# Canon

imageCLASS imageCLASS
MF229dw MF227dw





imageCLASS imageCLASS
MF216n MF212w





# Service Guide

For Authorized Servicers



Published by
Canon U.S.A., Inc.
One Canon Park
Melville, NY 11747-3336
1-800-OK-CANON
serviceplanning@cusa.canon.com

Canon U.S.A. Homepage: http://www.usa.canon.com

Canon U.S.A. e-Support Center Web site: <a href="http://www.support.cusa.canon.com">http://www.support.cusa.canon.com</a> Canon U.S.A. ISG Central Web site: <a href="http://www.isgcentral.cusa.canon.com">http://www.isgcentral.cusa.canon.com</a> Canon Network Access (CNA) Web site: <a href="http://www.cna.cusa.canon.com">http://www.cna.cusa.canon.com</a>

#### **IMPORTANT**

THIS SERVICE GUIDE INCLUDES THE INFORMATION RELATING TO THE imageCLASS MF200 Series.

SPECIFICATIONS AND OTHER INFORMATION CONTAINED HEREIN MAY VARY SLIGHTLY FROM ACTUAL DEVICE VALUES OR THOSE FOUND IN ADVERTISING AND OTHER PRINTED MATTER.

USE OF THIS SERVICE GUIDE SHOULD BE STRICTLY SUPERVISED TO AVOID DISCLOSURE OF CONFIDENTIAL INFORMATION.

ALL PRICES LISTED ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PART NUMBERS LISTED MAY BE CHANGED WITHOUT NOTICE TO REFLECT ENGINEERING REVISIONS.

#### **REVISION HISTORY**

Revision	Date	Section(s)	Details
_	August 2014	All	Release of the imageCLASS MF200 Series Service Guide for Authorized Servicers



#### COPYRIGHTS AND TRADEMARKS

This Service Guide is the property of Canon U.S.A., Inc. © Canon U.S.A., Inc. 2014. All rights reserved.

Canon, imageCLASS, and Always Ask for Canon Genuine Toner, Parts & Supplies are registered trademarks of Canon Inc.

All other company names and product names may be trademarks or registered trademarks of their respective owners, and are hereby acknowledged.

#### **LEGAL NOTICES**

The information contained in this Service Guide constitutes confidential information of Canon U.S.A., Inc.

Pursuant to the authorized Service Agreement with Canon U.S.A., Inc., this Service Guide is solely for reference purposes and may be used only by an authorized Service Provider of Canon U.S.A., Inc. No part of this Service Guide may be reproduced or transmitted in any form by any means, electronic or mechanical, for any purpose without the prior written consent of Canon U.S.A., Inc., except as expressly permitted herein.

Pursuant to the authorized Service Agreement with Canon U.S.A., Inc., Service Provider agrees to indemnify Canon U.S.A., Inc. and to hold it harmless from and against any and all claims arising out of Service Provider's possession, use, or misuse of this Service Guide.

Canon U.S.A., Inc. from time to time updates this online Service Guide and may modify the information and/or specifications contained in it at any time without notice. Additionally, all prices and availability dates listed herein are subject to change without notice. The latest version is available online at the ISG Central and e-Support Web sites noted above. Please make certain that you are using the latest version. Specimens of Web pages included herein are for illustration purposes only.

#### **DISCLAIMER**

NEITHER CANON NOR ITS SUPPLIERS NOR ANY AUTHORIZED SERVICE PROVIDER SHALL BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE (UNLESS CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY AUTHORIZED SERVICE PROVIDER), LOSS OF REVENUE OR PROFIT, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, EXPENDITURES FOR SUBSTITUTE EQUIPMENT OR SERVICES, LOSS OR CORRUPTION OF DATA, INCLUDING, WITHOUT LIMITATION, DATA STORED ON THE PRODUCT'S OPTIONAL HARD DISK DRIVE, STORAGE CHARGES OR OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THE PRODUCT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED AND EVEN IF CANON OR ITS SUPPLIERS OR ANY AUTHORIZED SERVICE PROVIDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST CANON OR ITS SUPPLIERS OR ANY AUTHORIZED SERVICE PROVIDER BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING. THE PURCHASER ASSUMES ALL RISKS AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO PERSONS AND THE PROPERTY OF THE PURCHASER OR OTHERS ARISING OUT OF THE POSSESSION, USE, MISUSE, OR INABILITY TO USE THE PRODUCT NOT CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY **AUTHORIZED SERVICE PROVIDER.** 



# **Contents**

I.	Product Overview	1
II.	Product Configuration and Box Contents	2
	A. Configuration and CarePAKs	2
	B. Box Contents	3
III.	Service Authorization	4
IV.	Educational Training	4
	A. Training Program Overview	4
	B. Who Should Complete	4
	C. Prerequisites	
	D. Course Format	
	E. Course Equipment	
V.	Servicing Notes	
	A. Power and Plug Requirements	5
	B. Installation Space Requirements	6
	C. Estimated Installation Time  D. Notes on the Wireless LAN	
	D. Notes on the Wireless LAN  E. Service Support Tools	
	F. Consumables	
	G. Consumable Parts	-
	H. Periodic Replacement Parts	
	I. Firmware Upgrade	
	J. Computer Requirements for Downloading Firmware	14
VI.	End-User Customer Service Offerings	15
	A. Monthly Copy/Print Volume	15
	B. Limited Warranty Support	
	C. Technical Support for the End-User	16
	Carry-In Service     Exchange Service	
	3. Internet Support	18
	D. Post-Warranty Support	19
	CarePAK Extended Service Plans	
	2. Time and Material Service	
VII.	Authorized Servicer Program	
	A. Authorized Servicer Customer Registration System	22
	B. ASCR Registration Process C. Replacement Inventory	
	D. Optional On-Site Service	
	·	
VIII.	Authorized Servicer Support Offerings  A. Authorized Servicer Support	24
	B. Internet Support	
	Canon USA's e-Support Center Web Site	
	Canon USA's ISG Central Web Site	26
	C. Call Escalation Procedure	28



IX.	Wa	arranty Procedures	29
	A.	e-Tag	29
	В.	Online Limited Warranty Credit Inquiry	31
	C.	Warranty Reimbursement Program	33
	•	1. Dispatch by CITS	33
		Warranty Marketing Program	
Χ.	Pa	rts Support	35
	A.	Parts and Service Material Orders	35
		1. Canon Network Access	
		2. Parts Order Desk	36
	В.	Parts Order Entry	37
		1. Regular Orders	
		2. Rush Orders	
	C.	Parts Information/Parts Price List Download	37
	D.	Parts Discontinuation Schedule Information	37
	E.	Order/Invoice Inquiry	
	F.	Parts Return Process	
XI.	Αp	ppendix	39
		Specifications	
	R	Warranty	44
	٥.	imageCLASS Series Exchange/Carry-In Product Limited Warranty	
		Canon Toner Cartridge Limited Warranty	
	С	List of Tables	
	_	List of Figures	-
	υ.	LIGE OF FIGURE 1	



#### I. Product Overview

The Canon imageCLASS MF229dw, imageCLASS MF227dw, and imageCLASS MF216n are compact, B&W (Black-and-White), laser, multifunction devices with copy, print, scan, and fax capabilities. The imageCLASS MF212w is a compact, B&W, laser, multifunction device with copy, print, and scan capabilities. These models also bring the following capabilities to users in a small office or home office environment:

- Connectivity:
  - USB 2.0 High Speed port for printing and scanning from USB memory.
  - 10/100 Base-T Ethernet connectivity that supports network printing, scanning, and PC faxing.
  - IEEE 802.11 b/g/n<sup>1</sup> wireless connectivity that supports wireless network printing, scanning, and PC faxing (The imageCLASS MF229dw, imageCLASS MF227dw, and imageCLASS MF212w only).
- Print and copy speeds (B&W using LTR (letter-sized) paper)
  - imageCLASS MF229dw and imageCLASS MF227dw: up to 28 ppm<sup>2</sup> (pages-per-minute).
  - imageCLASS MF216n and imageCLASS MF212w: up to 24 ppm<sup>2</sup>.
- Quick first print time in approximately 6 seconds.
- Duplex functions
  - imageCLASS MF229dw: Duplex Print, Copy, Scan, Fax
  - imageCLASS MF227dw: Duplex Print Only
  - imageCLASS MF216n and imageCLASS MF212w: Not available
- Color scanning at an interpolated resolution of up to 9,600 x 9,600 dpi (dots per inch), and optical scanning at a resolution of up to 600 x 600 dpi.
- Includes a front-loading paper cassette with a capacity of up to 250 sheets, and a multipurpose tray with single-sheet feeding capability.
- Standard 33.6 Kbps Super G3 fax capabilities (The imageCLASS MF229dw, imageCLASS MF227dw, and imageCLASS MF216n only).
- Meets the ENERGY STAR guidelines for energy efficiency.
- Standard UFR II LT printing.
- Support for mobile printing from Apple iOS and Android mobile devices.

.

<sup>1</sup> Wireless performance may vary, depending on terrain and distance between the printer and wireless network clients.

The copy/print speed is measured during continuous copy/print runs. Copy/print speeds may vary, depending on the paper type, size, and paper feeding direction. Copy/print speeds on smaller paper sizes may be slower. Also, the machine may experience downtime or slow down in the middle of a continuous copy/print run to adjust the temperature inside the machine, and maintain optimal print quality.



# II. Product Configuration and Box Contents

# A. Configuration and CarePAKs

**Note**: All configurations shown are for reference purposes only, and are subject to change without notice. Please refer to the Price List in the CNA (Canon Network Access) Web site <a href="www.cna.cusa.canon.com">www.cna.cusa.canon.com</a> for the most up-to-date item numbers.

Table 1 — Configuration

Item	Item Number <sup>3</sup>		
imageCLASS MF229dw			
imageCLASS MF229dw	9540B009AA		
imageCLASS MF227dw	9540B013AA		
imageCLASS MF216n	9540B043AA		
imageCLASS MF212w	9540B056AA		
Supplies and Consumables			
Cartridge 137 (Yields approximately 2,400 pages (LTR), with the factory default print density setting.)	9435B001AA		
Service Materials and Parts Catalog			
imageCLASS MF200 Series Service Manual	Available for download on the		
imageCLASS MF200 Series Parts Catalog	<u>e-Support</u> Web site		

<sup>3</sup> Item numbers and part numbers are subject to change without notice.



#### Table 2 — eCarePAKs

eCarePAKs are available for purchase through an Authorized Canon Reseller or Distributor. For more information, see <u>"CarePAK Extended Service Plans,"</u> on p. 19.

Model Tier		Extended Coverage Length and Type	Item Number <sup>3</sup>
	1E	1 Year Exchange/Carry-In	5707B038AA
imageCLASS MF216n and		2 Year Exchange/Carry-In	5707B039AA
MF212w		3 Year Exchange/Carry-In	5707B040AA
		4 Year Exchange/Carry-In	5707B041AA
	2E	1 Year Exchange/Carry-In	5707B042AA
imageCLASS MF229dw and		2 Year Exchange/Carry-In	5707B043AA
MF227dw		3 Year Exchange/Carry-In	5707B044AA
		4 Year Exchange/Carry-In	5707B045AA

<sup>3</sup> Item numbers and part numbers are subject to change without notice.

#### **B. Box Contents**

**Note**: The box contents shown below are for reference purposes only, and are subject to change without notice.

- imageCLASS MF200 Series Product
- Power Cord
- User Software CD-ROM
- Setup Instructions

- Warranty Card
- User Manuals
- Telephone Cable (Excludes MF212w Model)



#### III. Service Authorization

To obtain and maintain authorization to service the imageCLASS MF200 Series, each dealer location must have at least two (2) employees certified to service the machine.

# IV. Educational Training

# A. Training Program Overview

Technicians who successfully complete the imageCLASS MF200 Series online course and pass the certification exam are authorized to service and support the imageCLASS MF200 Series.

The imageCLASS MF200 Series online course is available via the Training section of the e-Support Center Web site.

# **B. Who Should Complete**

All service technicians responsible for installing, servicing, and supporting the imageCLASS MF200 Series machines must successfully complete the imageCLASS MF200 Series online course, and pass the certification exam to receive technical support and dealer authorization to sell these products.

#### C. Prerequisites

There are no prerequisites for this training course. However, it is highly recommended that the service technician have:

- Prior experience with Canon imageCLASS MF devices
- Experience with taking eLearning courses
- Familiarity with common hand tools to disassemble and service Canon devices



#### D. Course Format

The imageCLASS MF200 Series online course is a self-paced course. It covers the setup and service information for these models, and familiarizes the service technician with the important areas in the Service Manual and User Manuals.

The following learning resources are provided as downloads in this training course:

- Printed version of the course for reference
- Service Manual
- Quick Setup Guide
- e-Manual

It takes approximately 2.0 hours to complete this course successfully. It is important that a quiet and undistracted learning area be set up by the student beforehand to effectively take this training course and complete the assessment exam.

# **E. Course Equipment**

- Windows workstation with audio and access to the Training section of the <u>e-Support Center</u> Web site
- Flash-enabled Web browser (preferably Microsoft Internet Explorer)

It is necessary to enable file downloads in Internet Explorer to download the documents supplied within the course. Internet Explorer 8 disables the file download option by default. To enable Internet Explorer 8 to download files, perform the following steps:

- 1. Open Internet Explorer, select the "Tools" menu.
- 2. Click "Internet Options."
- 3. Click "Security."
- 4. Click "Custom level."
- 5. Scroll down to the Downloads section, and click "Enable" under <Automatic prompting for file downloads> and under <File download>.
- 6. Click "OK" to close all the dialog boxes.
- 7. Close and reopen Internet Explorer. You should now be able to download the learning resources contained within the course.

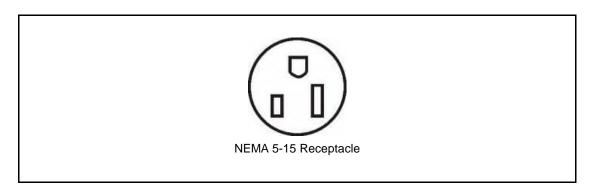
# V. Servicing Notes

# A. Power and Plug Requirements



The imageCLASS MF200 Series devices require a NEMA 5-15 receptacle for proper operation. Before installation, confirm that a proper NEMA receptacle is available for this device. It is not necessary to have a dedicated line.

Table 3 — Power and Plug Requirements



# **B.** Installation Space Requirements

The imageCLASS MF200 Series approximate installation space requirements are shown below. Always ensure that there is enough space for the service and operation of the device.

Keep the back and sides of the machine at least 4" (100 mm) away from a wall for the proper servicing of the equipment.

imageCLASS Model	Width	Depth	Height
MF229dw	15.4" (391 mm)	14.9" (378 mm)	14.2" (361 mm)
MF227dw	15.4" (391 mm)	14.6" (371 mm)	14.2" (361 mm)
MF216n	15.4" (391 mm)	14.6" (371 mm)	14.2" (361 mm)
MF212w	15.4" (391 mm)	14.6" (371 mm)	12.3" (312 mm)



Table 4 — imageCLASS MF229dw Installation Space Requirements

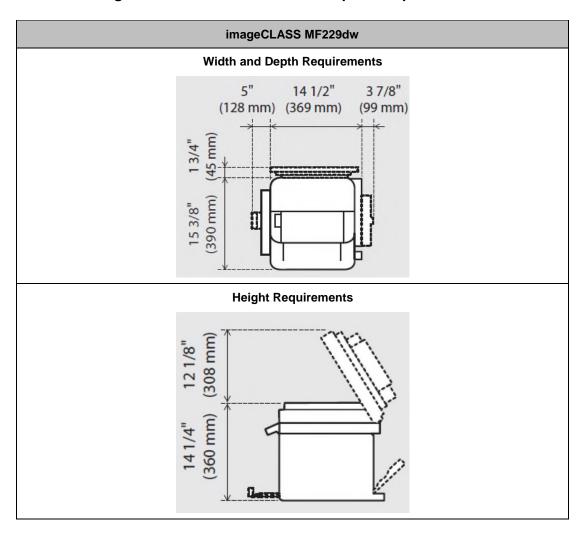




Table 5 — imageCLASS MF227dw Installation Space Requirements

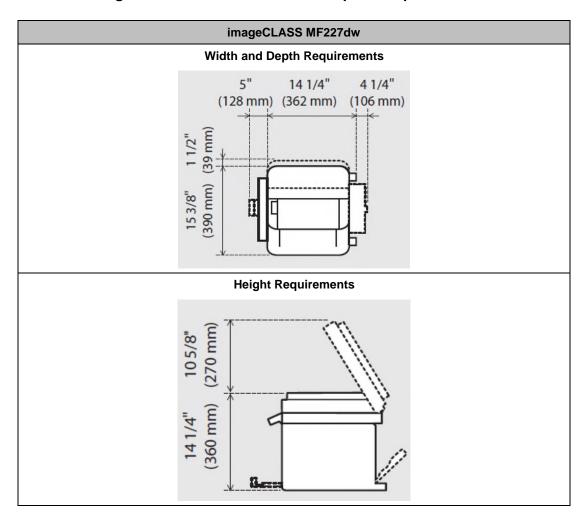




Table 6 — imageCLASS MF216n Installation Space Requirements

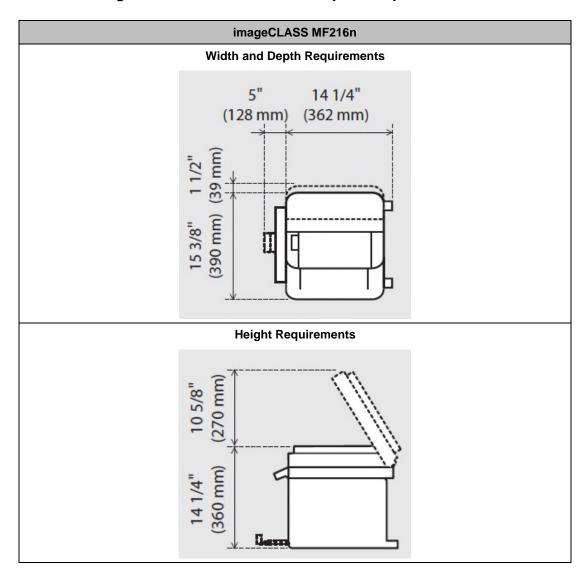
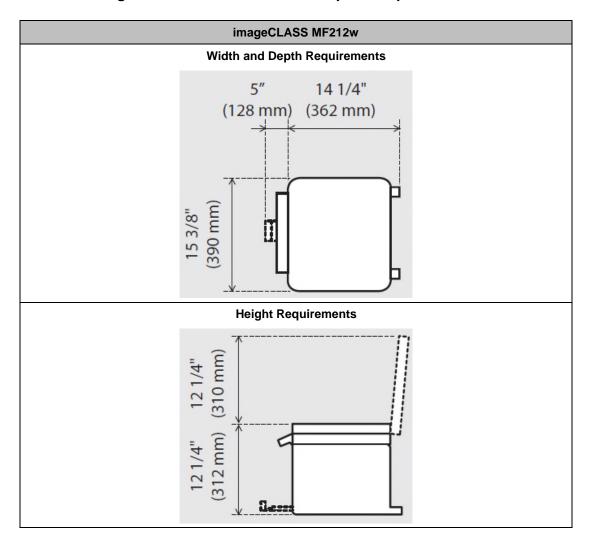




Table 7 — imageCLASS MF212w Installation Space Requirements





#### C. Estimated Installation Time

The estimated length of time needed to unpack and install the main unit is approximately 5 minutes. This is based on one (1) experienced technician or end-user.

The time needed to install the printer driver on the imageCLASS devices is shown below. Add this amount of time to the estimated installation time of the main unit.

imageCLASS MF229dw and MF227dw via:

USB Connection: Approximately 1.6 minutes
 Wired Connection: Approximately 2.1 minutes
 Wireless Connection: Approximately 2.5 minutes

imageCLASS MF216n and MF212w via:

USB Connection: Approximately 1.0 minutes
 Wired Connection: Approximately 1.8 minutes
 Wireless Connection: Approximately 2.0 minutes

#### D. Notes on the Wireless LAN

- The imageCLASS MF229dw, MF227dw, and MF212w must be kept within (approximately 164' (50 m)) from the wireless Local Area Network router or access point.
- Obstacles such as walls and floors can reduce the effective range resulting in deterioration of communications. Avoid obstacles between the machine and the wireless Local Area Network router or access point.
- Microwaves and refrigerators may cause interference if the machine or wireless Local Area Network router or access point is installed nearby. Keep the machine, wireless Local Area Network router or access point away from microwaves and refrigerators.
- When multiple networks are used to avoid interference between the channels, set each network to a channel that is as far apart from other network channels, such as Ch.1, Ch.6, and Ch.11. Refer to the instruction manual of the wireless Local Area Network router or access point, or contact the manufacturer for information on checking and setting methods for channels.



# **E. Service Support Tools**

The tools listed in the table below are necessary for the proper servicing of the machine. For more information on the tools below, see the *imageCLASS MF200 Series Service Manual*.

Table 8 — Service Tools

Tool Name	Part Number3	Usage/Remarks	
Tool Case	TKN-0001	_	
Jumper Wire	TKN-0069	With clip.	
Gap Gauge CK-0057 0.02 mm to 0.03 mm			
Spring Scale	CK-0058	Used to check the paper cassette's spring pressure.	
	CK-0101	M4, M5 length: 363 mm	
Philips Screwdriver	CK-0104	M3, M4 length: 155 mm	
1 milps ociewanivei	CK-0105	M4, M5 length: 191 mm	
	CK-0106	M4, M5 length: 85 mm	
Flat-Blade Screwdriver	CK-0111	_	
Precision Slot Head Screwdriver	CK-0114	Six-piece set	
Hex-Key Wrench Set	CK-0151	Five-piece set	
Smooth File	CK-0161	_	
Hex Screwdriver	CK-0170	M4, length: 107 mm	
Nipper	CK-0201	_	
Long-Nose Pliers	CK-0202		
Pliers	CK-0203	_	
Stop-Ring Pliers	CK-0205	For shaft ring.	
Crimping Tool	CK-0218	_	
Tweezers	CK-0302	_	
Scale	CK-0303	150 mm for measurement	
Plastic Hammer	CK-0314	_	
Brush	CK-0315	_	
Penlight	CK-0327	_	
Plastic Bottle	CK-0328	_	
Lint-Free Cloth	CK-0336	500 SH/PKG	
Oiler	CK-0349	30 cc	
Plastic Bottle	CK-0351	30 cc	
Digital Multimeter	FY9-2032	_	

<sup>3</sup> Item numbers and part numbers are subject to change without notice.



The solvents and oils in the table below should also be carried to ensure that the imageCLASS MF200 Series is properly serviced. For more information on the special tools, solvents, and oils below, see the *imageCLASS MF200 Series Service Manual*.

Table 9 — Solvents and Oils

Type Part Number <sup>3</sup>		Usage/Remarks	
Ethyl Alcohol	None (Purchase locally)	<ul> <li>For cleaning metal parts, plastic, grease, and toner</li> <li>Keep away from flammable materials.</li> </ul>	
		<ul><li>Apply to the gears, shafts, and shaft supports.</li><li>Molykote EM-50L (Dow Corning Corporation)</li></ul>	

<sup>3</sup> Item numbers and part numbers are subject to change without notice.

#### F. Consumables

Consumables are all products and materials that are consumed with regular use and cannot be reused. Such consumables include but are not limited to paper and toner.

A number of factors are considered to determine the approximate yield expectancy of a consumable item, including paper size and the amount of coverage per page.

**Note:** All consumables shown in the table below are estimates for reference purposes only, and are subject to change without notice.

Table 10 — Main Unit Consumables List

Description	Part Number <sup>3</sup>	Quantity	Estimated Life (prints) <sup>4</sup>	Remarks
Cartridge 137	9435B001AA	1	2,400	Based on the ISO/IEC 19752 Standard.

<sup>3</sup> Item numbers and part numbers are subject to change without notice.

#### G. Consumable Parts

Consumable parts are parts that have a limited life, which will be reached during a customer's specific machine operation, and should then be replaced as needed by a service technician.

The imageCLASS MF200 Series does not have any consumable parts.

#### H. Periodic Replacement Parts

The imageCLASS MF200 Series does not have any periodically replaced parts.

<sup>4</sup> Value is based on LTR paper with the factory default print density setting.



# I. Firmware Upgrade

Firmware can be downloaded by the end-user or service technician via a USB cable or a wired/wireless network that is connected to a computer. Firmware is available for download on Canon U.S.A., Inc.'s (hereinafter referred to as Canon USA) public Web site (<a href="http://www.usa.canon.com/cusa/support/consumer/">http://www.usa.canon.com/cusa/support/consumer/</a>). When servicing the machine, make sure to go to Canon USA's public Web site, and download the most recent firmware.

#### Note:

- A computer and the most recent UST (User Support Tool) file are required to install upgraded firmware.
- Only the Main Controller PCB can be upgraded using the UST.
- The UST and firmware are included in the firmware package download from Canon USA's public Web site.

# J. Computer Requirements for Downloading Firmware

The recommended desktop PC or laptop requirements<sup>5</sup> to download the firmware are:

- CPU: Celeron 400 MHz or higher (32-bit processor only)
- Memory: 32 MB of RAM or more
- Free HDD Capacity: 100 MB or more of available hard disk space
- High-Speed USB 2.0 (recommended) or 1.1
- Display: 640 x 480 resolution or better, 256 colors or more
- Operating System (any of the following):
  - Microsoft Windows 2000 Server/Professional
  - Microsoft Windows XP Professional or Home Edition
  - Microsoft Windows Server 2003
  - Microsoft Windows Vista (32-bit processor version only)
  - Microsoft Windows 7, 8, or 8.1
  - Microsoft Windows Server 2008/2012
  - Mac OS X 10.3 or later
- Necessary Cables: High-Speed USB 2.0-compliant cable (as short as possible to avoid connection problems).

**Note:** Do not use extension cables.

\_

<sup>5</sup> Specifications are subject to change without notice.



# VI. End-User Customer Service Offerings

# A. Monthly Copy/Print Volume

The optimum performance range is the volume range that the equipment is intended to run on a regular basis to maintain a high-level of performance and print/copy quality.

The maximum print/copy monthly volume is the maximum number of pages the machine can produce within a one (1) month period (based on LTR paper). It is recommended not to use the device to produce the maximum number of pages, or a greater volume, on a consistent monthly basis.

Table 11 — Monthly Copy/Print Volume

Model	Optimum Performance Range	Maximum Monthly Print Volume
imageCLASS MF229dw and imageCLASS MF227dw	750 to 3,000 prints	Up to 10,000 prints
imageCLASS MF216n and imageCLASS MF212w	500 to 2,000 prints	Up to 8,000 prints

# **B. Limited Warranty Support**

The Canon imageCLASS MF200 Series Limited Warranties are effective for a period of one (1) year following the delivery of the machine to the original purchaser. Carry-In Service and Exchange Service are included.

The Canon Toner Cartridge Limited Warranty is effective for a period of thirty (30) days from the date of the original purchase.

There is no warranty on any consumables, such as paper.

For detailed warranty information, refer to the Limited Warranty cards located in the Appendix.



# C. Technical Support for the End-User

The first technical support call from the end-user is handled by CITS (Canon Information Technology Services). The CITS help desk, at 1-800-OK-CANON (1-800-652-2666), is available Monday through Friday, 8 A.M. to 8 P.M. EST (Eastern Standard Time), except for holidays. The CITS help desk provides the following support:

- Answers product related questions.
- Assists the end-user with pre- and post-sales inquiries.
- Redirects end-user calls to the Authorized Servicer of record. If there is no Authorized Servicer of record, the CITS help desk will:
  - Attempt to resolve hardware, software, and operational problems.
  - Assist the customer with installation and setup.
- If telephone-based troubleshooting fails to resolve a problem, CITS either provides the end-user with the contact information of the nearest third-party service provider for Carry-In Service, or processes an Exchange Service.

#### Note:

- The CITS help desk times may change without notice.
- The CITS help desk only diagnoses problems with your machine.

# 1. Carry-In Service

Carry-In Service provides the end-user with an Authorized Servicer of record where they can carry in the defective product and have it repaired.

CITS will refer the end-user to the Authorized Servicer of record. The Authorized Servicer will diagnose any problems with the machine, and if required, provide Carry-In Service.

If there is no Authorized Servicer of record, the CITS help desk will diagnose any problems with the machine over the telephone. If telephone-based troubleshooting fails to resolve the problem, the CITS help desk will provide the end-user with the contact information of the nearest ASF (Authorized Service Facility) that can provide Carry-In Service.

The end-user needs to contact the ASF to schedule a repair.



# 2. Exchange Service

The Exchange Service option enables Canon USA to ship the end-user a replacement product for the defective product.

CITS will help the end-user over the telephone to diagnose any problems with the machine first. If telephone-based troubleshooting fails to resolve the problem, and Exchange Service is requested, the CITS help desk issues the end-user a Return Authorization Number.

The end-user must provide the CITS help desk with the following information:

- Product serial number
- A ship to location for the replacement product

Canon USA will ship a replacement product to the end-user by the next business day (two (2) business days Exchange Service for Alaska and Hawaii), provided the request is made prior to 4 P.M. EST, Monday through Friday, except for holidays.

The replacement product includes a prepaid shipping label for the return shipment of the defective product back to Canon USA. The end-user must ship the defective product within ten (10) days of receipt of the replacement product.

**IMPORTANT:** Exchange Service is not available to ASCR (Authorized Servicer Customer Registration) registered customers. See <u>"Authorized Servicer Customer Registration System,"</u> on p. 22.



# 3. Internet Support

End-user support is also available via the Canon USA consumer Web site: <a href="http://consumer.usa.canon.com">http://consumer.usa.canon.com</a>. The end-user can access print drivers, software downloads, FAQs (Frequently Asked Questions), register their product, review promotions, and research products. Information for technical support by telephone, e-mail, and third-party service provider locations is also available on the consumer Web site.





# D. Post-Warranty Support

#### 1. CarePAK Extended Service Plans

There are two CarePAK Extended Service Plans offered by Canon USA, and they differ only in the way one purchases the CarePAK.

Virtual CarePAK: Purchased directly by the end-user from Canon

USA's public Web site www.shop.usa.canon.com.

**eCarePAK:** Purchased in bulk by a distributor or dealer, who then

sells the eCarePAK to their customers.

Both of the Canon CarePAK Extended Service Plans enable the customer to extend the service coverage on their Canon product beyond the one (1) year limited warranty. They provide the customer toll-free telephone support, and if needed, Exchange Service for their Canon product for the duration of the extended coverage. A customer can purchase a 1 to 4 year extended coverage plan for a total of 5 years of coverage.

#### Note:

- CarePAK coverage cannot be extended beyond the original term purchased.
- The CarePAK Extended Service Plan must be purchased during the product warranty period, and goes into effect on the day the original warranty expires.
- The CarePAK Extended Service Plan does not include coverage for any consumables, such as paper.
- Reimbursement to the Authorized Servicer during the CarePAK Extended Service Plan is through the e-Tag System. See <u>"e-Tag,"</u> on p. 29.



#### a. Virtual CarePAK Extended Service Plan

# 1. Purchasing a Virtual CarePAK Extended Service Plan

An end-user can purchase a Virtual CarePAK Extended Service Plan online by following the steps below:

- 1. Go to www.shop.usa.canon.com.
- 2. Point to the "Accessories" link.
- Click "Extended Service Plan."
- 4. Under <Select the right plan for your Canon Product>, select "Scanners, Copiers & Fax."
- 5. Select "Laser Copiers."
- 6. Select your imageCLASS model.
- 7. Under <Choose a Package>, select the radio button next to your machine's model number.
- 8. Click "ADD TO CART," and follow the instructions to complete the purchase.

**Note:** During the online purchase process, the end-user is prompted to enter their e-mail address. Once the end-user completes their purchase, they are sent a CarePAK registration number (also called an "Enrollment Number") via an e-mail message with a link to the registration site. (The end-user must purchase and register their Virtual CarePAK within the manufacturer's warranty period.)

# 2. Registering a Virtual CarePAK Extended Service Plan

An end-user can register their Canon CarePAK Extended Service Plan online by following the steps below:

- 1. Go to www.shop.usa.canon.com.
- 2. Point to the "Accessories" link.
- 3. Click "Extended Service Plan."
- 4. Click "Register Your Canon CarePAK."
- 5. Enter the registration number, click "Continue," and then follow the instructions to complete the registration.

**Note:** After registration is complete, a Certificate of Registration is mailed to the end-user.



#### b. eCarePAK Extended Service Plan

# 1. Purchasing an eCarePAK Extended Service Plan

A customer (end-user) can purchase an eCarePAK Extended Service Plan from the dealer or reseller who sold them the machine. Only an authorized dealer or distributor can purchase an eCarePAK from Canon.

eCarePAK orders must contain the following information:

- Reseller's e-mail address, name, and address
- Customer's e-mail address, name, and address
- The device's model number, serial number, and purchase date

# 2. Registering an eCarePAK Extended Service Plan

Canon USA registers each eCarePAK, and provides the customer with the terms and conditions that pertain to their purchased eCarePAK Extended Service Plan via U.S. Mail.

**Note:** Any questions on eCarePAKs should be asked via e-mail message to <a href="mailto:ecarepak\_support@cusa.canon.com">ecarepak\_support@cusa.canon.com</a>.

#### 2. Time and Material Service

If a customer calls CITS for service after the product warranty has expired, and an Extended Service Plan was not purchased, or the Extended Service Plan has expired, the CITS help desk will diagnose the problem.

If service is required, the CITS help desk will provide the end-user with the contact information of the Authorized Servicer of record. The Authorized Servicer may charge the end-user for time and materials every time service is provided.

If the product is not registered under the ASCR system, CITS will dispatch a third-party service provider, and the end-user will be charged for time and materials.



# VII. Authorized Servicer Program

The Authorized Servicer program enables Canon's distribution product resellers to become Authorized Servicers (authorized to service the Canon products they resell). Refer to the imageCLASS Authorized Servicer Program Guide, found in the Download Center section of the <u>e-Support Center</u> Web site for details to help an Authorized Servicer become familiar with Canon USA's business processes and the resources that are available to assist them.

Canon USA's Engineering Services and Solutions Division's Business Relations and Administration department is available to answer questions regarding the Authorized Servicer program. The Business Relations and Administration department can be contacted at 1-631-330-2335, Monday through Friday, 9 A.M. to 5 P.M. EST.

# A. Authorized Servicer Customer Registration System

The ASCR system is used to link the customer's product's serial number to their Authorized Servicer. If a customer contacts the CITS help desk, and service is required (warranty or post-warranty), the Authorized Servicer who is registered to that customer's product is dispatched (referred). An ASF services all unregistered units.

The Authorized Servicer must register the customer's product serial number in the ASCR system to be eligible for warranty reimbursement.



# **B. ASCR Registration Process**

The ASCR system can be accessed through the Warranty section of the <u>e-Support Center</u> Web site. Select the "ASCR" tab, and then select "Create New Registration Record" to enter each serial number for which you intend to provide Carry-In Service and support.

Registration of your customer's product's serial numbers to your service organization as "Dispatch by CITS" will have all end-user calls to CITS, for Carry-In Service and support, referred directly to your organization.

Products not registered with the ASCR registration process default to a support model, where CITS dispatches (via end-user referral) an ASF for Carry-In Service, or provides the end-user with an Exchange Service.

#### Note:

Do not enter a serial number for any products that you cannot service. By entering the customer's product's serial number, you agree to be dispatched by CITS if a registered customer contacts CITS and requires service.

# C. Replacement Inventory

The Authorized Servicer's product's serial numbers for replacement inventory and Carry-In Service must be registered using the ASCR system. Registration of replacement inventory ensures that calls to CITS, in the event that replaced products require service, dispatches your service organization to service the product.

#### D. Optional On-Site Service

While not included in the Labor Compensation for Carry-In Service, the Authorized Servicer has the option to provide on-site service to the end-user. However, labor compensation is not increased.



# VIII. Authorized Servicer Support Offerings

# A. Authorized Servicer Support

Authorized Servicers can contact CITS technical support at 1-877-277-7043, Monday through Friday, 8 A.M. to 8 P.M. (EST), except for holidays. Before contacting CITS, a technician must exhaust all other resources, including the service manual, and the <u>e-Support Center</u> Web site for technical publications, and their internal service support infrastructure.

**Important:** Your customer's product's serial numbers must be registered to your service organization using the ASCR system to ensure that your customers remain associated with your service organization only. See <u>"ASCR Registration Process,"</u> on p. 23.

# **B. Internet Support**

#### 1. Canon USA's e-Support Center Web Site

The <u>e-Support Center</u> Web site, available from Canon USA's Engineering Services and Solutions Division, provides high-quality support via the Internet. This is only available for Canon USA's Authorized Servicing Dealers or Authorized Servicer's.

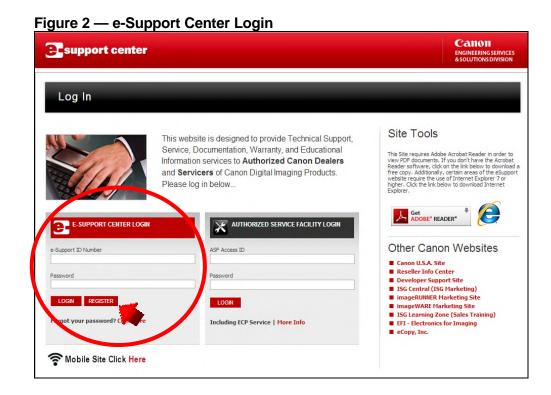
Canon USA's <u>e-Support Center</u> Web site is designed to give Authorized Servicers access to the following technical support information:

- Notification of new releases, patches, technical publications, and other information via e-mail.
- Search capability for technical solutions with the Integrated Knowledge Management System using natural language queries.
- Read or download online documentation.
- Download patches and their Readme files.
- Track and modify logged cases.
- Review all open cases.
- Technical information, the warranty e-Tag system, and training information.

For more information on how to access the Warranty section of the e-Support Center Web site, or how to file a claim, see <u>"Warranty Procedures</u>," on p. 29.



To access online support for Authorized Servicers, you must first register for an e-Support ID number. To register for an e-Support ID, go to the Canon USA e-Support Center Web site at <a href="http://www.support.cusa.canon.com">http://www.support.cusa.canon.com</a>. Click the "REGISTER" button, and follow the instructions. This service is available at no additional charge to all authorized dealers.





#### 2. Canon USA's ISG Central Web Site

Complete Service Guide versions are available on Canon USA's ISG Central Web site (<a href="http://isgcentral.cusa.canon.com">http://isgcentral.cusa.canon.com</a>).

Access is limited to an Authorized Dealer's management staff. Contact your Dealer Administrator to request access to the Engineering Services and Solutions section of ISG Central.

Figure 3 — ISG Central Login

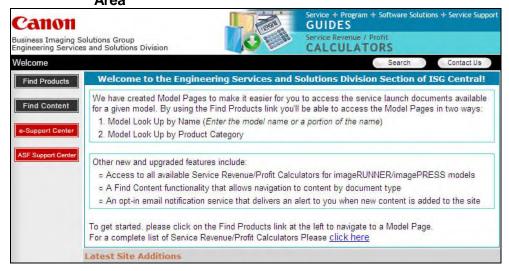




After the dealer logs on to the ISG Central Web site, select "Engineering Services & Solutions" to access the Service Guides area of the Web site, as shown below.



Figure 5 — ISG Central: Engineering Services & Solutions Service Guides Area





#### C. Call Escalation Procedure

Canon USA provides a time-sensitive call escalation process for all imageCLASS MF200 Series Authorized Servicers. The CITS help desk is the single point of entry for this process. Once a call is placed to the CITS help desk and information is logged into the call management system, a case number is assigned to the call. Every effort is made to resolve the problem during the call. For problems that cannot be resolved during the initial call and require escalation, follow the process below.

Canon imageCLASS MF200 Series **End-User Assistance Required** by the End-User Resolved **CITS** Resolved 1-800-OK-CANON (652-2666) **Exchange Service CITS Refers the End-User** to the Authorized Servicer Requested Canon's **Authorized Servicer Assistance Required** by the Authorized Servicer **CITS** 1-877-277-7043 **Canon USA Engineering** 

Figure 6 — Call Escalation Procedure Flow Chart



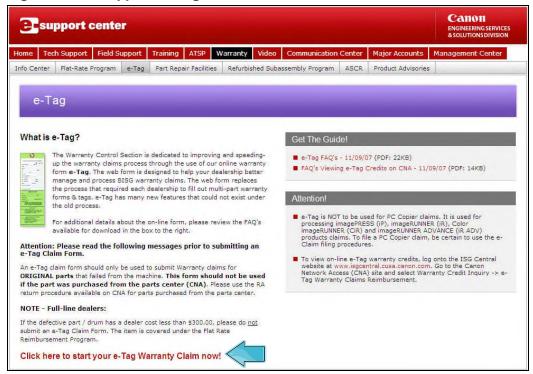
# IX. Warranty Procedures

# A. e-Tag

e-Tag is an electronic limited warranty claim form that is completed online, printed out, and accompanied by the **original** defective part or defective toner assembly that is being returned to the Warranty section for warranty compensation.

The e-Tag warranty claim form can be accessed in the Warranty section of the e-Support Center Web site at <a href="http://www.support.cusa.canon.com">http://www.support.cusa.canon.com</a>.

Figure 7 — e-Support: e-Tag





To submit a new warranty claim, select the type of claim from the drop-down list, shown below, and complete the required sections of the e-Tag limited warranty claim form.

Figure 8 — e-Support: e-Tag Claim Console



A copy of the e-Tag warranty claim form and the machine's service history must be returned with the original defective parts to the address provided on the bottom of the e-Tag warranty claim form.

The service history log can be handwritten or computer-generated, and must include the following information:

- Dealer Name
- Machine's Installation Date
- Machine's Serial Number
- Part Number

- Part Description
- Date Part Was Removed
- Machine Copy Count
- Reason for Removal
- Work Performed (Highlight Current Service Call)

For defective toner assemblies, ship the toner assembly to the address provided on the bottom of the e-Tag warranty claim form, accompanied by a copy of the e-Tag warranty claim form, the machine's service history log, a "before" sample copy that depicts the problem, and an "after" sample copy that shows that the problem has been resolved.

After a claim form is authorized, parts and labor reimbursements are deposited into your direct deposit account within 30 days, if you have elected to receive direct deposit.



# **B. Online Limited Warranty Credit Inquiry**

The Online Warranty Credit Inquiry enables your dealership to check, download, and print the details of your e-Tag credits on the CNA (Canon Network Access) Web site.

To view your e-Tag warranty claim credits online, log on to the ISG Central Web site at <a href="http://www.isgcentral.cusa.canon.com">http://www.isgcentral.cusa.canon.com</a>, and select "Canon Network Access (CNA)," as shown below.





On the CNA Web site, select "Warranty Credit Inquiry," and then select "e-Tag Warranty Claims Reimbursement" to perform an e-Tag Warranty claims search, as shown in the following screen shots.

Figure 10 — CNA: Warranty Credit Inquiry



Figure 11 — CNA: Warranty Credit Inquiry



To check the status of the e-Tag warranty claims already submitted:

Go to the e-Tag Warranty Claim Console, as shown at the bottom of the screen shot in <u>Figure 8 — e-Support: e-Tag Claim Console</u>. This console enables you to check the status of your claims. To view the details of the e-Tag limited warranty claim form, double-click any record.

**Note:** e-Tag warranty claims are connected to the e-Support ID number that is entered. Therefore, it is highly recommended that only one person enter and manage the e-Tag warranty claims from your dealership.



## C. Warranty Reimbursement Program

The two warranty reimbursement programs available for service providers are Dispatch by CITS or the Warranty Marketing Program. Both programs require the customer's serial number be registered with the ASCR system.

## 1. Dispatch by CITS

Dispatch by CITS is available to ASCR registered customers where the Warranty Marketing Program option has not been selected.

Help desk support is managed by CITS to dispatch the Authorized Servicer of record. To obtain reimbursement for service delivered during the end-user warranty, you must be dispatched by CITS. For this to occur, the end-user must contact CITS first to attempt all user-performed service remedies. If these remedies do not resolve the problem, the Authorized Servicer of record is dispatched. See <u>"ASCR Registration Process,"</u> on p. 23.

On-site service labor compensation of \$135.00 per incident is automatically issued to the dispatched Authorized Servicer (your company) once the service call has been closed with CITS. Defective parts reimbursement is issued upon receipt of an e-Tag claim with the defective part.



## 2. Warranty Marketing Program

Some service providers may choose to have their own help desk serve as the "first point of contact" rather than CITS. This places the burden of having an effective in-warranty call avoidance process upon the service provider. Service calls performed under this arrangement are not eligible for labor reimbursement under the process. Instead, a flat rate of \$30.00 is issued to a service provider for each product (serial number) they choose to support in this manner.

The ASCR process allows the service provider to select this option, and it is incumbent on the service provider to provide service support that is consistent with commercially acceptable standards. In cases where the service provider accepts the flat-rate payment, but does not provide service support to the end-user, the service provider could lose authorization to service that product.

**IMPORTANT:** Under the Warranty Marketing Program, the service provider assumes 100% of all end-user responsibility. To submit a warranty claim for a defective part, please follow the e-Tag Warranty Claim form process. See "e-Tag," on p. 29.



## X. Parts Support

#### A. Parts and Service Material Orders

#### 1. Canon Network Access

If you have direct access to CNA, log on to the CNA Web site via <a href="http://www.cna.cusa.canon.com">http://www.cna.cusa.canon.com</a>. However, you can also access CNA through Canon USA's ISG Central Web site, and access the CNA section via the "Canon Network Access (CNA)" tab.

All Authorized Servicers are recommended to submit their parts purchase orders electronically via CNA. The Authorized Servicer is responsible for all shipping costs related to their order.





ISG Canon CENTRAL Welcome to ISG Central **UPDATES** NEW MP-100H SOFTWARE FOR CANON MREAL SYSTEM FOR MIXED REALITY EXPANDS ITS SUPPORT TO A VARIETY OF SENSORS FOR ENHANCED PERFORMANCE
Canon U.S.A., Inc. today announced the introduction of the MP-100H, a new version of software for
the Company's MREAL System for Mixed Reality (MR), that enhances the functionality by
expanding its compatibility to a wider selection of position-detection sensors. n Financial Services CANON ADDS AIRPRINT COMPATIBILITY TO NEW COLOR IMAGECLASS MULTIFUNCTION Canon Network Access (CNA) Canon U.S.A., Inc. today announced that two of its newest line of imageCLASS laser multifunction printers (NFPs) support AirPrint wireless printing from iPad, iPhone and iPod touch. Engineering Services & Solutions CANON TO EXHIBIT LASER MFPS AND DOCUMENT SCANNERS AT 2013 AMERICAN BAR ASSOCIATION TECHSHOW CONFERENCE AND EXPO
Canon U.S.A., Inc. will be an exhibitor at the American Bar Association's TECHSHOW 2013 Legal
Technology Conference & Expo taking place April 4 - 6, at the Hilton Chicago. Canon will showcase
Its ImageCLASS laser printers and multifunction printers and imageFORMULA document scanners, demonstrating the value that products with robust speed, exceptional output and flexibility can offer to the legal sector Canon Financial Services Federal Support Center Dealer Leasing Reference Guide Support Center

Figure 13 — ISG Central

The CNA Web site enables you to:

- Order parts
- Download parts information and the parts price list
- View the parts discontinuation schedule information
- Inquire about orders and invoices

The CNA Web site is accessible 24 hours a day, and 7 days a week.

#### 2. Parts Order Desk

Authorized Servicers without access to the CNA Web site must contact the Canon Parts Order Desk at 1-866-481-2569. The Authorized Servicer is responsible for all shipping costs related to their order.



## **B. Parts Order Entry**

## 1. Regular Orders

All parts for regular orders are shipped via ground once the parts orders are printed by Canon USA, unless an alternate shipping method is requested by the Authorized Servicer for rush orders.

Parts and shipping are charged to the Authorized Servicer.

Note: Shipments may be delayed for credit review.

#### 2. Rush Orders

To ensure same day shipment of rush orders, submit all one (1) and two (2) day emergency purchase orders no later than 4 P.M. EST.

All purchase orders placed through CNA are confirmed via an e-mail message.

#### C. Parts Information/Parts Price List Download

All parts information for active parts are made available on the CNA Web site under the Parts Information link. Downloadable files by model and product are also available under the Parts Information link.

**Note:** Authorized Servicers without access to the CNA Web site must contact the Canon Parts Order Desk at 1-866-481-2569.

#### D. Parts Discontinuation Schedule Information

Parts discontinuation information is available on the CNA Web site under the Parts/Supply Discontinuation link. Information is available regarding active machines, machines scheduled to be discontinued within the year, and discontinued machines.

**Note:** Authorized Servicers without access to the CNA Web site must contact the Canon Parts Order Desk at 1-866-481-2569.

Canon U.S.A., INC.

As Of: 06/16/2003 12:00:17



## E. Order/Invoice Inquiry

Inquiries concerning purchase orders and invoices can be made on the CNA Web site. You can search using the purchase order, invoice number, or conduct a search for the most recent date required. For additional tracking information, purchase orders that have been shipped contain a link to the UPS (United Parcel Service) Web site. For questions concerning parts, please send an e-mail message to <a href="mailto:canonparts@cusa.canon.com">canonparts@cusa.canon.com</a>.

**Note:** New Accounts are not available on the CNA Web site. Authorized Servicers without access to the CNA Web site should contact the Canon Parts Order Desk at 1-866-481-2569 for order and invoice inquiries.



Order and Invoice Inquiry

Parts Information
Parts Price List

Provides detailed order and invoice information.

Canon U.S.A., Inc.

Figure 14 — Canon Network Access

## F. Parts Return Process

Canon IISA

Marketing Info.

**COL-ISG Service** 

Terms of Use User Profile Update Profile System Admin.

The parts return process is available on the CNA Web site under "Forms," and then select "Parts Return Request Application." The information you need to enter is the Purchase Order Number, Shipping Order Number, the Parts Numbers of the parts you want to return, and the quantity.

a global leader of

breakthrough products and

new technologies

**Note:** Authorized Servicers without access to the CNA Web site must contact the Canon Parts Order Desk at 1-866-481-2569 for information about the parts return process.



# XI. Appendix

## A. Specifications

**Note:** All specifications are for reference purposes only, and are subject to change without notice.

**Table 12 — Machine Specifications** 

Item		Description
Dimensions (H x W x D)		imageCLASS MF229dw: Approximately 14.2" x 15.4" x 14.9" (361 mm x 391 mm x 378 mm)  imageCLASS MF227dw/MF216n: Approximately 14.2" x 15.4" x 14.6" (361 mm x 391 mm x 371 mm)  imageCLASS MF212w: Approximately 12.3" x 15.4" x 14.6" (312 mm x 391 mm x 371 mm)
Weight		imageCLASS MF229dw: Approximately 28.9 lb (13 kg) imageCLASS MF227dw: Approximately 26.9 lb (12 kg) imageCLASS MF216n: Approximately 25.4 lb (11 kg) imageCLASS MF212w: Approximately 22.5 lb (10 kg)
Cartridge		Canon Cartridge 137 yields approximately 2,400 LTR pages with the factory default print density setting.
Cartridge Type		Single cartridge system
Maximum Monthly Print Volume		imageCLASS MF229dw/MF227dw: Up to 10,000 prints imageCLASS MF216n/MF212w: Up to 8,000 prints
Power Require	ments	110V – 127V AC, 50/60 Hz, 15 A
Plug		NEMA 5-15
	Maximum	Duplex Model: Approximately 1,220 W Simplex Model: Approximately 1,190 W
	Standby Mode	Duplex Model: Approximately 5.8 W Simplex Model: Approximately 5.4 W
Power Consumption	Sleep Mode	Duplex Model: Wired Connection: Approximately 1.7 W Wireless Connection: Approximately 2.3 W Simplex Model: Wired Connection: Approximately 1.6 W Wireless Connection: Approximately 3.2 W
	Main Power Switch Turned OFF	Approximately 0.5 W
Warm-Up Time		Approximately 13.5 seconds <sup>6</sup> (Temperature: 23°C (73.4°F), humidity: 65% RH (Relative Humidity); from when the machine is turned ON using the main power switch to when the Standby screen is displayed)
Environmental Conditions		Temperature: 50°F to 86°F (10°C to 30°C) Humidity: 20% to 80% RH (Relative Humidity) (no condensation)

\_

<sup>6</sup> Warm-up time may vary, depending on the installation environmental conditions.



Table 13 — Wi-Fi Specifications (imageCLASS MF229dw, MF227dw, and MF212w)

Item	Description
Standard Host Interfaces	IEEE 802.11g, IEEE 802.11b, and IEEE 802.11n <sup>1</sup>
Connection Method	WPS (Wi-Fi Protected Setup), and Manual Setup
Frequency Range	2,412 to 2,462 MHz
Data Transmission Rate	IEEE802.11g: 6/9/12/18/24/36/48/54 Mbps IEEE802.11b: 1/2/5.5/11 Mbps IEEE 802.11n: - SGI Invalidated 20 MHz: 6.5/13/19.5/26/39/52/58.5/65 Mbps - SGI Validated 20 MHz: 7.2/14.4/21.7/28.9/43.3/57.8/72.2 Mbps - SGI Invalidated 40 MHz: 13.5/27/40.5/81/108/121.5/135 Mbps - SGI Validated 40 MHz: 15/30/45/60/90/120/150 Mbps
Communication Mode	Infrastructure Mode
Security	WEP (64- and 128-bit), WPA-PSK (TKIP/AES), WPA2-PSK (AES), and 802.1x (LEAP, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS)

<sup>1</sup> Wireless performance may vary, depending on terrain and distance between the printer and wireless network clients.

Table 14 — Connectivity, and Software Specifications

Item	Description
Standard Interfaces	<ul> <li>USB 2.0 High-Speed (A USB cable is not included.)</li> <li>10/100 Base-TX Ethernet (Network)</li> <li>Wi-Fi IEEE802.11g/IEEE802.11b/IEEE 802.11n (imageCLASS MF229dw, MF227dw, MF212w only. WPS (Wi-Fi Protected Setup); Connection can be established by manually setting values)</li> </ul>
USB Functions	Print, PC Fax, and Scan
Network Functions	Print, PC Fax, and Scan
Remote UI	Yes
Bundled Software	Canon drivers, MF Toolbox (scan application), Document Management, and OCR Software  Drivers and the Toner Status app are available for download from <a href="https://www.usa.canon.com">www.usa.canon.com</a> .
Supported Operating Systems	Windows 8.1, 8, 7, Windows Server 2012 R2, 2008 R2, Windows Server 2008 R2, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP, Mac OS X 10.5.8 and up, and Linux (Print Only)



Table 15 — Copy Specifications

Item		Description
Copy Speed <sup>7</sup> (LTR)	Simplex	imageCLASS MF229dw/MF227dw: Up to 28 cpm (copies per minute) imageCLASS MF216n/MF212w: Up to 24 cpm
	Duplex	imageCLASS MF229dw/MF227dw Only: Up to 16 cpm
Copy Resolution		Text/Photo(High Speed): Up to 300 dpi x 600 dpi Text/Photo, Photo, Text: Up to 600 dpi x 600 dpi
Halftones		Up to 256 levels
First Copy Time <sup>8</sup>		Platen Glass: Approximately 9 seconds Feeder: Approximately 14 seconds
Reduction/Enlargement		25%, 50%, 64%, 78%, 100%, 129%, 200%, 400%
Zoom		25% to 400% in 1% increments
Original Type		Text/Photo (High Speed), Text/Photo, Photo, and Text
Continuous Co	pying Capacity	Up to 99 copies
Maximum Copy Size		Platen: Up to 8 1/2" x 11" (LTR) ADF: Up to 8 1/2" x 14" (LGL)
Copy Features		Collate, 2 on 1, 4 on 1, ID Card Copy, Copy Modes (Text/Photo, Text, Photo)
Copy Memory		256 MB (Shared)

Table 16 — Print Specifications

Ite	em	Description
Туре		Monochrome Laser
Print Speed <sup>7</sup> (LTR, Plain Paper)	Simplex	imageCLASS MF229dw/MF227dw: Up to 28 ppm (pages per minute) imageCLASS MF216n/MF212w: Up to 24 ppm
	Duplex	imageCLASS MF229dw/MF227dw Only: Up to 16 ppm
First Print Time	9	Approximately 6 seconds
Printer Language		Canon UFR II LT (Host-based)
Print Resolution		Up to 600 x 600 dpi; (Up to 1,200 x 1,200 dpi equivalent)
Gradation		256 gradations
Maximum Print Size		Up to 8 1/2" x 14" (LGL)
Output Tray Capacity		Approximately 100 sheets (16 to 20 lb bond (60 to 80 g/m <sup>2</sup> ))
<b>Print Memory</b>		256 MB (Shared)

The copy/print speed is measured during continuous copy/print runs. Copy/print speeds may vary, depending on the paper type, size, and paper feeding direction. Copy/print speeds on smaller paper sizes may be slower. Also, the machine may experience downtime or decrease the copy/print speed in the middle of a continuous copy/print run to adjust the temperature inside the machine or maintain the optimal print quality.

B LTR size, after returning from the Energy Saver mode.

<sup>9</sup> May vary, depending on the output environment.



Table 17 — Scan Specifications

Ite	em	Description
Scanner Type		CIS (Color Contact Image Sensor)
	B&W	imageCLASS MF229dw, MF227dw (with ADF):
		1-Sided: Up to 23 ipm (images per minute)
		2-Sided: Up to 8 ipm (MF229dw Only)
Scanning		imageCLASS MF216n (with SADF):
Speed (LTR		1-Sided: Up to 21 ipm
at 300 x 300	Color	imageCLASS MF229dw, MF227dw (with ADF):
dpi)		1-Sided: Up to 15 ipm
		2-Sided: Up to 5 ipm (MF229dw Only)
		imageCLASS MF216n (with SADF):
		1-Sided: Up to 15 ipm
		Optical:
		Platen Glass: Up to 600 x 600 dpi
Scan Resolution	n	Feeder: Up to 300 x 300 dpi
		Software Interpolated:
		Up to 9,600 x 9,600 dpi
Maximum Docu	ımant Siza	Platen: Up to 8 1/2" x 11 3/4"
Maximum Document Size		ADF: Up to 8 1/2" x 14" (LGL)
Driver		TWAIN
		WIA (Windows Image Acquisition) 1.0 (Windows XP)
		WIA 2.0 (Windows Vista, 7, 8, and 8.1)
		ICA (Image Capture Application) (Mac OS X 10.6.x or later)

Table 18 — Paper Handling Specifications

Item	Description
Paper Source/Capacity	Paper Cassette: 250 sheet capacity <sup>10</sup>
Faper Source/Capacity	Multipurpose Tray: 1 sheet capacity
Document Feeder	imageCLASS MF229dw: Up to 50 sheets (Duplex, LTR) <sup>10</sup>
Document reeder	imageCLASS MF227dw/MF216n: Up to 35 sheets (Simplex, LTR) <sup>10</sup>
Paper Output	Approximately 100 sheets (face-down)
Paper Weight	Paper Cassette: 16 to 43 lb bond (60 to 161 g/m <sup>2</sup> )
Paper Weight	Multipurpose Tray: 16 to 43 lb bond (60 to 161 g/m <sup>2</sup> )
Media Sizes	Letter, Legal, Statement, Executive
Media Types	Plain Paper, Heavy Paper, Bond Paper, Labels, Index Cards,
media Types	Transparency, Recycled Paper, and Envelope
Envelope Capacity	Paper Cassette: Up to 20 envelopes
Envelope Capacity	Multipurpose Tray: 1 envelope
Envelope Types	Com 10, Monarch, DL, C5

<sup>10</sup> Based on 20 lb bond (80 g/m<sup>2</sup>) plain paper.



Table 19 — Fax Specifications

Item	Description
Line Used	PSTN (Public Switched Telephone Network) 11
Communication Mode	Super G3, G3
Modem Speed	Super G3: Up to 33.6 Kbps G3: Up to 14.4 Kbps Automatic Fallback
Compression Method	MH, MR, MMR
Transmission Speed	Approximately 3.0 seconds per page <sup>12</sup> (ECM-MMR, transmitting from memory at 33.6 Kbps)
Fax Resolution	Up to 200 x 400 dpi (Super Fine)
Memory Capacity (Sending and Receiving)	Up to 256 pages <sup>12</sup> (Total pages of transmission/reception) Maximum number of fax jobs that can be sent from memory: 10 Maximum number of fax jobs that can be received into memory: 90
Dialing	4 One-Touch Key destinations, 100 Coded Dialing destinations, 103 Group Dialing destinations, Address Book Dialing, Regular Dialing with the numeric keys, Automatic Redialing, Manual Redialing, and 114 Sequential Broadcast destinations
Reports	Send Results Transmission Management Report <sup>13</sup> and RX Results Report

<sup>11</sup> The Public Switched Telephone Network currently supports fax modem speeds up to 28.8 Kbps, depending on telephone line conditions. Fax machines that can send and receive documents must conform to ITU-T v.34 guidelines.

<sup>12</sup> Based on the ITU-T (ITU Telecommunication Standardization Sector) Standard Chart No. 1, MMR standard mode.

<sup>13</sup> Output automatically after 40 transmissions.



## **B.** Warranty

## 1. imageCLASS Series Exchange/Carry-In Product Limited Warranty

#### CANON imageCLASS SERIES EXCHANGE/CARRY-IN PRODUCT LIMITED WARRANTY

The limited warranty set forth below is given by Canon U.S.A., Inc. ("Canon USA") with respect to the Canon imageCLASS Series product and accessories packaged with this limited warranty (collectively, the "Product") when purchased and used in the United States.

CARTRIDGES FOR THE PRODUCT (EXCEPT THE CARTRIDGE BUNDLED WITH THE PRODUCT, FOR WHICH THERE IS NO WARRANTY) ARE COVERED BY A SEPARATE WARRANTY ACCORDINGLY, THIS LIMITED WARRANTY DOES NOT COVER ANY CARTRIDGES FOR THE PRODUCT, WHETHER SHIPPED WITH THE PRODUCT OR PURCHASED THEREAFTER.

Canon USA warrants the Product to be free from defects in workmanship and materials under normal use and service for a period of one year after delivery to the original purchaser ("Purchaser") by Canon USA or its authorized Reseller. During the relevant warranty period, and in its sole discretion, Canon USA shall, or shall cause its authorized service provider ("Service Provider"), to, without charge, repair, or replace any defective part with a new or comparable rebuilt part, or exchange the Product with a new or refurbished Product. Warranty replacement shall not extend the warranty period of the malfunctioning Product. This warranty shall not extend to consumables, such as paper, as to which there shall be no warranty or replacement.

Canon USA offers assistance for installation, operation, and support\* of the Product as follows:

(a) On-line troubleshooting via a searchable Knowledgebase, answers to frequently asked questions, the latest driver and firmware downloads, and email support at www.cusa.canon.com/support. (b) Toll free telephone support at 1-800-OK-CANON (652-2666), Monday through Friday from 8:00 a.m. to 8:00 p.m. Eastern Time (excluding holidays).

If Canon USA's remote assistance above cannot fix your Product's malfunction, Canon USA shall provide the contact information of the nearest authorized Canon USA Service Provider ("Service Provider") for service, or will exchange the Product, except where the malfunction involves a user replaceable item, in which case Canon USA will send you a replacement part with installation instructions. You will be responsible for installing the user replaceable items in your Product.

If the service or exchange is performed, and (1) the Product malfunction is not covered by this limited warranty, or (2) the applicable warranty period has expired or has not been sufficiently established by appropriate documentation, then you will be charged for such service at the then current service rates of Canon USA or the Service Provider, or for such exchange, as applicable.

This warranty shall only apply if the Product is used in conjunction with compatible computers, peripheral equipment, and software. Canon USA shall have no responsibility for such items except for compatible Canon brand peripheral equipment covered by a separate warranty ("Separate Warranty"). Repairs of such Canon brand peripheral equipment shall be governed by the terms of the Separate Warranty. NON-CANON BRAND COMPUTERS, PERIPHERAL EQUIPMENT AND SOFTWARE WHICH MAY BE DISTRIBUTED WITH THE PRODUCT ARE SOLD AS IS, WITHOUT WARRANTY OF ANY KIND BY CANON USA, INCLUDING ANY IMPLIED WARRANTY 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.

NO IMPLIED WARRANTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, APPLIES TO THE PRODUCT AFTER THE APPLICABLE PERIOD OF THE EXPRESS LIMITED WARRANTY STATED ABOVE. NO OTHER WARRANTY OR GUARANTY, EXCEPT AS MENTIONED ABOVE, GIVEN BY ANY PERSON, FIRM, OR CORPORATION WITH RESPECT TO THE PRODUCT, SHALL BIND CANON USA OR ANY SERVICE PROVIDER. (SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.) NO WARRANTY IS GIVEN ON ANY USED PRODUCT.

This warranty shall be void and of no force and effect if the Product is damaged as a result of (a) abuse, neglect, mishandling, alteration, electric current fluctuation or accident, (b) improper use, including failure to follow operating or maintenance instructions in, or environmental conditions prescribed in, Canon USA's operator's manual or other documentation, (c) installation or repair by other than authorized service representatives qualified by Canon USA who are acting in accordance with Canon USA's service bulletins, (d) use of supplies or parts (other than those distributed by Canon USA) which damage the Product or cause abnormally frequent service calls or service problems, or (e) use of the Product with non-compatible computers, peripheral equipment or software, including the use of the Product in any system configuration not recommended in any manual distributed with the Product. Nor does this warranty extend to any Product on which the original identification marks or serial numbers have been defaced, removed, or altered.

ANY SYSTEM SOFTWARE (WHETHER FACTORY LOADED ON THE PRODUCT OR CONTAINED ON THE SOFTWARE CD-ROM'S ENCLOSED WITH, OR ACCOMPANYING, THE PRODUCT), AND ANY UTILITY SOFTWARE, DISTRIBUTED WITH OR FOR THE PRODUCT, IS SOLD "AS IS" AND WITHOUT WARRANTY BY CANON USA. THE SOLE WARRANTY WITH RESPECT TO SUCH SOFTWARE IS CONTAINED IN THE SOFTWARE MANUFACTURER'S LICENSE AGREEMENT DISTRIBUTED THEREWITH, INCLUDING ANY LIMITATIONS AND DISCLAIMERS THEREON, PLEASE CONTACT CANON USA IMMEDIATELY IF YOU HAVE NOT RECEIVED A COPY OF THE SOFTWARE MANUFACTURER'S LICENSE AGREEMENT.

NEITHER CANON USA NOR ANY SERVICE PROVIDER SHALL BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE (UNLESS CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON USA OR ANY SERVICE PROVIDER), LOSS OF REVENUE OR PROFIT, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, EXPENDITURES FOR SUBSTITUTE EQUIPMENT OR SERVICES, LOSS OR CORRUPTION OF DATA, INCLUDING, WITHOUT LIMITATION, STORAGE CHARGES OR OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THE PRODUCT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED AND EVEN IF CANON USA OR ANY SERVICE PROVIDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST CANON USA OR ANY SERVICE PROVIDER BE GREATER IN AMOUNT THAN THE PURCAHSE PRICE OF THE PRODUCT CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, THE PURCHASER ASSUMES ALL RISKS AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO PERSONS AND PROPERTY OF THE PURCHASER OR OTHERS ARISING OUT OF THE POSSESSION, USE, MISUSE, OR INABILITY TO USE THE PRODUCT NOT CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON USA OR ANY SERVICE PROVIDER. THIS WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THE PRODUCT AND STATES SUCH PURCHASER'S EXCLUSIVE REMEDY.

\*Support options are subject to change without notice.

THIS WARRANTY APPLIES TO PRODUCTS SOLD AND USED IN THE U.S.A. ONLY,



Canon U.S.A., Inc. One Canon Park, Melville, New York 11747 Canon is a registered trademark of Canon Inc.



## 2. Canon Toner Cartridge Limited Warranty

## CANON TONER CARTRIDGE LIMITED WARRANTY

Canon U.S.A., Inc. and Canon Canada Inc., (collectively "Canon") warrant to the original purchaser ('the Purchaser') of the Canon Toner Cartridge packaged with this limited warranty (the "Cartridge"), when used in a compatible "Canon-brand product (the "Product"), to be free from defects in workmanship and materials under normal use and service for a period of thirty (30) days from the date of original purchase. A defective Cartridge returned to Canon U.S.A., Inc., Canon Canada, Inc. or an authorized dealer (a "Dealer") of Canon U.S.A., Inc. or Canon Canada, Inc. within the thirty (30) day warranty period and proven to be defective upon inspection will be exchanged for a new Cartridge. The warranty period for any replacement Cartridge shall begin upon its shipment and will extend for no longer than the balance of the period remaining on the warranty for the defective Cartridge at the time of such shipment.

When returning any Cartridge under this limited warranty, you must pack the Cartridge in its original carton with a copy of the bill of sale (or invoice of purchase), together will a complete explanation of the problem and return it to the entity from whom you purchased the Cartridge (i.e. Canon USA, Inc., Canon Canada, Inc. or a Dealer). To obtain the shipping address of Canon U.S.A, Inc. or Canon Canada, Inc., please call the Canon U.S.A., Inc. Help Desk at 1-800-828-4040 or Canon Canada Technical Support at 1-800-OK-CANON. Shipping charges, if any, must be prepaid. If your Cartridge is covered by this limited warranty, a new Cartridge will be returned to you without charge by Canon U.S.A., Inc., Canon Canada, Inc. or the Dealer from whom you purchased the Cartridge.

NO IMPLIED WARRANTY OR CONDITION\*\*, INCLUDING ANY IMPLIED WARRANTY OR CONDITION\*\* OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, APPLIES TO THE CARTRIDGE AFTER THE APPLICABLE PERIOD OF THE EXPRESS LIMITED WARRANTY STATED ABOVE, AND NO OTHER EXPRESS WARRANTY, CONDITION\*\* OR GUARANTY, EXCEPT AS MENTIONED ABOVE, GIVEN BY ANY PERSON OR ENTITY WITH RESPECT TO THE CARTRIDGE SHALL BIND CANON OR ANY SERVICE PROVIDER (SOME STATES AND PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU). NO WARRANTY IS GIVEN ON ANY USED CARTRIDGE

This limited warranty does not apply to, and does not guarantee, any particular cartridge yield (i.e., number of copies per Cartridge). Cartridge yield will vary depending on average density of originals copied and other factors. See Canon U.S.A.'s or Canon Canada's operator's manual for the Product for further information.

This warranty is void and of no force and effect if the Cartridge is damaged as a result of (a) abuse, neglect, mishandling or alteration of the Cartridge, a Product Accessory or a Product in which the Cartridge is incorporated, electric current fluctuation, exposure to light, or accident; (b) improper use, including failure to follow operating or maintenance instructions in, or environmental conditions prescribed in, the applicable operator's manual or other documentation; (c) installation or repair by other than service representatives qualified by Canon who are acting in accordance with Canon's service bulletins; or, (d) use of supplies or parts (other than those distributed by Canon) which damage the Cartridge or cause abnormally frequent service calls or service problems. Nor does this warranty extend to any Cartridge on which the original lot numbers or dating have been defaced, removed, or altered.

NEITHER CANON NOR ANY SERVICE PROVIDER SHALL BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE (UNLESS CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY SERVICE PROVIDER), LOSS OF REVENUE OR PROFIT, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, EXPENDITURES FOR SUBSTITUTE EQUIPMENT OR SERVICES, LOSS OR CORRUPTION OF DATA, STORAGE CHARGES OR OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THE CARTRIDGE, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED AND EVEN IF CANON OR ANY SERVICE PROVIDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST CANON OR ANY SERVICE PROVIDER BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE CARTRIDGE CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, THE PURCHASER ASSUMES ALL RISKS AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO PERSONS AND PROPERTY OF THE PURCHASER OR OTHERS ARISING OUT OF THE POSSESSION, USE, MISUSE, OR INABILITY TO USE ANY CARTRIDGE SOLD BY CANON NOT CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY SERVICE PROVIDER. THIS WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THE CARTRIDGE.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

THIS WARRANTY APPLIES TO CARTRIDGES SOLD AND USED IN THE U.S.A. AND CANADA ONLY.

\* As specified in the Product's operator's manual.

" In Canada

CAUTION:
Keep out of reach of children.
Keep from contact with oxidizing materials.
Refer to instructions for handling and storing.



Canon U.S.A., Inc.
Canon Canada, Inc.

Canon is a registered trademark of Canon Inc.



# C. List of Tables

	Table 1 — Configuration	2
	Table 2 — eCarePAKs	3
	Table 3 — Power and Plug Requirements	6
	Table 4 — imageCLASS MF229dw Installation Space Requirements	
	Table 5 — imageCLASS MF227dw Installation Space Requirements	
	Table 6 — imageCLASS MF216n Installation Space Requirements	
	Table 7 — imageCLASS MF212w Installation Space Requirements	
	Table 8 — Service Tools	
	Table 9 — Solvents and Oils	
	Table 10 — Main Unit Consumables List	13
	Table 11 — Monthly Copy/Print Volume	15
	Table 12 — Machine Specifications	
	Table 13 — Wi-Fi Specifications (imageCLASS MF229dw, MF227dw, and MF212w)	40
	Table 14 — Connectivity, and Software Specifications	
	Table 15 — Copy Specifications	
	Table 16 — Print Specifications	
	Table 17 — Scan Specifications	
	Table 18 — Paper Handling Specifications	
	Table 19 — Fax Specifications	43
D.	List of Figures	
	Figure 1 — Canon USA's Consumer Web Site	18
	Figure 2 — e-Support Center Login	
	Figure 3 — ISG Central Login	
	Figure 4 — ISG Central: Engineering Services & Solutions Web Page	
	Figure 5 — ISG Central: Engineering Services & Solutions Service Guides Area	
	Figure 6 — Call Escalation Procedure Flow Chart	
	Figure 7 — e-Support: e-Tag	
	Figure 8 — e-Support: e-Tag Claim Console	30
	Figure 9 — ISG Central	
	Figure 10 — CNA: Warranty Credit Inquiry	
	Figure 11 — CNA: Warranty Credit Inquiry	
	Figure 12 — CNA Log In	
	Figure 13 — ISG Central	
	Figure 14 — Capan Network Access	