

# LASER CLASS<sub>®</sub> 2060



## SERVICE GUIDE

CANON U.S.A., INC. TECHNICAL SUPPORT DIVISION Rev. 0 January 2000

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LC 2060 Series Service Guide

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#### I. Product Overview

The LASER CLASS<sup>®</sup> 2060 is the newest addition to Canon's Super G3 machines. The LC 2060 Series are high-speed fax machines. As an ENERGY STAR<sup>™</sup> partner, Canon U.S.A., Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

#### II. Design Features

#### A. Laser Facsimile Features

- FX-3 single cartridge (included) approximately 2,700<sup>1</sup> sheets
- Super G3 High Speed Facsimile (33,600 bps Communication)
- 40 sheets ADF<sup>2</sup>
- Up to 6 ppm/600dpi Laser Printing
- 250 sheets LTR Cassette, 100 sheets MP Tray
- High Capacity 340 (5.31 MB) Pages Memory<sup>3</sup>

#### III. Specifications

#### A. LC 2060 Series

Item Description		
Modem:	• Fax Modem/33,600bps/V.34, V.17, V.33, V.29, V.27tar, V.21	
	Handshake; V.8	
Tx Speed:	Approximately 3 seconds per page <sup>4</sup>	
Data Compression System:	MH, MR, MMR, JBIG	
	Approximately:	
ADF:	<ul> <li>40 sheets (Letter)</li> </ul>	
	<ul> <li>20 sheets (Legal)</li> </ul>	
Scanning Speed:	Up to 5 seconds per page (Letter & Standard Mode)	
Scanning Original Width:	inal Width: 8.5" (216 mm)	
Effective Scanning Width: 8.4" (214mm)		
Scanning Resolution:	<ul> <li>Copy: Up to 600dpi (direct)</li> </ul>	
Scalling Resolution.	Fax: Up to 400 dpi	
Engine Resolution:	600dpi x 600dpi	
Paper Feeding:	<ul> <li>Approximately: 250 sheets (Letter Cassette)</li> </ul>	
raper reeding.	<ul> <li>Approximately: 100 sheets (MP Tray)</li> </ul>	
Toner Cartridge:	FX-3 Single Cartridge 2.7K/CRG (based on 5% coverage)	
Fixing System:	Heat fixing (RAPID Fusing System)	
Automatic Dialing:	One touch 32 locations, coded 100 locations	
Dimensions (H x W x D):	11.9" x 15.0" x 19.0" (303.5mm x 380mm x 483mm)	
Weight:	28.7 lbs. (13Kg)	

<sup>1</sup> Yield is based on 5% coverage.

<sup>2</sup> Based on 20 lb. Bond paper.

<sup>&</sup>lt;sup>3</sup> Based on ITU-T No. 1 Chart (Standard Mode)

<sup>&</sup>lt;sup>4</sup> Approximately 3 seconds per page fax transmission time is based on the ITU-T No. 1 Chart (MMR, Standard mode) at 33.6 Kbps modem speed. The Public Switched Telephone Network (PSTN) currently supports 28.8 Kbps modem speeds or lower, depending on telephone line conditions.

#### IV. PRODUCT CONFIGURATION

#### A. Model of LC 2060 Series

Item	Item Number
	Basic Fax Model Includes: FX-3 Cartridge (H11-6381-230) Handset (HH7-2410-000)
LC 2060	H12-1652-210

#### B. Supplies

Item	Item Number
FX-3 Cartridge	H11-6381-230

#### V. Service Features

#### A. Estimated Installation Time

Item	Estimated Installation Time
LC 2060 Main Unit	Approximately 60 minutes

#### B. Adjustment Items

The ATT (signal power level) should not be adjusted without a given reason. Increasing the ATT may cause other errors when Super G3 is present.

#### C. Consumables

The following items may, depending on usage, require replacement over the warranty period of the unit.

No.	Product Name	Product Number	Qty	Estimated Yield/Life (sheets) <sup>5</sup>	Remarks
1.	FX-3 Cartridge	H11-6381-230	1	2,700 <sup>1</sup>	Replace when toner runs out.

#### D. Periodic Inspection and Replacement Parts

There are no periodic inspections or replacement parts that are required by the customer or service technician for the LC 2060 Series.

<sup>&</sup>lt;sup>5</sup> Estimated average values in the field, based upon data from supplier. Data is subject to change depending upon many factors including, without limitation, monthly printer volume, environment, type of image printed or copied and customer handling of the equipment

#### E. Customer Maintenance

It should be recommended to the customer that the following items be cleaned, as necessary, to help maintain the machine's peak performance:

Item	Instructions
Main Unit Outer Cover	Lightly wipe the unit's outer casing with a clean, soft, lint-free cloth moistened with water or diluted dishwashing detergent solution.
Separation Roller	Wipe separation roller with a soft, dry cloth when the document separation/feed performance fails.
Separation Guide	Wipe separation guide with a soft, dry cloth when the document separation performance fails.
White Sheet	Wipe with a dry, clean soft cloth when the copied and transmitted images are faint.
Scanning Glass (Contact Sensor)	Wipe with a dry, clean soft cloth when black vertical stripes appear in copied or transmitted images.
Paper Feed Guide	Wipe with a clean, soft, dry, lint-free cloth to remove any toner or paper debris when marks appear on back of paper in copied or received images.

#### F. Service Technician Maintenance

During service calls, it is recommended that the following items be cleaned as necessary to maintain the machine's peak performance:

Item	Instructions
Paper Pickup Roller	Using a lint-free paper dipped in isopropyl alcohol, wipe dirt off the paper pickup roller when recording paper feed performance fails.
Transfer Charging Roller	Wipe with a lint-free paper and remove any toner or paper debris when marks on back of paper or blank spots at intervals of 1.96" (50 mm) appear in copied or received images.
Static Charge Eliminator	Wipe with a lint-free paper and remove any foreign matter, such as paper fragments, when polka dots appear in copied or received images.
High-Voltage Terminal	Wipe with a clean, soft, dry lint-free cloth to remove any toner or paper debris when copied or received images are light, dark, or completely blank.
Fixing Entrance Guide	Wipe with a lint-free paper and remove any toner or paper debris when marks on back of paper, irregular/smudged black vertical line, paper jam, wrinkles in copied or received images occur.
Paper Face-up Eject Roller	Using lint-free paper dipped in isopropyl alcohol, wipe off the paper eject face-up roller when paper jams occur during copying or receiving.
Flapper	Wipe with a lint-free paper and remove any toner or paper debris when paper jams occur frequently during copying or receiving.
Document Feed Roller	Wipe with a soft, dry cloth when document
Document Eject Roller	feed performance fails.
Pressure Roller	Using lint-free paper dipped in alcohol, wipe off the pressure roller when marks on back of paper at intervals of 2.48" (63 mm) or poor fixing, paper jam, or wrinkles occur during copying or receiving.

Item	Instructions
Fixing Assembly	Using lint-free paper dipped in isopropyl alcohol, wipe off the fixing assembly when marks appear at intervals of 2.95" (75mm) or poor fixing of copied or received images occur.
Separation Pad	Using cloth dipped in isopropyl alcohol, wipe off separation pad when recording paper separation performance fails.

### G. Repairable Parts List

**Note:** Please refer to Section VI (Warranty) of the Facsimile "Quick Access Management Information Guide" which explains that warranty parts on Canon U.S.A.'s Facsimile Repairable Parts List should be sent <u>directly to an Authorized Parts Repair Facility</u>. To avoid any confusion or delay of the repair, <u>do not combine</u> shipments of Canon warranty parts with any other parts you may be submitting to the Authorized Parts Repair Facility (A.P.R.F). The above part(s) should be sent to your A.P.R.F.

#### H. Recommended Special Tools List

ТооІ	Part Number	Use
Grease (MOLYKOTE EM-50L)	HY9-007-000	
UNIWAY68	CK-0451	Apply to specified areas.
IF-20	CK-8006	

#### VI. Warranty Policy

#### A. Warranty Terms

- 1. The warranty term for the LC 2060 Series is ninety (90) days from date of delivery to the original purchaser from Canon U.S.A., Inc. or its authorized dealer. See Canon LC 2060 Series Product Limited Warranty.
- 2. LC 2060 Series authorized dealers are responsible for providing warranty service to the customer. The customer is entitled to repair by the dealer, at no charge, in accordance with the terms and conditions set forth in the Canon LC 2060 Series Product Limited Warranty.

#### B. Warranty Parts Credit and Repair

Parts that are specified on the LC 2060 Series Repairable Parts List (See Page 5) must be shipped prepaid directly to one of the following two Authorized Parts Repair Facilities (A.P.R.F's):

Nationwide Repair Service Inc.
7864 Barton Street
Lenexa, KS 66214
Telephone: 1-913-248-1722
Fax: 1-913-631-8372

Repairable parts under warranty, are repaired free of charge by the A.P.R.F. Under normal circumstances, the turnaround time is approximately five working days. Once repaired, the board/part is sent back to the dealer.

Parts that are not specified on the LC 2060 Series Repairable Parts List (See Page 5) must be shipped to the following address:

Canon U.S.A., Inc. 100 Jamesburg Road, Side A Jamesburg, NJ 08831 Attention: Warranty Control Section

The LC 2060 Series authorized dealer will receive credit for returned non-repairable defective parts, which are under warranty.

All defective parts when shipped under warranty, either for repair to an A.P.R.F. or to Canon U.S.A., Inc., must be accompanied by a completed Fax Part Return Tag and appropriate proof of warranty. Fax Part return Tags may be obtained from your respective regional Canon U.S.A., Inc., office, Imaging Systems Group Technical Support Staff.

#### VII. Suggested Maintenance Agreement

The following is a detailed description of Suggested Maintenance Agreement Rates and the Estimated Service Costs for the LC 2060 Series.

THE MAINTENANCE AGREEMENT RATES ARE OFFERED AS A SUGGESTION ONLY. CANON DOES NOT REPRESENT OR WARRANT THAT AN AUTHORIZED DEALER WILL OPERATE AT ANY LEVEL OF PROFITABLILITY. IN SETTING MAINTENANCE AGREEMENT RATES, THE DEALER SHOULD CONSIDER VARIABLES AFFECTING THE RATES, INCLUDING THE COSTS INCURRED BY THE PARTICULAR DEALER.

#### A. Suggested Maintenance Agreement Rates

The following maintenance agreement rate includes all service visits and replacements parts.

Model	Suggested Maintenance Agreement Rates
LASER CLASS 2060	\$222.00 per year

#### B. Estimated Running Costs

The chart below presents the estimated service cost (parts and labor) for maintaining one LASER CLASS 2060. Estimated parts cost will vary according to parts usage. The estimated labor cost reflects a 5% annual increase in technician's estimated annual salary.

#### LASER CLASS 2060

Estimated Annual Parts Cost	\$20.26
Estimated Annual Labor Cost <sup>6</sup>	\$112.84
Estimated Annual Running Cost	\$133.10

<sup>&</sup>lt;sup>6</sup> Average of 5 years. Yearly increase of 5% is assumed in the technician's salary.

#### C. Data Sheet

BY REFERRING TO THE INFORMATION SET FORTH IN THE DATA SHEET BELOW, AND BY USING ITS OWN DATA TO CALCULATE THE COST OF LABOR, A DEALER MAY ADJUST THE MAINTENANCE AGREEMENT RATE TO REFLECT ITS SPECIFIC COSTS AND NEEDS.

#### LASER CLASS 2060

Working Time [Minutes/Visit]	60
Travel Time [Minutes/Visit]	30
Visit Ratio [Visit/Month]	1.7
Estimated Technician's Annual Working Hours [Hours/Year]	1,615
Estimated Annual Salary [Per Year]	\$29,396
Fixed Cost	Salary x 2.2
Estimated # of Machines (A dedicated technician can handle) [Machines/Tech.]	633
Estimated Dealer's Profit Ratio (Based on regular plan)	40.00%

THESE PERFORMANCE TARGETS ARE BASED ON ADHERENCE TO CANON'S PUBLISHED SERVICE PROCEDURES AND THE USE OF GENUINE CANON PARTS.

#### VIII. Training

#### A. Overview

Technicians that are currently LASER CLASS Series certified or CFX-L4000 certified will receive auto-certification for the LASER CLASS 2060. All others must complete and pass imageCLASS 1100 video self-paced training, and meet the prerequisites, in order to become certified on the LASER CLASS 2060.

#### B. Summary

imageCLASS 1100 video self-paced training consists of the following:

- imageCLASS 1100 theory of operation
- imageCLASS 1100 service procedures
- Accessories installation and operation
- Troubleshooting

The imageCLASS 1100 video self-paced training program may be completed using the LASER CLASS 2060 product and service documentation.

#### C. Prerequisites

The prerequisite for the LASER CLASS 2060 is "Introduction to Facsimile Video Program" certification.

#### D. Certification

The prerequisite for the imageCLASS 1100 Video Self-Paced Training Program is "Introduction to Facsimile Video Program" certification.

#### E. Materials

The Technical Documentation for the LASER CLASS 2060 is listed below:

Description	Item Number
imageCLASS 1100 Video Self-Paced Training Program	KU7-2012-000
Service Manual	HY8-19AQ-000
Parts Catalog	HY8-39AN-000

To purchase the imageCLASS 1100 Video Self-Paced Training Program, please call the Parts Order Desk at 1-732-521-7230.

#### IX. Appendix A. LASER CLASS 2060 Series Product Warranty Conditions

Canon U.S.A., Inc. in the case of goods purchased in the U.S.A., or Canon Canada, Inc. in the case of goods purchased in Canada (herein collectively referred to as "Canon") warrants its Laser Class 2060 Facsimile and Canon-brand accessories or options for such Laser Class 2060 Facsimile (when installed on the equipment for which they were designed) (collectively the "FAX Equipment") to be free from defects in workmanship and material under normal use and maintenance conditions for a period of 90 days from delivery to the original purchaser by Canon or its authorized dealer. During such warranty period, defective parts or defective FAX Equipment returned to Canon or its authorized dealer, as applicable, and proven to be defective upon inspection, will be replaced with new or comparable rebuilt parts or exchanged for new or refurbished FAX Equipment as determined by Canon or its authorized dealer in their sole discretion. Warranty replacement will not extend the warranty period of the defective FAX Equipment. This warranty does not extend to used equipment or to any external interface equipment.

In order to obtain warranty service for the FAX Equipment, contact the authorized Canon dealer you purchased it from to schedule the repair. FAX Equipment covered by this limited warranty will be repaired, or exchanged with new or refurbished FAX Equipment, at no charge to you. Repairs or exchanges not covered under this limited warranty will be charged to you at such cost as each authorized Canon dealer may generally establish from time to time.

This warranty does not cover any consumables. However, a separate warranty is given for the Canon FX Toner Cartridge. This warranty does not extend to software. The purchaser will be solely responsible for obtaining and installing all required software, programming design or coding, as to all of which Canon will have no responsibility. This warranty will only apply if the FAX Equipment is used in conjunction with compatible computers, peripheral equipment and software, as to which items Canon will have no responsibility.

NON-CANON BRAND COMPUTERS, PERIPHERAL EQUIPMENT AND SOFTWARE WHICH MAY BE DISTRIBUTED WITH THE FAX EQUIPMENT ARE SOLD "AS IS," WITHOUT WARRANTY OR CONDITION OF ANY KIND BY CANON, INCLUDING ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The sole warranty, if any, with respect to such non-Canon brand item is given by the manufacturer or producer thereof. Separate warranties are given for other Canon brand equipment, which may be used with the FAX Equipment.

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#### Conditions of Warranty

Defective parts must be returned to Canon (or one of its authorized dealers) with all necessary documentation including proof of purchase.

THIS WARRANTY APPLIES TO FAX EQUIPMENT SOLD IN THE U.S.A. AND CANADA ONLY.

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