COLOR LASER COPIER 1120/1130/1150

SERVICE MANUAL

REVSION 0

Canon

MAR. 1999 FY8-13G3-000

 CANON CLC1120/1130/1150 REV.0 MAR. 1999 PRINTED IN JAPAN (IMPRIME AU JAPON)

IMPORTANT

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Printed in Japan
Imprimé au Japon

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

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INTRODUCTION

This Service Manual contains basic data and figures on the plain paper CLC1120/1130/1150 needed to service the machine in the field. The copier is designed to enable fully automated copying work, and may be configured with the following options:

1. RDF-E2
2. Stapler Sorter-F1
3. Film Projector-D1
4. Paper Deck-E1

For the RDF-E2, Stapler Sorter-F1, and Film Projector-D1, see their respective Service Manuals for details. This Service Manual covers the copier itself, and consists of the following chapters:

Chapter 1 *General Description* introduces the copier's features and specifications, shows how to operate the printer unit, and explains how copies are made.

Chapter 2 *Basic Operation* provides outlines of the steps used to generate copies.

Chapter 3 *Exposure System* discusses the principles of operation used for the mechanical/electrical operations of the copier's exposure system. It also explains the timing at which the various units involved are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 4 *Image Processing System* discusses the principles of operation used for the mechanical/electrical operations of the copier's image processing system. It also explains the timing at which the various units involved are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 5 *Laser Exposure System* discusses the principles of operation used for the mechanical/electrical operations of the copier's laser exposure system. It also explains the timing at which the various units involved are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 6 *Image Formation System* discusses the principles of how images are formed. It also explains the timing at which the various units involved in image formation are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 7 *Pick-Up/Feeding System* discusses the principles of how the printer unit picks up and moves paper inside it. It also explains the timing at which the various units involved are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 8 *Fixing System* discusses the principles of how the printer unit fuses toner images to paper. It also explains the timing at which the various units involved are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 9 *Externals/Auxiliary Mechanisms* shows the copier's external parts, and explains the principles used for the copier's various control mechanisms in view of the functions of electrical and mechanical units and in relation to their timing of operation. It also shows how these units may be disassembled/assembled and adjusted.

Chapter 10 *Paper Deck* discusses the principles of operation used for the series of operations between pickup and delivery performed by the paper deck. It also explains the timing at which the various units involved are operated, and shows how they may be disassembled/assembled and adjusted.

Chapter 11 *Installation* introduces requirements for the site of installation, and shows how the printer unit may be installed using step-by-step instructions.

Chapter 12 *Maintenance and Servicing* provides tables of periodically replaced parts and consumables/durables and scheduled servicing charts.

Chapter 13 *Troubleshooting* provides tables of maintenance/inspection, standards/ adjustments, and problem identification (image fault/malfunction).

Appendix contains a general timing chart and general circuit diagrams.

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.
   In the diagrams, ▭▭▭ represents the path of mechanical drive — where a signal name accompanies the symbol ⟶, the arrow indicates the direction of the electric signal.
   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.
2. In the digital circuits, '1' is used to indicate that the voltage level of a given signal is "High," while '0' is used to indicate "Low." (The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.
   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.

All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine.

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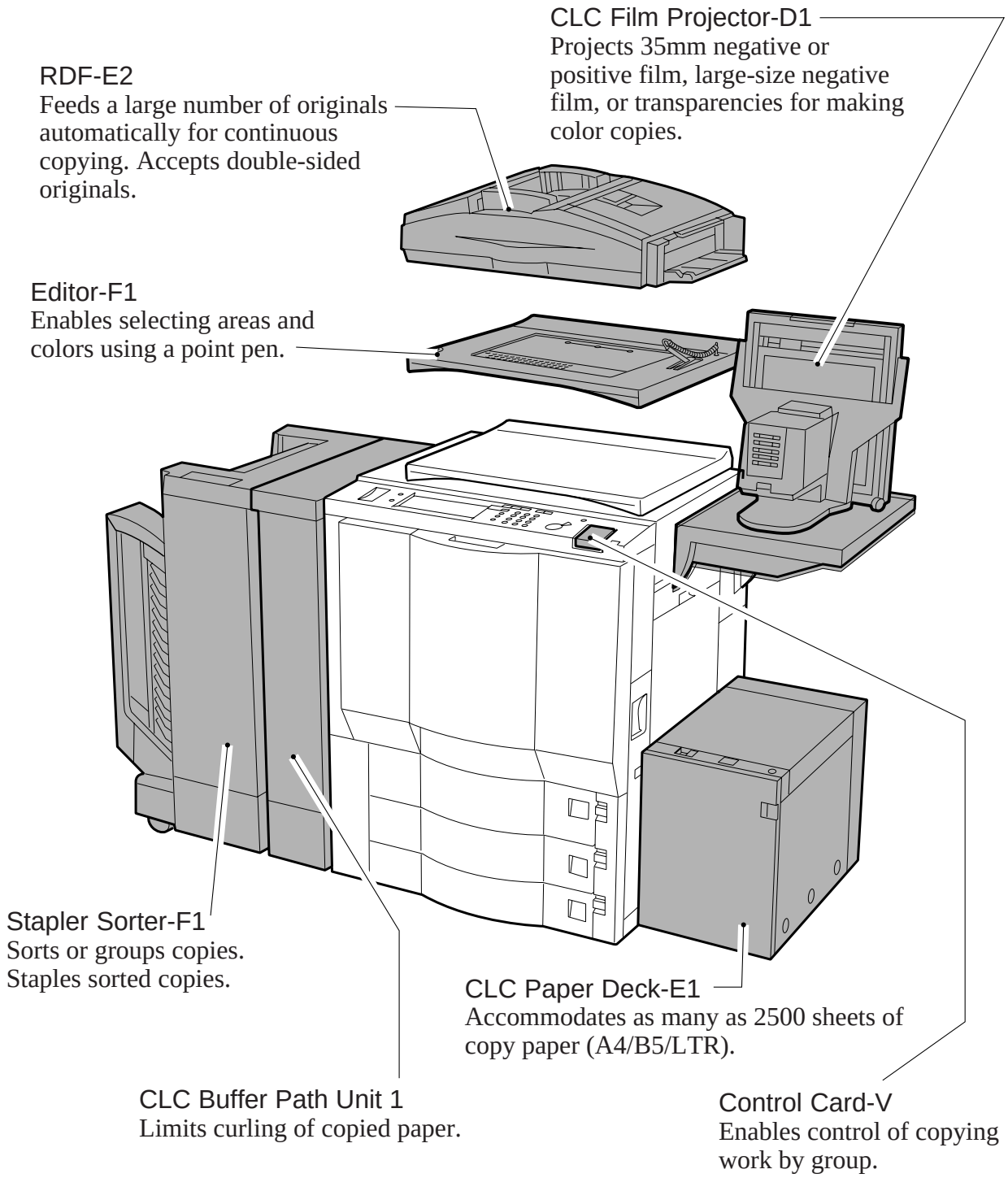
System Configuration

The CLC1120/1130/1150 may be configured as follows to make up a system (the shaded areas indicate accessories):



The figures above represents the CLC1150; however, the CLC1120/1130 may be configure in the same way.

CLC1120: 2-cassette model
CLC1130: 3-cassette model
CLC1150: 2-cassette model with a duplexing unit.

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