

**brother**<sup>®</sup>

**FACSIMILE EQUIPMENT  
SERVICE MANUAL**

**MODEL: MFC5200C/MFC890**

**SAMPLE PAGE ONLY**  
**SERVICE & REPAIR MANUALS**

## 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 eight chapters and appendices.

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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 6 DISASSEMBLY/REASSEMBLY, LUBRICATION, ADJUSTMENT

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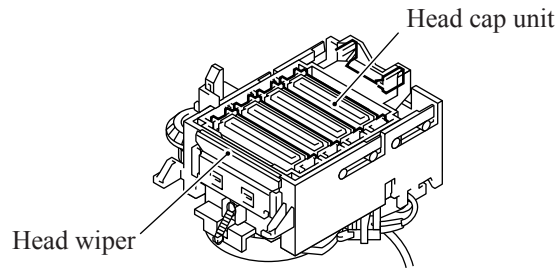
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## 6.1 DISASSEMBLY/REASSEMBLY

### ■ Safety Precautions

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

- (1) If you unpack the package sent from the user, first check that the top edge of the head wiper is flush with that of the head cap unit before turning on the machine. If the head wiper protrudes or is out of place, lightly pull up the head wiper and move it towards the head cap unit to retract it.



- (2) 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.
- (3) Be careful not to lose screws, washers, or other parts removed for parts replacement.
- (4) Do not remove gears from the document feed roller ASSY (shown on page 6-14) or document ejection roller ASSY (shown on page 6-19) if at all possible. Once removed, they will become unusable and new gears will have to be put back in.
- (5) When using soldering irons and other heat-generating tools, take care not to damage the resin parts such as wires, PCBs, and covers.
- (6) Before handling the PCBs, touch a metal portion of the machine to discharge static electricity; otherwise, the electronic parts may be damaged due to the electricity charged in your body.
- (7) When transporting PCBs, be sure to wrap them in conductive sheets such as aluminum foil.
- (8) Be sure to reinsert self-tapping screws correctly, if removed.
- (9) Tighten screws to the torque values listed on the following pages.
- (10) 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.
- (11) Before reassembly, apply the specified lubricant to the specified points. (Refer to Subsection 6.2 in this chapter.)
- (12) After repairs, check not only the repaired portion but also that the connectors and other related portions function properly before operation checks.
- (13) Once the print head unit prints, it will start head locking operation after five seconds from the end of printing. The head locking operation will take 5 to 10 seconds. NEVER unplug the power cord before the machine completes the head locking operation; doing so will make the print head unit unusable and require replacement with a new print head unit.

When you receive the machine from the user or when you pack it for sending it back to the user, check the head locking state.

# CHAPTER 7 MAINTENANCE MODE

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## 8.1 ERROR INDICATION

To help the user or the service personnel promptly locate the cause of a problem (if any), the facsimile equipment incorporates the self-diagnostic functions which display error messages for equipment errors and communications errors.

For the communications errors, the equipment also prints out the transmission verification report and the communications list.

### 8.1.1 Equipment Errors

If an equipment error occurs, the facsimile equipment emits an audible alarm (continuous beeping) for approximately 4 seconds and shows the error message on the LCD. For the error messages, see [ 1 ] below.

To display detailed error information, use the maintenance-mode function code 82 described in CHAPTER 7, Subsection 7.5.18 (that is, make the equipment enter the maintenance mode and then press the **8** and **2** keys). Following the MACHINE ERROR, one of the error codes listed in [ 2 ] will appear on the LCD.

#### [ 1 ] Error messages on the LCD

Messages on the LCD	Probable Cause
<p>CHECK CARTRIDGE</p> <p>Open cover, then reinstall ink cartridge.</p> <p>(These messages appear alternately.)</p>	<p>Any of the ink cartridges is not loaded.</p>
<p>CHECK ORIGINAL (CHECK DOCUMENT)</p> <p>Remove original, and press STOP KEY. (Remove documents, then press STOP KEY.)</p> <p>(These messages appear alternately.)</p>	<ul style="list-style-type: none"> <li>■ Document jam                             <ol style="list-style-type: none"> <li>(1) The document length exceeds the limitation (400 or 90 cm) registered by firmware switch WSW16. (Refer to Appendix 2.) (Both the document front and rear sensors stay ON even after the document has been fed by the registered length.)</li> <li>(2) The document rear sensor detects no trailing edge of a document after the document has been fed by 400 cm. (The document rear sensor stays ON even after the document has been fed when the document front and rear sensors were OFF and ON, respectively.)</li> </ol> </li> </ul>