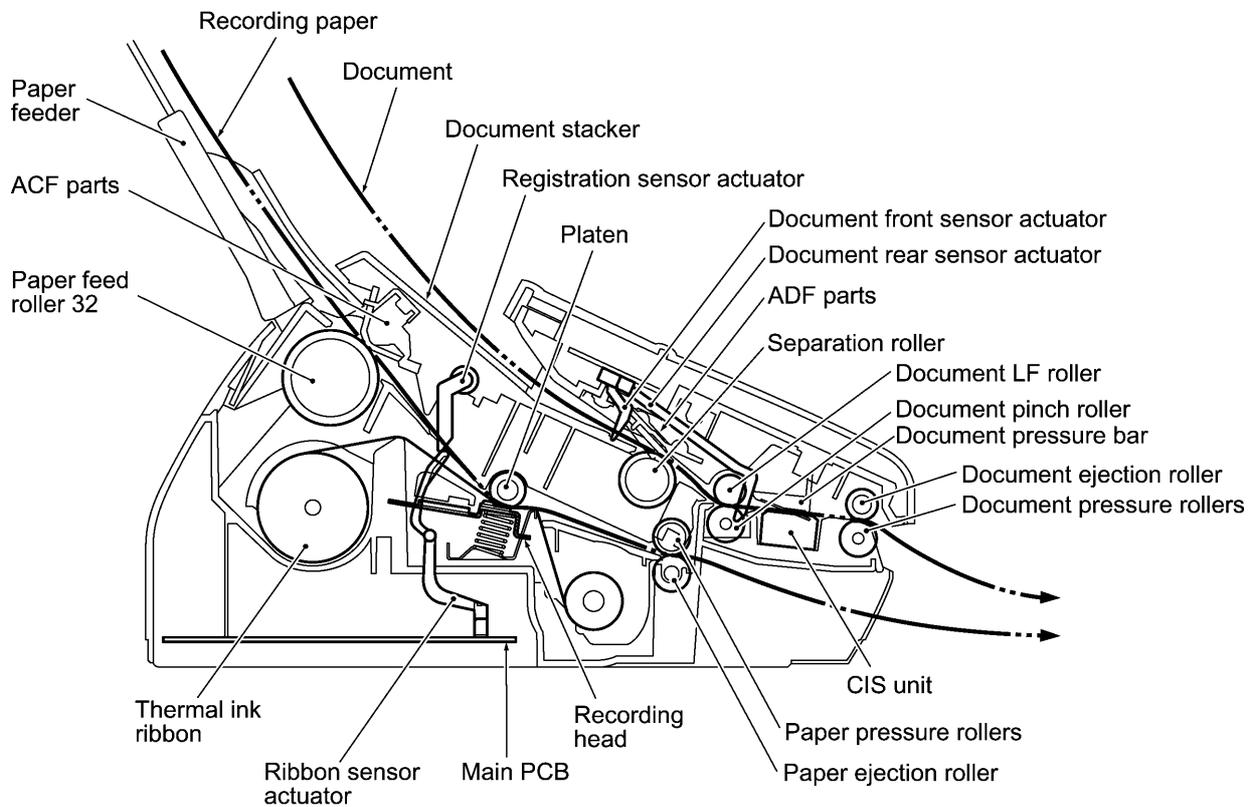


\*Not provided on models w/o handset.  
\*\*Provided on MC models.

## 2. MECHANISMS

The facsimile equipment is classified into the following mechanisms:

- n Scanning Mechanism
  - ADF mechanism
  - Document scanning & feeding mechanism
- n Printing Mechanism
  - ACF and registration mechanism
  - Printing and paper ejecting mechanism
- n Power Transmission Switching Mechanism
- n Sensors and Actuators



## 2.1 Scanning Mechanism

The scanning mechanism consists of the document stacker, automatic document feeder (ADF), separation roller, document LF roller, scanner, document ejection roller, and document sensors. (For details about the sensors, refer to Section 2.4.)

### **Automatic document feeder (ADF)**

If the operator sets documents on the stacker and starts the transmitting operation, the ADF (consisting of the separation roller and ADF parts) feeds those documents into the equipment, starting from the bottom sheet to the top, page by page. Each document advances to the scanner with the document LF roller, and then it is fed with the document ejection roller.

### **Scanner**

The scanner uses a contact image sensor (CIS) unit which consists of an LED array illuminating documents, a self-focus lens array collecting the reflected light, a CIS PCB carrying out photoelectric conversion to output picture element data, and a cover glass on which a document advances. When the document passes between the document pressure bar and the cover glass, it is scanned.

## 2.2 Printing Mechanism

The printing mechanism consists of the paper feeder, automatic cut sheet feeder (ACF), paper feed roller 32, platen, thermal recording head, paper ejection roller, and sensors. (For details about the sensors, refer to Section 2.4.)

### **Automatic cut sheet feeder (ACF) and registration mechanism**

If the operator sets cut sheets into the paper feeder and receiving operation starts, the ACF (paper feed roller 32 and ACF parts) feeds paper into the equipment, a sheet at a time. After the leading edge of paper passes through the registration sensor actuator, the paper is further fed for the specified time length. Accordingly, the leading edge will reach the platen where the paper skew will be eliminated.

### **Printing and paper ejecting mechanism**

The platen feeds the paper up to the printing position where the thermal recording head prints while the thermal ink ribbon advances. Then the paper is fed out of the equipment with the paper ejection roller.

## 2.3 Power Transmission Switching Mechanism

The facsimile equipment has a single drive motor whose power transmission route can be switched by the planetary gear system and by changing the motor rotation direction. This switching allows the equipment to function in five operation modes—scanning, paper feeding, recording, paper ejecting, and copying modes.

To switch to a particular mode, the motor rotates in the reverse direction. If the switching arm of the planet gear ASSY turns on the arm HP switch, the motor further rotates by the specified number of pulses to locate the planet gear ASSY in the particular mode position. Then the motor rotates in the forward direction to enter the particular mode.

## 2.4 Sensors and Actuators

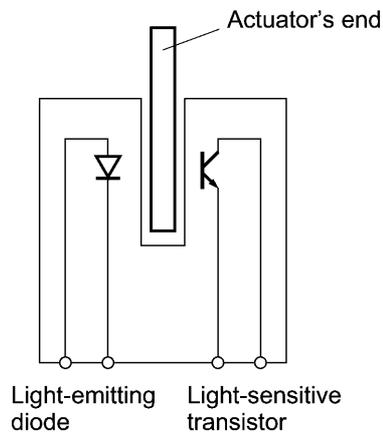
This equipment has two photosensors and five mechanical switches as described below.

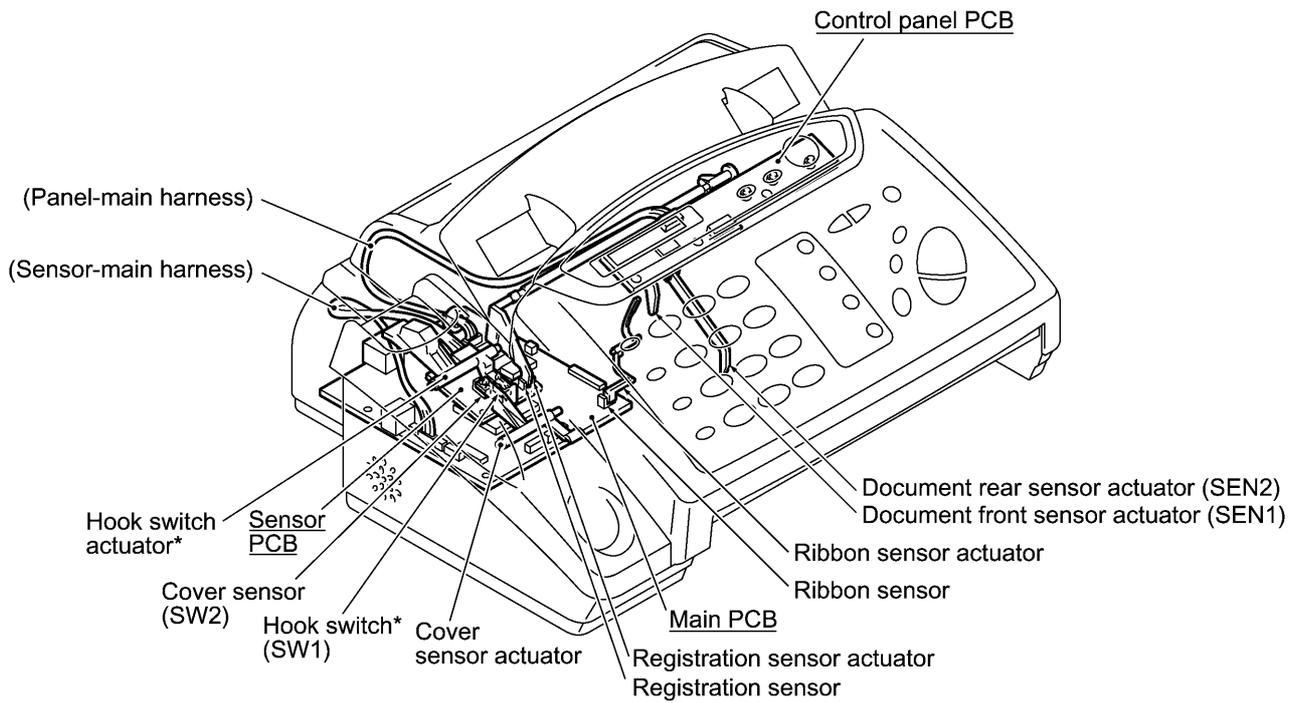
| Sensor name           | Type               | Located on        |
|-----------------------|--------------------|-------------------|
| Document front sensor | Microswitch (SEN1) | Control panel PCB |
| Document rear sensor  | Microswitch (SEN2) | Control panel PCB |
| Cover sensor          | Microswitch (SW2)  | Sensor PCB        |
| Hook switch*          | Microswitch (SW1)  | Sensor PCB        |
| Registration sensor   | Photosensor        | Sensor PCB        |
| Ribbon sensor         | Photosensor        | Main PCB          |
| Arm HP switch         | Leaf switch        | Drive unit        |

\*Not provided on models w/o handset.

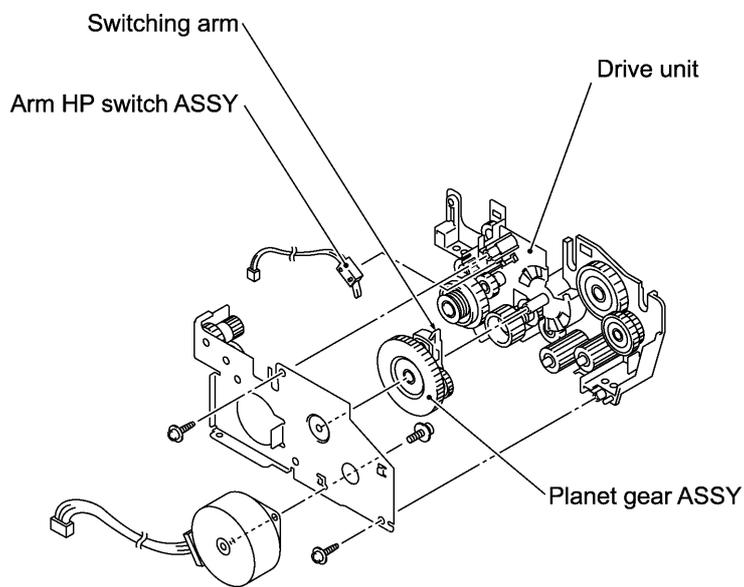
- Document front sensor which detects the presence of documents.
- Document rear sensor which detects the leading and trailing edges of pages to tell the control circuitry when the leading edge of a new page has reached the starting position and when the scan for that page is over.
- Cover sensor which detects whether the control panel ASSY is closed.
- Hook switch sensor\* which detects whether the handset is placed on the handset mount.
- Registration sensor which detects the leading and trailing edges of recording paper, which allows the controller to determine the registration timing and check paper jam.
- Ribbon sensor which detects whether the ink ribbon is loaded.
- Arm HP switch which detects whether the switching arm of the drive unit is placed in the home position.

The registration sensor and ribbon sensor is a photointerrupter consisting of a light-emitting diode and a light-sensitive transistor. Each of them has an actuator separately arranged (see the next page). When an actuator is not activated, its black end lies in the path of light issued from the light-emitting diode and interrupts its light so that the emitted light does not enter the light-sensitive transistor. If paper or ribbon comes in so as to activate the actuator, the actuator's black end goes out of the light path and the emitted light enters the light-sensitive transistor. This way, the sensor detects the presence of paper or ink ribbon.





\*Not provided on models w/o handset.

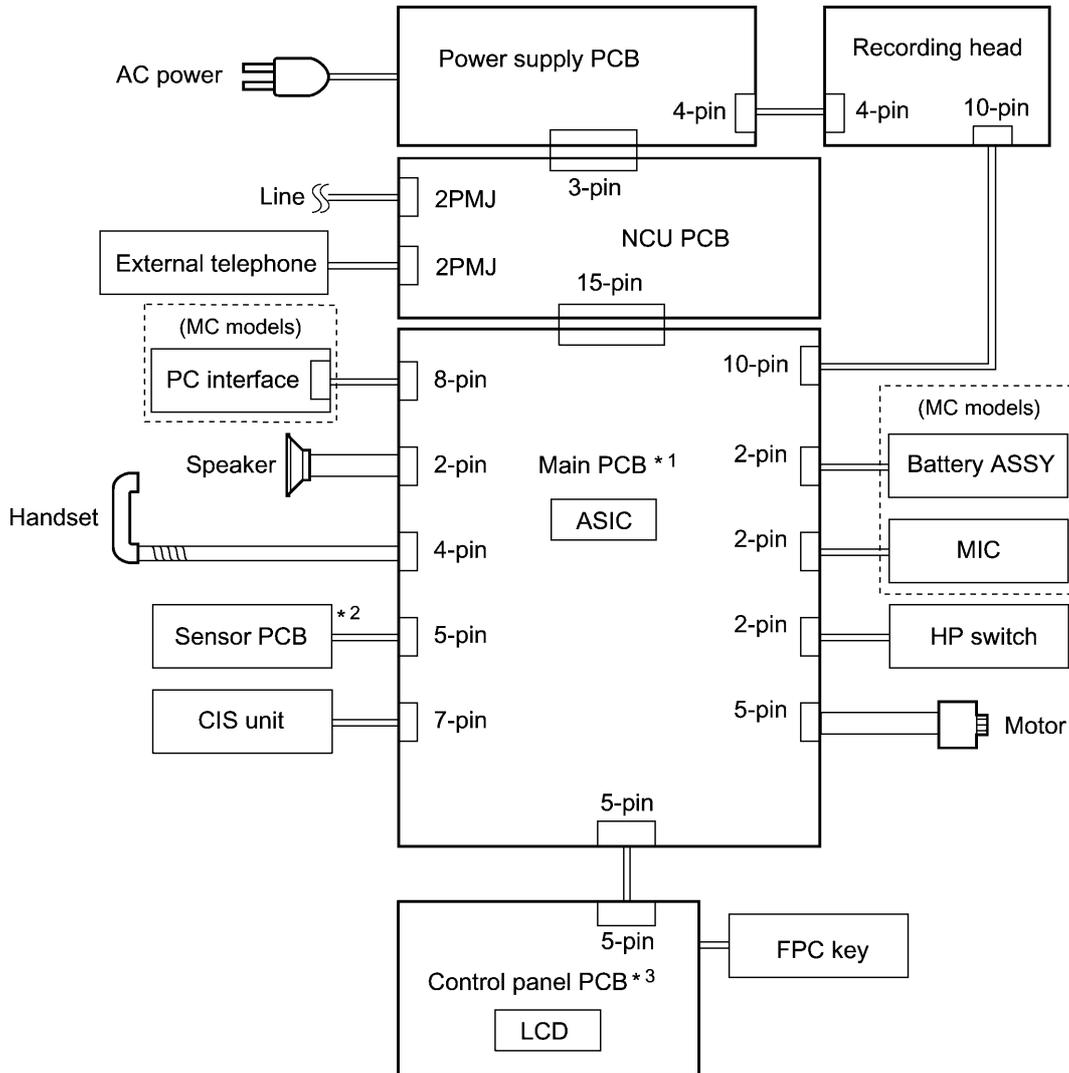


**Location of Sensors and Actuators**

# 3. CONTROL ELECTRONICS

## 3.1 Configuration

The hardware configuration of the facsimile equipment is shown below.



\*1 On the main PCB is the ribbon sensor.

\*2 On the sensor PCB are these sensors:  
 | Cover sensor (SW2)  
 | Hook switch\* (SW1)  
 | Registration sensor

\*3 On the control panel PCB are these sensors:  
 | Document front sensor (SEN1)  
 | Document rear sensor (SEN2)

**Configuration of Facsimile Equipment**

**CHAPTER IV.**  
**DISASSEMBLY/REASSEMBLY AND**  
**LUBRICATION**

# CHAPTER IV. DISASSEMBLY/REASSEMBLY AND LUBRICATION

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| [ 2 ] Platen gear (Gear 24) and joint between gears 32 and chute cover ASSY.....  | IV-44        |
| [ 3 ] Paper ejection roller, document LF roller, and document ejection roller ..  | IV-45        |

# 1. DISASSEMBLY/REASSEMBLY

## n Safety Precautions

To prevent the creation of secondary problems by mishandling, observe the following precautions during maintenance work.

- (1) Unplug the power cord from the power outlet before replacing parts or units. When having access to the power supply, be sure to unplug the power cord from the power outlet.
- (2) Be careful not to lose screws, washers, or other parts removed for parts replacement.
- (3) When using soldering irons and other heat-generating tools, take care not to damage the resin parts such as wires, PCBs, and covers.
- (4) Before handling the PCBs, touch a metal portion of the equipment to discharge static electricity; otherwise, the electronic parts may be damaged due to the electricity charged in your body.
- (5) When transporting PCBs, be sure to wrap them in conductive sheets such as aluminum foil.
- (6) Be sure to reinsert self-tapping screws correctly, if removed.
- (7) Tighten screws to the torque values listed on the next page.
- (8) When connecting or disconnecting cable connectors, hold the connector bodies not the cables. If the connector has a lock, always slide the connector lock to unlock it.
- (9) Before reassembly, apply the specified lubricant to the specified points. (Refer to Section 2 in this chapter.)
- (10) After repairs, check not only the repaired portion but also that the connectors and other related portions function properly before operation checks.

## Tightening Torque List

| Location           | Screw type                       | Q'ty   | Tightening torque<br>N•m (kgf•cm) | Loosening torque<br>N•m (kgf•cm) |
|--------------------|----------------------------------|--------|-----------------------------------|----------------------------------|
| Cover stopper link | Taptite, pan B M4x6D10           | 1      | 0.69 ±0.20 (7 ±2)                 | Min. 0.40 (4.0)                  |
| ROM cover          | Taptite, cup B M3x8              | 1      | 0.39 ±0.20 (4 ±2)                 | Min. 0.20 (2.0)                  |
| Chute cover ASSY   | Taptite, cup B M3x8              | 4      | 0.39 ±0.20 (4 ±2)                 | Min. 0.20 (2.0)                  |
| ACF parts          | Taptite, bind B M3x8             | 4      | 0.39 ±0.20 (4 ±2)                 | Min. 0.15 (1.5)                  |
| ADF parts          | Taptite, pan B M3x6              | 1      | 0.39 ±0.20 (4 ±2)                 | Min. 0.10 (1.0)                  |
| Panel rear cover   | Taptite, cup B M3x8              | 4      | 0.39 ±0.20 (4 ±2)                 | Min. 0.15 (1.5)                  |
| Control panel PCB  | Taptite, cup B M3x8              | 2 (1)* | 0.39 ±0.20 (4 ±2)                 | Min. 0.20 (2.0)                  |
| Handset mount      | Taptite, cup B M3x8              | 1      | 0.49 ±0.20 (5 ±2)                 | Min. 0.15 (1.5)                  |
| Sensor PCB         | Taptite, cup B M3x8              | 1      | 0.39 ±0.20 (4 ±2)                 | Min. 0.20 (2.0)                  |
| Recorder frame     | Taptite, cup B M3x8              | 2      | 0.49 ±0.20 (5 ±2)                 | Min. 0.20 (2.0)                  |
| Drive unit         | Taptite, cup B M3x8              | 2      | 0.49 ±0.20 (5 ±2)                 | Min. 0.20 (2.0)                  |
| Sub frame ASSY     | Taptite, cup B M3x8              | 2      | 0.49 ±0.20 (5 ±2)                 | Min. 0.20 (2.0)                  |
| Motor              | Screw, pan (spring washer) M3x6  | 1      | 0.69 ±0.20 (7 ±2)                 | Min. 0.34 (3.5)                  |
| Lower cover        | Taptite, cup B M3x8              | 2      | 0.49 ±0.20 (5 ±2)                 | Min. 0.15 (1.5)                  |
| CIS spring         | Taptite, cup B M3x8              | 1      | 0.39 ±0.20 (4 ±2)                 | Min. 0.20 (2.0)                  |
| CIS holder         | Taptite, cup B M3x8              | 1      | 0.39 ±0.20 (4 ±2)                 | Min. 0.20 (2.0)                  |
|                    | Taptite, bind B M3x8             | 1      | 0.39 ±0.10 (4 ±1)                 | Min. 0.20 (2.0)                  |
| Bottom plate       | Taptite, cup B M3x8              | 5      | 0.49 ±0.20 (5 ±2)                 | Min. 0.15 (1.5)                  |
| (Drive unit)       | Taptite, cup S M3x6              | 1      | 0.69 ±0.20 (7 ±2)                 | Min. 0.40 (4.0)                  |
| Grounding wire     | Screw, pan (plain washer) M4x6DB | 1      | 0.69 ±0.20 (7 ±2)                 | Min. 0.40 (4.0)                  |
| Main PCB           | Taptite, cup B M3x8              | 1      | 0.49 ±0.20 (5 ±2)                 | Min. 0.15 (1.5)                  |

\* The control panel PCB of base models is secured with a single screw.

## n Preparation

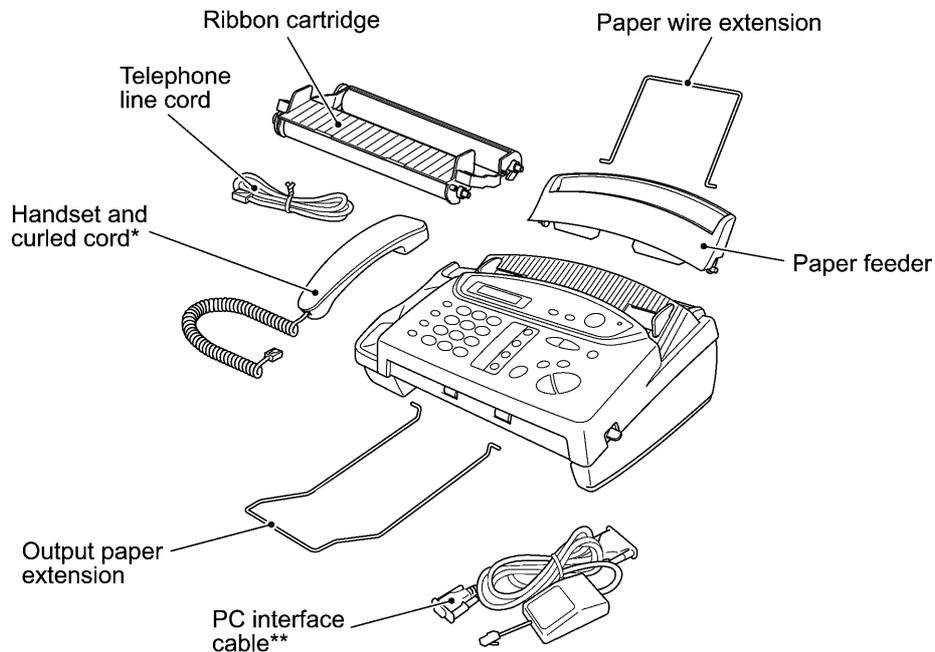
Prior to proceeding to the disassembly procedure,

(1) Unplug

- the modular jack of the telephone line,
- the modular jack of the curled cord\* (and remove the handset\*),
- the PC interface cable\*\* and
- the modular jack of an external telephone set if connected. (Not shown below.)

(2) Remove

- the paper wire extension and paper feeder
- the output paper extension, and
- the ribbon cartridge.



\*Not provided on the FAX-T72.

\*\*Provided on the MFC660MC.

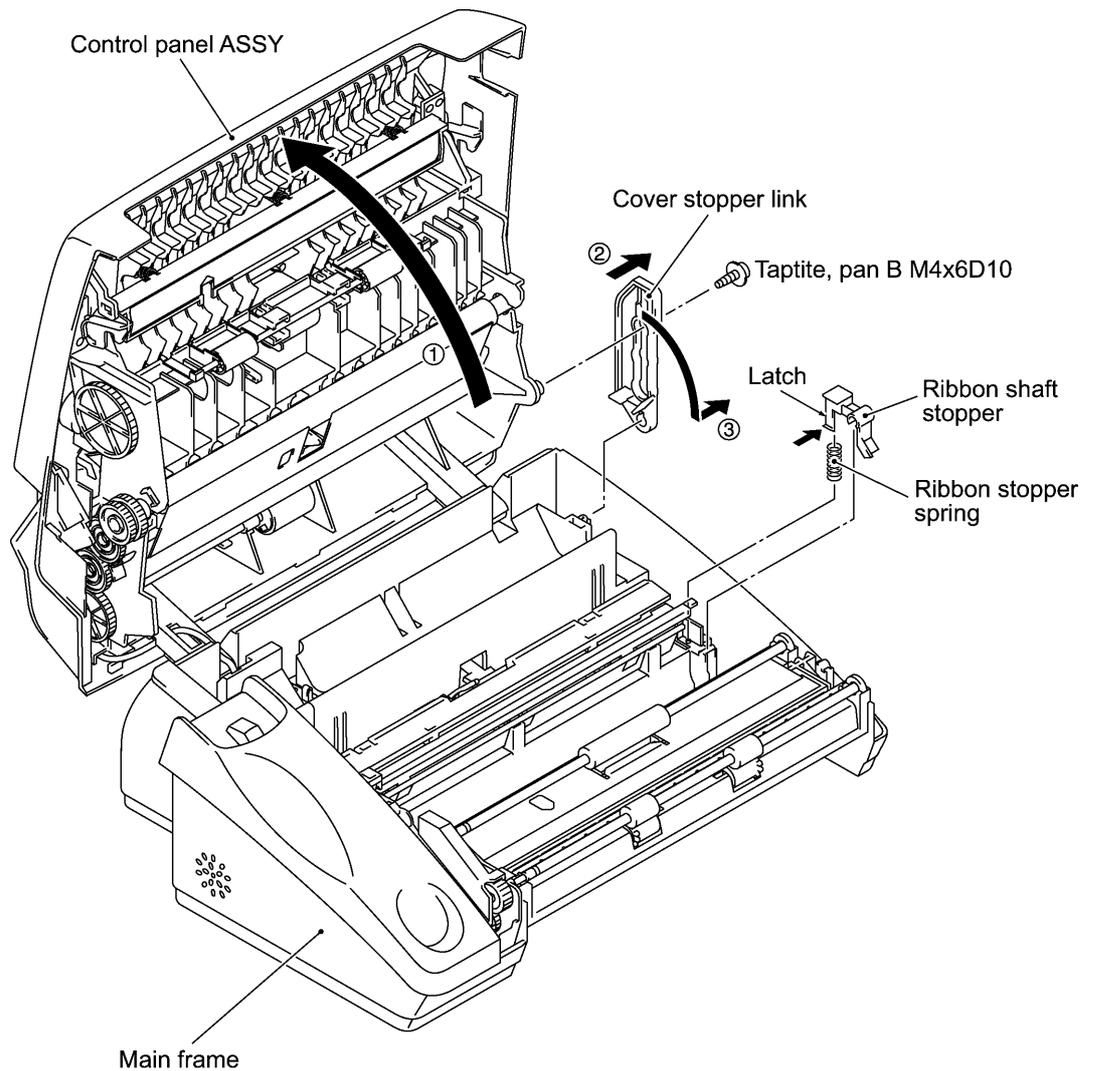
## n How to Access the Object Component

- On the next page is a disassembly order flow which helps you access the object components. To remove the motor, for example, first find it on the flow and learn its number ( 1.8 in this case). You need to remove parts numbered 1.1, 1.5, and 1.6 so as to access the motor.
- Unless otherwise specified, the disassembled parts or components should be reassembled in the reverse order of removal.

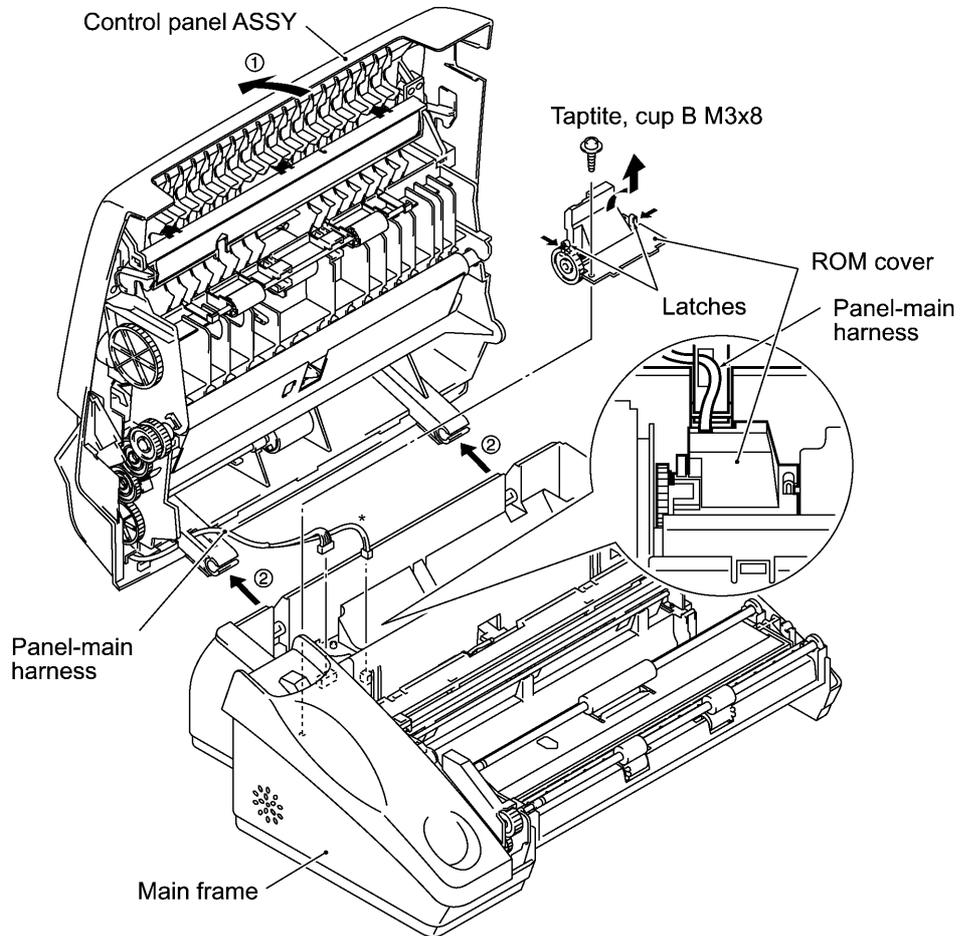


## 1.1 Cover Stopper Link, Ribbon Shaft Stopper, ROM Cover, and Control Panel ASSY

- (1) Open the control pane ASSY (in the direction of arrow • ).
- (2) Remove the screw from the cover stopper link. Pull the link outwards (arrow , ) to release it from the control panel ASSY and then turn it to the front (arrow *f*) to remove.
- (3) Press the latch of the ribbon shaft stopper with a screwdriver to release it from the main frame. The spring also comes off.



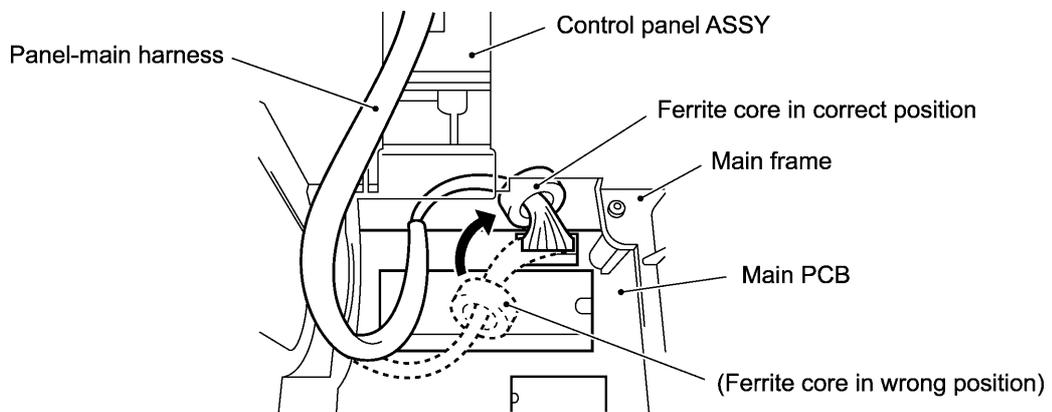
- (4) Remove the screw from the ROM cover. Unlatch the ROM cover and take it up.
- (5) Disconnect the panel-main harness from the main PCB.



\*MIC harness not provided on base models.

#### n Reassembling Notes

- When connecting the panel-main harness to the main PCB, place the ferrite core as illustrated below.

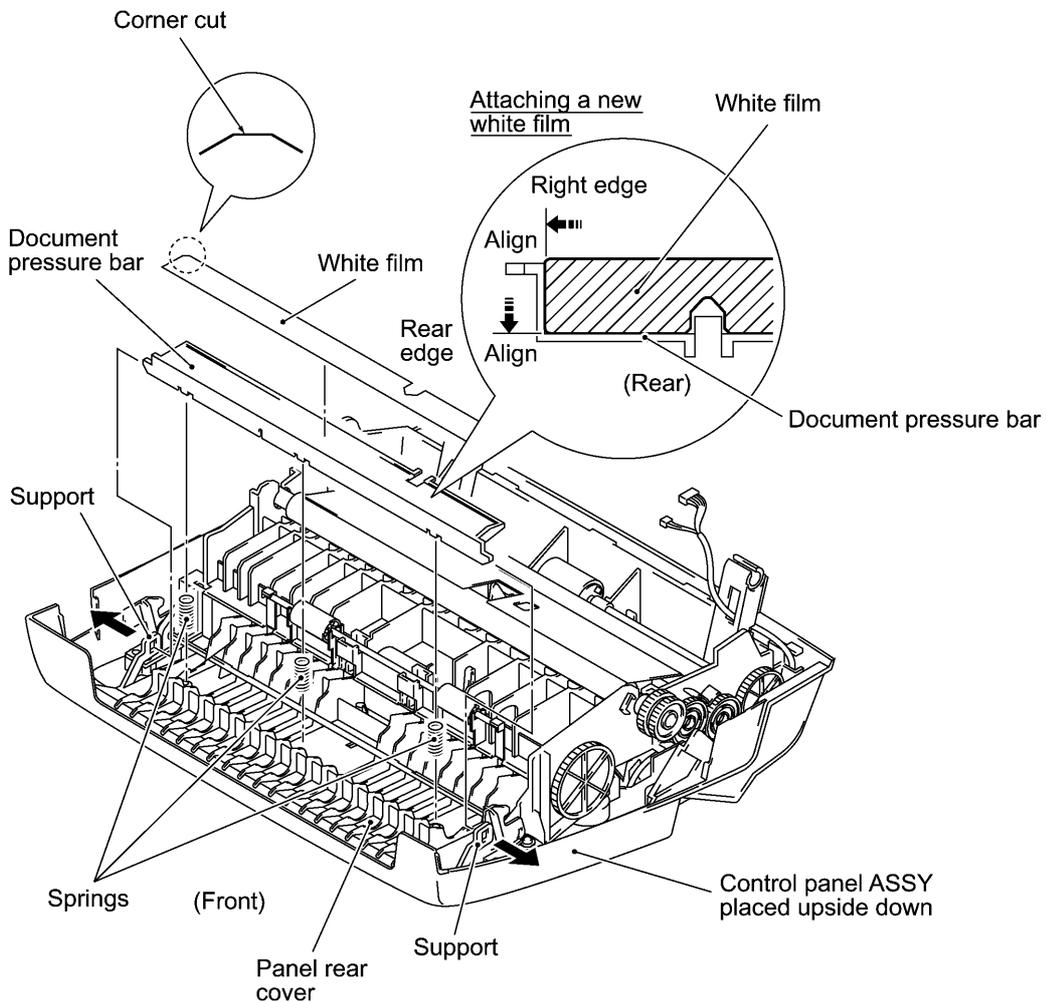


## 1.2 Disassembly of the Control Panel ASSY (Document pressure bar and chute cover ASSY)

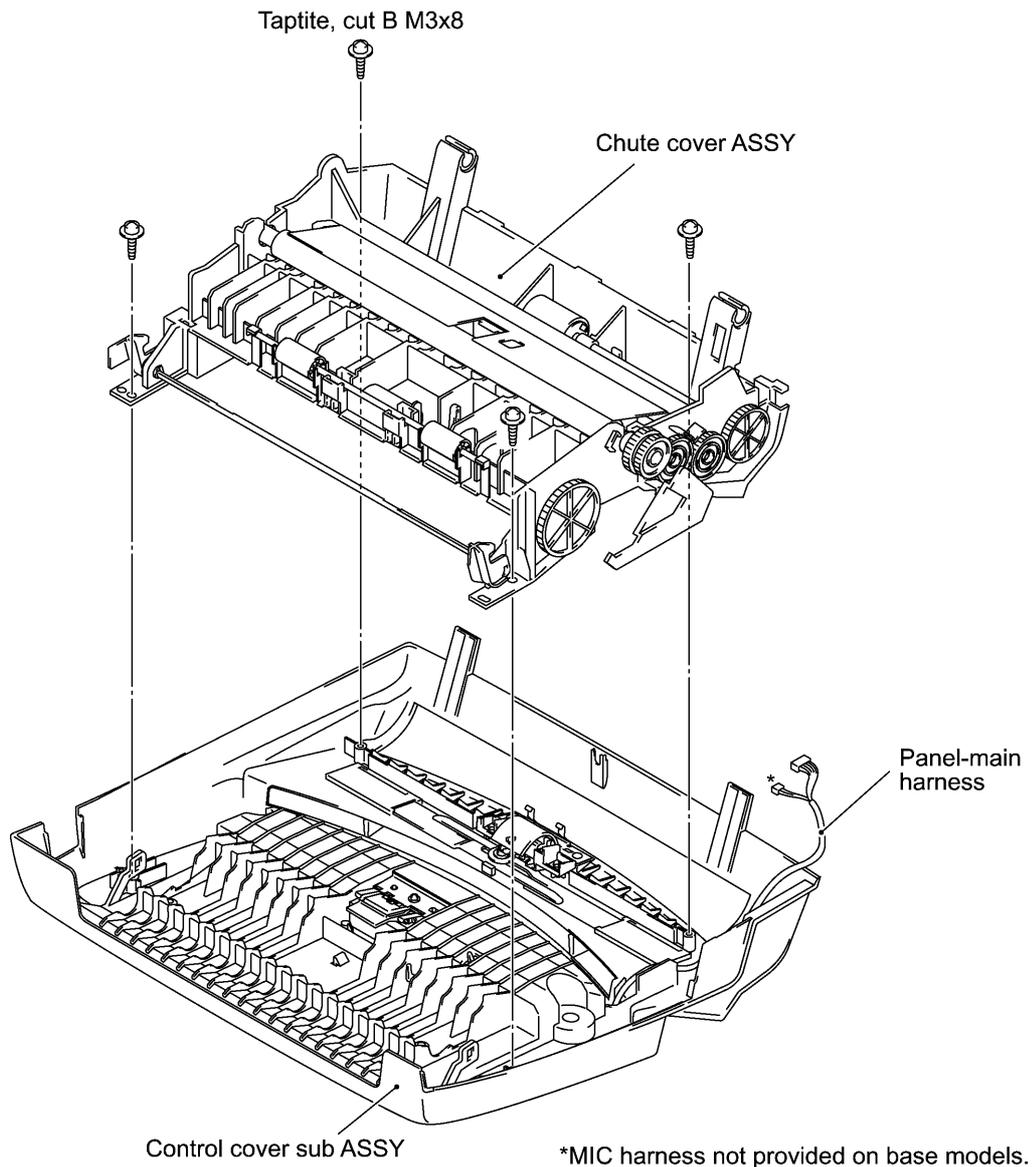
- (1) Place the control panel ASSY upside down.
- (2) Pull either of the supports provided on the panel rear cover outwards and lift up the document pressure bar. The three springs also come off.
- (3) To replace the white film of the document pressure bar, remove it.

**NOTE:** Once removed, the white film will become unusable and a new one will have to be put back in.

**NOTE:** When attaching a new white film to the document pressure bar, align the right and rear edges as shown below.



- (4) Remove four screws from the chute cover ASSY.
- (5) Slightly lift up the chute cover ASSY and remove the panel-main harness from the chute cover ASSY.



### n Reassembling Notes

- When reinstalling the chute cover ASSY, first pass the panel-main harness through the opening provided in the chute cover ASSY and route it as shown below.  
Then place the chute cover ASSY onto the control sub ASSY so that the box on the chute cover ASSY becomes fitted over the tab on the control cover sub ASSY.  
Tighten four screws in the order shown below.

