Canon

imageRUNNER 2270 / 2870

imageRUNNER 3570 / 4570

SERVICE GUIDE

IMPORTANT

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ALL PRICES LISTED ARE SUBJECT TO CHANGE WITHOUT NOTICE.

PART NUMBERS LISTED MAY BE CHANGED TO REFLECT ENGINEERING REVISIONS.

Revisions

Revision 0

- November 2004: imageRUNNER 2270/2870/3570/4570 Service Guide

Table of Contents

I. Product Overview

The imageRUNNER 2270/2870 (Segment 2), imageRUNNER 3570 (Segment 3) and the imageRUNNER 4570 (Segment 4) are Black & White devices with print speeds of up to 22 ppm, 28 ppm, 35 ppm, and 45 ppm respectively featuring a new generation of the MEAP (Multifunctional Embedded Application Platform) enabled imageRUNNER controller with advanced capabilities. The features of all four models are identical, except for speed and copy volume.

With the introduction of these new models, Canon is also introducing the new License Management System (LMS). Certain optional software features are preinstalled on all new units, and in order to activate the software programs, the feature must be licensed through the LMS server. This replaces the need for additional hardware or dongles to activate new software. Refer to the LMS section herein for further details.

Beginning April 1, 2005 new rules go into effect that limit access to the Technical Support Center to certified technicians. Please refer to the Technical Support section for more information.

As an Energy Star® Partner, Canon U.S.A., Inc. has determined that this product meets the Energy Star guidelines for energy efficiency.[1]

II. Design Features

A. New imageRUNNER Controller

The following lists the new MEAP-enabled imageRUNNER Controller highlights:

- MEAP standard
- High speed image processing
- New UFR II printing technology
- Extended copy/mailbox features
- Enhanced send features
- Improved Security features
- Updated connectivity support
- Advanced disability options
- Easy management and maintenance capabilities
- Vertical Paper Path
- RAPID Fusing
- New (QF) Toner

B. High Performance Scanning Unit

The imageRUNNER 2270/2870/3570/4570 devices include a compact, high-performance Contact Image Sensor (CIS). The reader includes a new streak detection mechanism to ensure scanned images and copies are free of dirt and paper dust.

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[1] If any of the options are installed, the copier may no longer be Energy Star compliant.

C.   High Capacity Paper Supply

The imageRUNNER 2270/2870/3570/4570 models ship standard with two paper drawers holding up to 550 sheets of paper each. The bypass capacity supports 50 sheets of paper.

D.   MEAP

MEAP is a Java® based development environment that, through the use of Canon tool kits, permits the development of software applications that run embedded within a Canon device. Some commercial MEAP applications have been developed and are available for resale.[2] With the use of Canon tool kits, customizable solutions can be developed for end-users. MEAP applications have the power and versatility to extend the value of these multifunctional devices.[3]

E.   Mail Box Functions

The mail box functionality has been expanded. The total number of documents stored in all inboxes has been increased to 2,000 documents with a total number of 8,000 accumulated pages.

Print Settings can be stored for Mail Box Documents: Number of Printouts, Paper Select, Finishing Options, 2-sided mode, Cover/Sheet Insertion, Booklet, Mode Memory, and Margin.

F.   Copy/Print from Mailbox Functions

- Maximum Copy Sets of 9,999

- The Page Numbering feature offers several functions including: reverse numbering, number size, numbers up to 9,999 with the option of leading zeros, numbers with hyphens, numbered chapters, total page numbering, and more.

- Margin Shift

- Preview screen

- Delete Page/Insert File

- Combined File Save, Form Composition

- Cover/Sheet Insertion (Front/Back Cover Printing)

- Job Separation Sheet between Print jobs or Copy sets

- The Watermark/Print Date functions allow for customized text or preset watermarks, with the option of including the date.

- Remote/Cascade Copy, Send and Receive

G.   Remote UI

Direct Print from the Remote UI for the following file formats: PDF 1.3, PS level 3-3011, and TIFF 6.0. Direct Print is available only with Multi-PDL Printer Kit-E1 installed.

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[2] Share Scan Open Platform (SSOP) is one example of a MEAP application currently available for resale.

[3] MEAP Demonstration applications are available on the e-Support website. Refer to the instructions included with the Demo Apps or more details.

III. Options

A. Integrated Paper Output

The built-in style Finisher-S1 (available for all four models) eliminates the need for an external tray as the footprint of the device remains the same with the finisher installed. The Finisher-S1 has two trays available (one tray standard, second tray optional) to increase paper output capacity and along with the optional Copy Tray-J1, end-users now have the option of three output trays in an imageRUNNER device without purchasing an external Finisher/Saddle Finisher.

B. Advanced Finishing and Paper Output

The external Finisher-Q3 or Saddle Stitch Finisher-Q4 for saddle stitch booklets and the optional Puncher Unit-M1 for 2/3-hole punch paper for either finisher can be added where advanced functionality is needed.

C. Paper Supply Options

The user has the option of adding the Paper Deck-Q1 which holds up to 2,500 sheets of paper and the Cassette Feeding Unit-Y2 which provides two additional sources of paper with each paper drawer holding up to 550 sheets, which provides a combined paper capacity of up to 4,750-sheets.

D. Universal Send Kit-B1

Universal send [4] allows the user to send one scanned document to specified destinations via fax, e-mail, or I-Fax, save them to a file server, or store them in an inbox to process them at a later date. You can also send documents to multiple destinations simultaneously using various sending methods, such as e-mail and I-Fax.
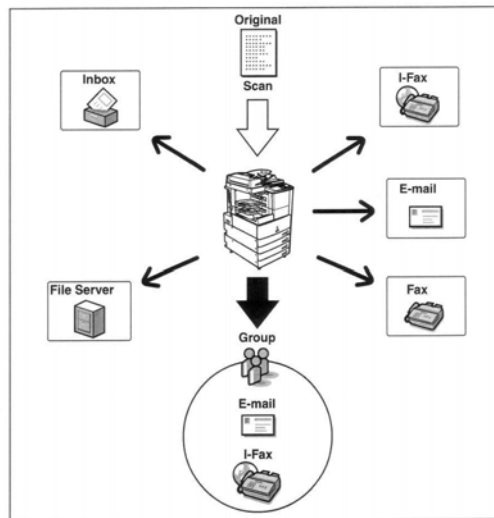
- I-Fax, e-mail, and File Server are only available if the optional Universal Send Kit-B1 is installed.

- Fax is available only if the optional Super G3 Fax Board-Q1 or Super G3 Multi-Line Fax Board-D1 is installed.

A new send function includes Embedded URL Send. An inbox is assigned a URL address. Through the Embedded URL Send feature, the URL address can be sent to an e-mail address, and the document(s) stored in that inbox can be accessed through the URL address, eliminating the need to e-mail large files.

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[4] To enable this function, a license key must be obtained from the License Management Server; refer to the License Management System for details on enabling license keys.

E. Universal Send PDF Enhancement Kit-B1

The Universal Send PDF Enhancement Kit offers two capabilities: 1) create searchable PDF documents and, 2) send Encrypted PDF documents. Universal Send Kit-B1 must be installed to enable the Universal Send PDF Enhancement Kit features.

When sending a document, chose PDF (OCR) as the file format and the scanned pages will be turned into a searchable PDF document through OCR (optical character recognition) technology. This searchable PDF document is supported by the search command in Adobe® Reader®/Acrobat® or in the Microsoft® Windows® Text Search Function. In the Additional Functions mode, end-users can change the default settings for smart scan and the number of characters for PDF (OCR) names.

The encrypted PDF mode enables the end-user to set a password to encrypt PDF files sent to an e-mail address or file server for enhanced security. Only users who enter the correct password at the other end can open, print, or change the received PDF document. Encrypted files cannot be sent to a fax, I-Fax, or inbox destination.

F. iR Security Kit-A2

The iR Security Kit-A2 includes HDD data encryption and HDD data complete erase. The Expansion Board-B1 and USB Application Interface Board-D1 must be installed.

Before installing the iR Security Kit-A2, the end-user data must be backed up: Address Book Settings, Additional Function Settings, Forwarding Settings, License files for MEAP applications, User authentication information registered with SDL, and data saved for MEAP applications. Refer to the iR Security Kit-A2 Installation procedures for instructions to backup the user data.

The following data cannot be backed up and will be lost upon installation of the Security Kit-A2: Data stored in mailboxes, mode memory registered using the copy/mailbox functions, scan settings registered using the transmission function, job history information (job logs), image forms stored in Form Composition, Unsent documents, MEAP SMS passwords. All data must be reentered manually.

Data that needs to be backed up	Data that CANNOT be backed up (will be lost)
➢ Address Book Settings	➢ Data stored in the Mailboxes
➢ Additional Function Settings	➢ Job history information (Job logs)
➢ Forwarding Settings	➢ Image forms stored in Form Composition
➢ License files for MEAP applications	➢ Unsent documents
➢ User authentication information registered with SDL	➢ Mode memory registered using copy/mailbox functions
➢ Data saved for use in MEAP applications	➢ Scan settings registered using the transmission function
	➢ MEAP SMS (Service Management Service) passwords

G. Facsimile Options

Two fax options are available for these models: the Super G3 Fax Board-Q1 or the Super G3 Multi-Line Fax Board-D1. Features of both these options include: On-Hook key function with one-touch dial calling and quick direct send that transmits the document as it is scanned in.

H. imageRUNNER Differences

These models replace the imageRUNNER 2200, 2220 (N/i), 2800, 3300, 3320 (N/i) and imageRUNNER 400S.

1. imageRUNNER 2270/2870/3570 and imageRUNNER 2200/2220(N/i)/2800/3300/3320(N/i) Differences

Features	imageRUNNER 2270/2870/3570	imageRUNNER 2200/2220(N/i)/2800/3300/3320(N/i)
Print Speed	Up to 22/28/35 ppm	Up to 22/28/33 ppm
Standard Memory/HDD	512 MB RAM, 20 GB HDD	128 MB RAM, 5.1 GB HDD
FCOT	• imageRUNNER 2270/2870- Approximately 4.9 seconds • imageRUNNER 3570 - Approximately 3.9 seconds	Approximately 5.8 seconds
Warm-Up Time	Approximately 30 seconds	Approximately 29 seconds
Paper Capacity	Standard: 1,150 / Maximum: 4,750	Standard: 1,050 / Maximum: 4,550
Mailbox – Total accumulated pages	Up to 8,000 pages	Up to 3,700 pages
Mailbox – Total Documents in all boxes	Up to 2,000 documents	Up to 1,000 documents
MEAP	Standard	imageRUNNER 2220 (N/i) and 3320 (N/i) Only
Toner Yield	• imageRUNNER 2270/2870 - 21,000 @ 6% coverage • imageRUNNER 3570 - 24,000 @ 6% coverage	Approximately 15,000 @ 6% coverage
Drum Yield	• imageRUNNER 2270/2870 - Approximately 75,000 impressions • imageRUNNER 3570 - Approximately 85,000 impressions	Approximately 55,000 impressions

2. imageRUNNER 4570 and imageRUNNER 400S Differences

Features	imageRUNNER 4570	imageRUNNER 400S
Print Speed	Up to 45 ppm	Up to 40 ppm
Fixing System	RAPID Fusing System	Heat Roller Method
Standard Memory/HDD	512 MB RAM, 20 GB HDD	128 MB RAM, 10 GB HDD
FCOT	Approximately 3.9 seconds	Approximately 6 seconds
Warm-up Time	Approximately 30 seconds	Approximately 92 seconds
Paper Capacity	Standard: 1,150 / Maximum: 4,750	Standard: 1,050 / Maximum: 5,550
Mailbox – Total Accumulated Pages	Up to 8,000 pages	Up to 1,000 pages
Mailbox – Total Documents in all Boxes	Up to 2,000 documents	Up to 100 documents
Network	Standard	Optional
MEAP	Standard	Not Available
Maximum Power Consumption	1.35 kW	1.5 kW
Toner Yield	Approximately 24,000 @ 6% coverage	Approximately 10,600 @ 6% coverage
Drum Yield	Approximately 85,000 impressions	Approximately 55,000 impressions

IV. Product Configuration

A. Model of imageRUNNER 2270/2870/3570/4570

Item	Item Number[5]
imageRUNNER 2270	9534A004AA
imageRUNNER 2870	9533A004AA
imageRUNNER 3570	9532A004AA
imageRUNNER 4570	9531A004AA
Connective Accessories	
Super G3 Fax Board-Q1	9568A002AA
Super G3 Multi-Line Fax Board-D1	9569A002AA
Universal Send Kit-B1[6] (required for Universal Send PDF Enhancement Kit)	9594A002AA
Universal Send PDF Enhancement Kit (Includes PDF Encryption & Searchable PDF)	9595A002AA
Multi-PDL Printer Kit-E1	9593A003AA
Expansion Bus Board-B1	9596A001AA
USB Application Interface Board-D1[7]	9597A001AA
iR Security Kit-A2[8] (Includes HDD Encryption & Complete Erase)	9942A003AA
Specific Accessories	
Finisher-S1	9563A001AA
Additional Finisher Tray-B1 (option for Finisher-S1)	9565A001AA
Puncher Unit-R1 (option for Finisher-S1)	9566A002AA
Puncher Unit-M1 (option for Finisher-Q3 and Saddle Stitch Finisher-Q4)	8690A002BA
Finisher-Q3 Set (includes Buffer Pass Unit-E1)	8691A008AA
Saddle Stitch Finisher-Q4 Set (includes Buffer Pass Unit-E1)	8692A007AA

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[5] Subject to change to reflect future engineering revisions.

[6] The Universal Send Kit-B1 includes a 10-user version of the eCopy Desktop (One year licenses).

[7] USB Application Interface Board-D1 required for MEAP Applications and iR Security Kit-A2.

[8] USB Application Interface Board-D1 and Expansion Board-B1 required for installation.

Item	Item Number[5]
DADF-N1	9560A002AA
Platen Cover Type-H	8684A001AA
Cassette Feeding Unit-Y2	8695A003AA
Paper Deck-Q1	8694A002AA
Document Tray-J1	8065A001AB
Copy Tray-J1[9]	8815A001AA
Inner 2 Way Tray-D1	9562A001AA
Envelope Attachment Feeder-C1	8697A001AA
FL Cassette-Y1	8732A001AA
FL Cassette-Z1	8733A001BA
Cabinet-P1	9669A002AA
Braille Label Kit-A1	7518A002AA
Accessibility Handle-A1	8201A001AA
Supplies	
Toner CRG GPR-15 (for imageRUNNER 2270/2870)	9629A003AA
Toner CRG GPR-16 (for imageRUNNER 3570/4570)	9634A003AA
GPR-15/16 Drum Unit	9630A004AA
Stamp Ink Cartridge-B1	6776A001AA
Staple Cartridge-J1 (For Finisher-S1, Q3, Q4)	6707A001AA
Staple Cartridge-D2 (For Saddle Stitch Finisher-Q4)	0250A002AA
Card Reader-C1[10]	6575A001AA
Basic Card Set	0500A002AA
Copy Card Set 1	0499A004AA
Copy Card Set 2	0499A005AA
Copy Card Set 3	0499A006AA
Card Reader Kit-B1	9005A001AA
Transparency Type E (100 Sheets / Box)	6101AJ28AA
Matte Labels 30 up (100 Sheets / Box)	6101AJ31AA

B.   Items in the Box

Note: Contents are subject to change without notice.

- Main Unit
- Operators Manual: Reference Guide
- Operators Manual: Copy Guide
- Operators Manual: Box Guide
- Operators Manual CD-ROM

- MEAP Administration CD-ROM
- Main Unit Warranty Card
- Drum Warranty
- Registration Card
- Installation Check List Package

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[9] The Copy Tray-J1 cannot be used when the Finisher-Q3 or Saddle Finisher-Q4 is attached. The Copy Tray-J1 can be attached only if the optional Finisher-S1 or the Inner 2 Way Tray-D1 is attached.

[10] Requires the Card Reader Kit-B1 for installation

V. Service Features

A. License Management System (LMS)

The License Management System (LMS) is a server based software license program. Each purchased software application package contains a license access number certificate with documentation. The Dealer must enter the license access number and the imageRUNNER serial number into the LMS server to generate a license Key. The LMS Server can be accessed through URL: http://www.canon.com/lms/ir/.

The License Key must be entered into the imageRUNNER control panel to activate the software option: Additional Functions → System Settings → License Registration. The main power switch on the imageRUNNER must be recycled to activate the new software.

A CD-ROM or additional hardware is not required for installation. The following optional software packages require LMS License activation:

- Universal Send Kit-B1
- Universal Send PDF Enhancement Kit-B1
- iR Security Kit-A2
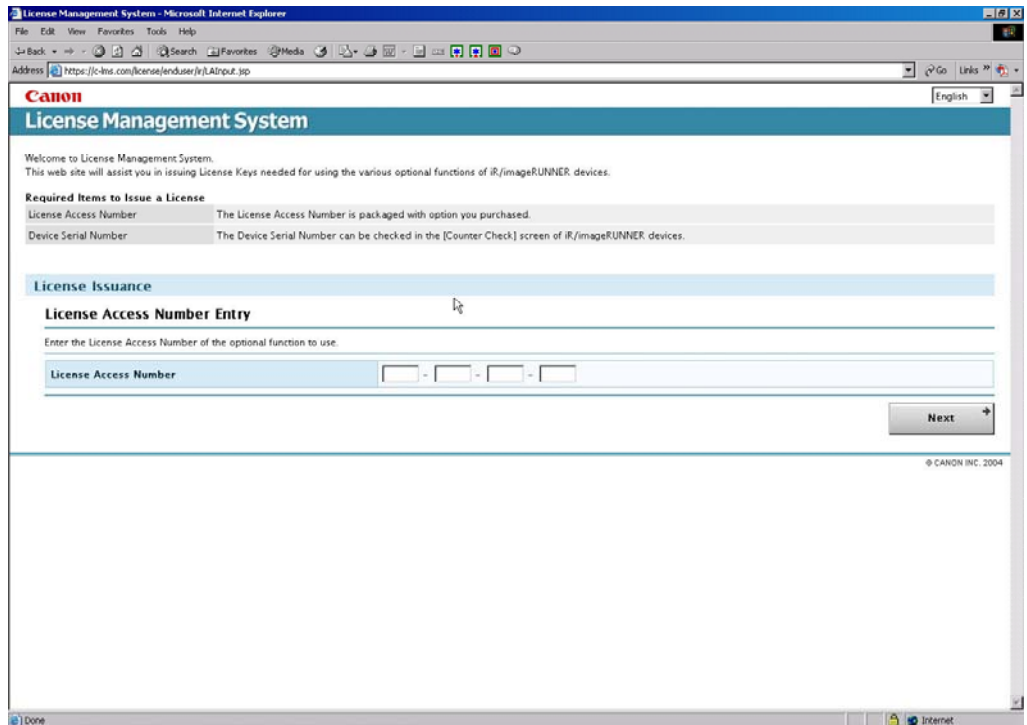
If there are any activation or installation problems contact the Technical Support Center. Be prepared to provide the product serial number, license access number, and license key.

Note:

> ➢ The software is preinstalled on the imageRUNNER device, only a valid license key will enable the software feature (no additional packaged software is available or required).

> ➢ The license access number is packaged with the purchased software option. Lost license access will not be replaced.

> ➢ The imageRUNNER device serial number can be found in the "counter check" screen.

> ➢ Activated software programs will not be impacted by normal service activity (e.g., HDD replacement).

B. Serviceability

To ensure machine reliability and copies of the highest quality, Canon U.S.A., Inc. recommends that a Quality Assurance Visit be performed every 120,000 copies. Quality Assurance requires the cleaning, checking, and replacement of parts as necessary for specific areas every 120,000 copies. The frequency of the Quality Assurance Visits will depend upon the following conditions: monthly copy volume, environment, type of originals copied, and customer's handling of the copier equipment.

C.   Approximate Installation Space
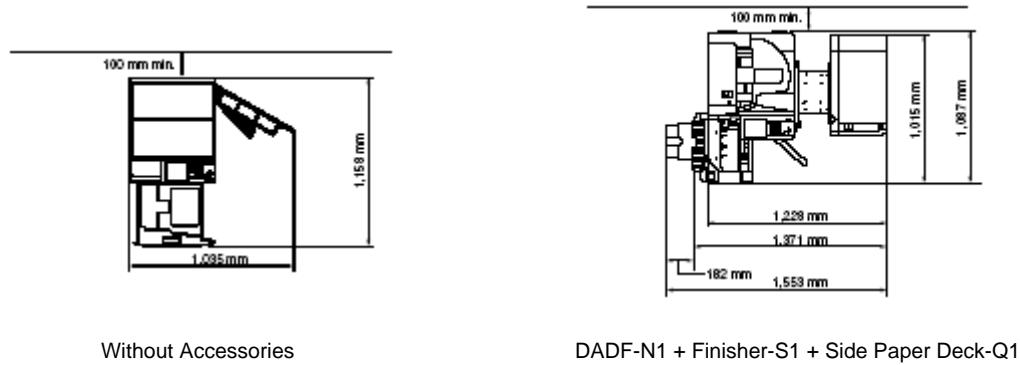
Without Accessories

DADF-N1 + Finisher-S1 + Side Paper Deck-Q1
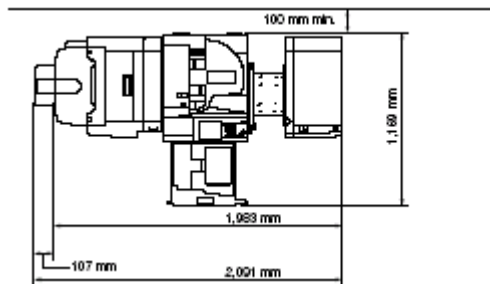
DADF-N1 + Saddle Finisher-Q4 + Puncher Unit-L1 + Buffer Pass Unit-E1 + Side Paper Deck-Q1

D.   Estimated Installation Time

The estimated installation times shown are based on an out-of-box installation only with a technician experienced on the imageRUNNER 2270/2870/3570/4570 models.

Description	Estimated Time
Main Unit (imageRUNNER 2270/2870/3570/4570)	45 Minutes
Finisher-S1	30 Minutes
Saddle Stitch Finisher-Q4 Set (Includes Buffer Pass Unit-E1)	20 Minutes
Finisher-Q3 Set (Includes Buffer Pass Unit-E1)	20 Minutes
Inner 2-Way Tray-D1/ Copy Tray-J1	20 Minutes
Additional Finisher Tray-B1	25 Minutes
Puncher Unit-R1	25 Minutes
Cassette Feeding Unit-Y1	5 Minutes
Cassette Feeding Unit-Z1	5 Minutes
Paper Deck-Q1	35 Minutes
Envelope Feeder Attachment-C1	5 Minutes
Platen Cover Type H	5 Minutes
DADF-N1	15 Minutes
Document Tray-J1	5 Minutes
Network Multi-PDL Print Kit-E1	5 Minutes

E.   Power and Plug Requirements

The imageRUNNER 2270/2870/3570/4570 requires a NEMA 5-15R receptacle for proper operation (See Figure 1). Confirm that a NEMA 5-15R receptacle is available prior to installation.
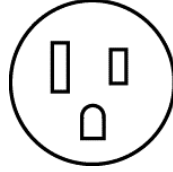
Figure 1
NEMA 5-15R Receptacle

F.   Soft Counter

The imageRUNNER 2270/2870/3570/4570 utilizes soft counters. The control panel normally displays four out of six counters when the counter check button is pressed. The counter description may be changed, enabled or disabled in service mode, except for counter one (1). The counter one (1) setting cannot be changed under any circumstances.

The chart below indicates the displayed counter configurations:

Displayed Counter	Description	Default Display	Default Switch
1	Total	On	Fixed
2	Total (Large)	On	May be changed
3	Copy (Total 1)	On	May be changed
4	Copy (Large)	On	May be changed
5	Not Displayed	Off	May be changed
6	Not Displayed	Off	May be changed

Refer to the Service Manual for complete details on the Soft Counter configurations.

G.   MEAP Application Counter

In addition to the Soft Counter function, the MEAP Application Counter counts the number of prints and scans per MEAP application.

There are two methods to display the MEAP Application Counter value:

1. The MEAP counter can be viewed from a web browser through a network connected PC with the MEAP device by selecting the SMS (Service Management Service) "Application/License Information" page.

2. To view the MEAP counter from the device itself, press "Counter Check" on the control panel, then from the LCD screen, press the "MEAP Counter" button.

Each MEAP application has its own counter. The number of applications that can be installed on the imageRUNNER 2270/2870/3570/4570 is directly related to the number of counters available. There are twenty (20) counters available for MEAP applications. However, the imageRUNNER 2270/2870/3570/4570 uses two MEAP application counters: one for the Portal Service and one for optional Universal Send. Therefore, the number of additional MEAP applications that can be installed is eighteen. The Portal Service can be uninstalled to free up one extra counter.

There are three types of MEAP applications:

1. Applet - a user interface for the application is on the control panel of the copier.

2. Servlet - a remote user interface is available for the application.

3. Esplet - there is no user interface for the application.

Applet type applications used directly from the control panel are limited to nine (three tabs in each pane times three panes).

H.   Upgrading

The Service Support Tool (Version 3.03 or later) is available via the Canon e-Support Center for updating the following system components:

- System Software stored on the HDD
- Language
- HD Format
- Remote User Interface (RUI) stored on the HDD
- MEAP Cont
- BootROM stored on a Flash Double Inline Memory Module (FDIMM) on the Main Controller Printed Circuit Board (PCB)

When the hard disk drive is replaced, the Service Support Tool is used to format the new HDD and load software. Canon U.S.A. will make the data for these updates available to the dealers via CD-ROM.

Note: A Personal Computer is required when installing upgraded firmware. Use a Network as an interface between the personal computer and the imageRUNNER 2270/2870/3570/4570 models to enable high-speed data transmission.

I.   Computer Requirements For Upgrading

Canon U.S.A. strongly recommends that dealers have a computer (desktop or laptop) available for use as a primary servicing tool to adequately service the imageRUNNER 2270/2870/3570/4570. The following are the recommended Desktop PC or laptop specifications[11] to use for the download:

1) CPU: Intel$^®$ Pentium$^®$ 166MHz or higher

2) Memory: 32MB of RAM (64MB recommended)

3) Free HDD Capacity: 100MB of available hard disk space

4) Monitor Resolution: VGA (640x480)

5) 16 Bit Color

6) Serial Port: RS-232C (D-sub 9-pin connector)

7) Network Connection (Ethernet-RJ45)

8) USB port

9) CD-ROM Drive

10) Operating System: Windows 95/98/XP, Windows 2000$^®$, Windows NT$^®$ 4.0

Necessary Cables:

- Cross-Over Ethernet Cable

The RS-232C cable is included with the Downloader PCB Assembly (FY9-2034-000).

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[11] Specifications are subject to change without notice.

J.   Hard Disk Drive Handling

The imageRUNNER 2270/2870/3570/4570 uses an HDD for storage of the firmware and image data. The HDD is easily affected by shock, vibration, and static charge. Therefore, its handling requires special care. When transporting an HDD, which is available as a service part, it must be kept in its original package until it is installed into the main body.

Exemption clause:

Canon U.S.A. or any of its affiliates or dealers will not be liable for any damages for loss of data received or stored on the hard disk, including loss arising from lost opportunity to use such data, even if Canon is informed of the possibility of such damages. Therefore, it is recommended not to store data on the HDD without having copies or printouts of such data outside. (Review the terms of the product's limited warranty for more details.)

K.   Consumables

Description	Product Number	Estimated Life (sheets)[12]	Remarks
imageRUNNER 2270/2870			
GPR-15 Toner Cartridge	9629A003AA	21,000	6% image ratio
imageRUNNER 3570/4570			
GPR-16 Toner Cartridge	9634A003AA	24,000	6% image ratio
imageRUNNER 2270/2870/3570/4570			
Drum Unit GPR-15/16	9630A004AA	75,000	imageRUNNER 2270/2870
		85,000	imageRUNNER 3570/4570

L.   Consumable Replacement Parts (Main Unit)

Part Description	Part Number [5]	Qty	Estimated Life (sheets)	Remarks
Transfer Charging Roller	FC6-2911-000	1	150,000	
Separation Static Eliminator	FL2-0247-000	1	150,000	
Developing Cylinder	FL2-0290-000	1	480,000	
Fixing Cleaning Roller	FM2-0358-000	1	150,000	imageRUNNER 2270/2870
	FM2-1793-000	1	240,000	imageRUNNER 3570/4570
Waste Toner Box	FM2-0303-000	1	75,000	imageRUNNER 2270/2870
			85,000	imageRUNNER 3570/4570
Fixing Heat Discharge Roller	FB5-4931-000	1	150,000	imageRUNNER 2270/2870
			240,000	imageRUNNER 3570/4570
Pick-up Roller	FB6-3405-000	2	120,000	
Feed/Separation Roller	FC5-6934-000	4	120,000	
Manual Feed Separation Pad	FC5-0488-000	1	240,000	
Manual Feed Pick-up Roller	FB1-8581-000	1	240,000	
Heat Discharge Fan Filter	FC5-1546-000	2	100,000	
Pressure Roller Bushing	RS5-1446-000	2	300,000	imageRUNNER 2270/2870

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[12] Estimated average values in the field, based on data from supplier. Data is subject to change depending upon many factors including, without limitation, monthly copy volume, environment, type of image printed and customer handling of the equipment.

M.   Consumable Replacement Parts (DADF-N1)

Part Description	Part Number [5]	Qty	Estimated Life (sheets) [12]	Remarks
Pickup Roller	FM2-2955-000	1	80,000	May be checked in the host machine's service mode listed as: Separation roller (DF-FD-RL)
Separation Pad	FL2-0963-000	1	80,000	May be checked in the host machine's service mode listed as: Separation roller (DF-SP-PD)
Feed Roll Guide	FL2-0946-000	1	40,000	
Stamp	FB5-9410-000	1	7,000	Replace when the stamp becomes faint

N.   Consumable Replacement Parts (Finisher-S1)

Part Description	Part Number [5]	Qty	Estimated Life (sheets) [12]	Remarks
Stapler	FM2-0665-000	1	500,000 times	times = number of staple operations
Static Eliminator 1	4A3-1134-000	2	1,000,000	
Static Eliminator 2	4A3-1271-000	1	1,000,000	For optional tray

O.   Consumable Replacement Parts (Finisher-Q3)

Part Description	Part Number [5]	Qty	Estimated Life (sheets) [12]	Remarks
Stapler	FM2-0665-000	1	500,000 times	times = number of staple operations
Delivery static Charge Eliminator (L)	FC5-3667-000	1	1,000,000	
Delivery Static Charge Eliminator (R)	FC5-5571-000	1	1,000,000	
Inlet Static Charge Eliminator	FL2-0822-000	1	1,000,000	
Swing guide inside Static Charge Eliminator	FL2-0817-000	1	1,000,000	
Buffer Roller	FC5-3442-000	2	1,000,000	
Return Roller (rear)	FC5-3457-000	1	1,000,000	Color White
Return Roller (front)	FC5-6873-000	1	1,000,000	Color Black
Stitcher (for Saddle Stitch Finisher-Q4 Only)	FL2-0846-000	2	100,000	one cartridge stitches (staples) approximately 2,000 times

P.   Consumable Replacement Parts (Paper Deck-Q1)

Part Description	Part Number [5]	Qty	Estimated Life (sheets)	Remarks
Pickup Roller (front)	FF5-7829-000	1	250,000	Actual number of prints
Pickup Roller (rear)	FF5-7830-000	1	250,000	
Feed Roller	FF5-7541-000	1	250,000	
Separation Roller	FB2-7777-000		250,000	

Q. Periodic Maintenance (Main Unit)

Item	Estimated Timing
imageRUNNER 2270/2870/3570/4570 Main Unit	
Transfer Guide on Transfer Assembly	Clean every 120,000 pages
Dust-Blocking Glass on Laser Scanner Assembly	
Fixing Inlet Guide in Fixing Assembly	
Feeding Guide on Transfer Assembly	
Feeding Guide on Developing Assembly	
Photosensitive Drum Butting Spacer in Developing Assembly	
Film Bias Static Eliminator in Fixing Assembly	Clean every 150,000 pages (imageRUNNER 2270/2870)
	Clean every 240,000 pages (imageRUNNER 3570/4570)

R. Periodic Maintenance (DADF-N1)

Item	Estimated Timing
Note: The presence of paper lint or dust on the roller or scraper can cause black lines on the image. Be sure to clean carefully.	
White Plate (copyboard cover)	Clean every 40,000 sheets
Platen Roller	
Registration Roller, Upper & Lower	
Delivery Reversing Roller, Upper & Lower	
Read Roller 1 & 2	
Read Roller 1 & 2 Roll	
Separation Plate	
Original Pickup Tray	
Separate Guide (including sheet)	
Open/Close Frame, open/close guide	
Feed Frame (including sheet)	
Platen Guide L & R	
Reversing Flapper	
Reversing Left Guide Sheet	
Registration Roller Sheet	
White Plastic Sheet	
Feed Guide (Dust-collecting tape)	Replace every 40,000 sheets
Reading Glass	Lubricate with silicone oil every 40,000 sheets
DADF Height	Adjust every 40,000 sheets
Pickup Roller	Clean every 40,000 sheets; replace every 80,000 sheets
Separation Pad	
Separation Roller	

S. Periodic Maintenance (Puncher Unit-M1 & Inner Puncher Kit-R1)

Item	Estimated Timing
Puncher Unit-M1	
Transmittance Sensor	25 million sheets: wipe with dry cloth
Inner Puncher Kit-R1	
Photo Sensor PCB	240,000 sheets: dry wipe cleaning
LED PCB	240,000 sheets: dry wipe cleaning

T. Customer Maintenance

Item	Estimated Timing
imageRUNNER 2270/2870/3570/4570 Main Unit	
Clean copyboard glass	As required (or once a month)
Clean copyboard cover	
Clean static eliminator	
Supply toner	When indicated on operation panel
Platen roller (cleaning)	As required (or every 10,000 prints)
Finisher-Q3	
Staple cartridge replacement	Replace when prompted
Puncher Unit-M1	
Punch waste removal	When prompted
Inner Puncher Kit-R1	
Dispose waste paper	When prompted

VI. Service Policy

A. Dealer Technical Support

imageRUNNER 4570 Series Technical Training is required to receive technical support for the imageRUNNER 2270/2870/3570/4570 products. Refer to the Canon Technical Support Center (TSC) on for further details.

The following support mechanisms have been established to deliver high quality and timely technical support services and product information to imageRUNNER 4570 Series dealerships. These support services cover areas such as system and user software, networking and connectivity issues, electro-mechanical operations, and other hardware servicing.

1. Canon USA/Dealer Support

In order to insure that each Dealer receives the highest level of support and in turn can resolve the end-customer's problems quickly and accurately, here are several recommendations for maximizing your technical support request.

- The Dealer Support personnel should check technical documentation (Manuals, Technical Publications, etc.) and the e-Support website (24 hours a day, 7 days a week) before calling Canon USA's TSC since your concern may have already been addressed and documented.

- Have your Support ID Number ready when you call the TSC and prepare to be at the location where the engine or application is accessible. This dramatically improves the TSC's ability to help troubleshoot the problem and eliminates any of the guesswork when answering a specific question. There are many "causes" to various problems, but by being at the location when calling, it takes the speculation out of the troubleshooting process by supplying accurate answers to what the machine / application is doing.

- Provide the serial number of the installed engine or application you are troubleshooting. While this is required for access to support, it will also provide the Specialist with information about previous calls for support.

- Be prepared to provide environment specific information and any other site-specific variables.

- Submit and update your profile information such as cell phone number, e-mail address or company address. To do so, you can logon to e-Support and access the "Current Profile" section to make updates or call Canon USA's TSC. Accurate profile information will allow for quick contact if more information is required from the caller later on.

- At the completion of each call, a ticket number is provided. If the Support Specialist does not provide a number, the caller can/should ask for it.

- A return call from a Dealer Technician/Systems Engineer with a resolution is extremely helpful. The information Canon USA receives from you on what actually resolved the problem is sent to the Support Specialist and enables them to better assist other callers who may have the same problem you just fixed.

2. Canon Technical Support Center

<u>Effective April 1, 2005</u>

Live phone based technical support from the Canon TSC is limited to those technicians who are certified to service the imageRUNNER 4570 Series or are enrolled for technical training.

Self-Service Support (software downloads, knowledgebase, support forums, technical publications) will continue to be available through the e-Support Center website (http://www.support.cusa.canon.com) for all Technicians and Systems Engineers. Refer to Technical Training on Page 24 for further details.

In the event assistance is required by the Dealer for the support of the imageRUNNER 4570 Series, Canon USA's TSC will provide support and problem escalation for the authorized servicing dealer. The TSC (1-800-528-2830) will provide second level support for Authorized imageRUNNER 4570 Series Dealers only. A valid Support ID and serial number is required to access the TSC. Hardware support is available Monday through Friday, 9:00am-8:00pm Eastern Standard Time and software and connectivity support is available Monday through Friday, 9:00am-6:00pm Eastern Time. If needed, on-site customer support will be available through proper escalation procedures.

Canon's TSC support responsibilities are as follows:

- All technical support for the customer is provided solely by the contracted servicing Dealer.
- The Canon USA TSC will be the central contact for the reporting of all known outstanding hardware and software issues to Canon USA's development groups.
- The Canon USA TSC will be available to all Authorized Dealers, Systems Engineers and Technicians who have successfully completed the Training Program.
- The TSC will provide technical information regarding all Canon associated hardware and software products.
- The TSC will deploy, as required through proper escalation procedures, all on-site Canon USA Digital Solutions Specialist and Systems Engineers.
- The TSC will provide a single place for problem escalation for engineering and development teams.

B.   Internet Systems And Technical Support

Canon USA's Systems and Technical Support Division provides high quality e-Support via the Internet and is only available for Canon USA Authorized Servicing Dealers.

Canon e-Support is designed to give dealer Systems Engineers and Technicians access to technical support information via the Worldwide Web. The following functions and information can be accessed:

- Search for Technical Solutions with the Integrated Knowledge Management System through natural language query

- Read or download on-line documentation

- Download patches and their Readme files

- Download Firmware and Software Drivers

- Track and Modify logged Cases

- Review all open Cases

- On-line parts look-up tool

- Hardware and Software Solutions knowledge base

- Interactive Support Forums

In order to access e-Support, you must first register for a Support ID. To register for a support ID, go on-line to the Canon USA Systems and Technical Support Division's e-Support Center at http://www.support.cusa.canon.com. Click on the "Register To Join" button and follow the instructions for registration. This service is available at no additional charge to all authorized dealers.

C. Escalation Procedure

Canon USA provides a time sensitive call escalation process for all authorized imageRUNNER 2270/2870/3570/4570 dealers. The TSC is the single point of entry for this process. Once a call is placed to the TSC and information is logged into the call management system, a case number will be assigned to the call. Every effort is made to resolve the problem during the call. Calls that cannot be resolved during the initial call and require escalation, need to follow the process below. The status of all escalated cases can be viewed via e-Support or by calling the TSC.
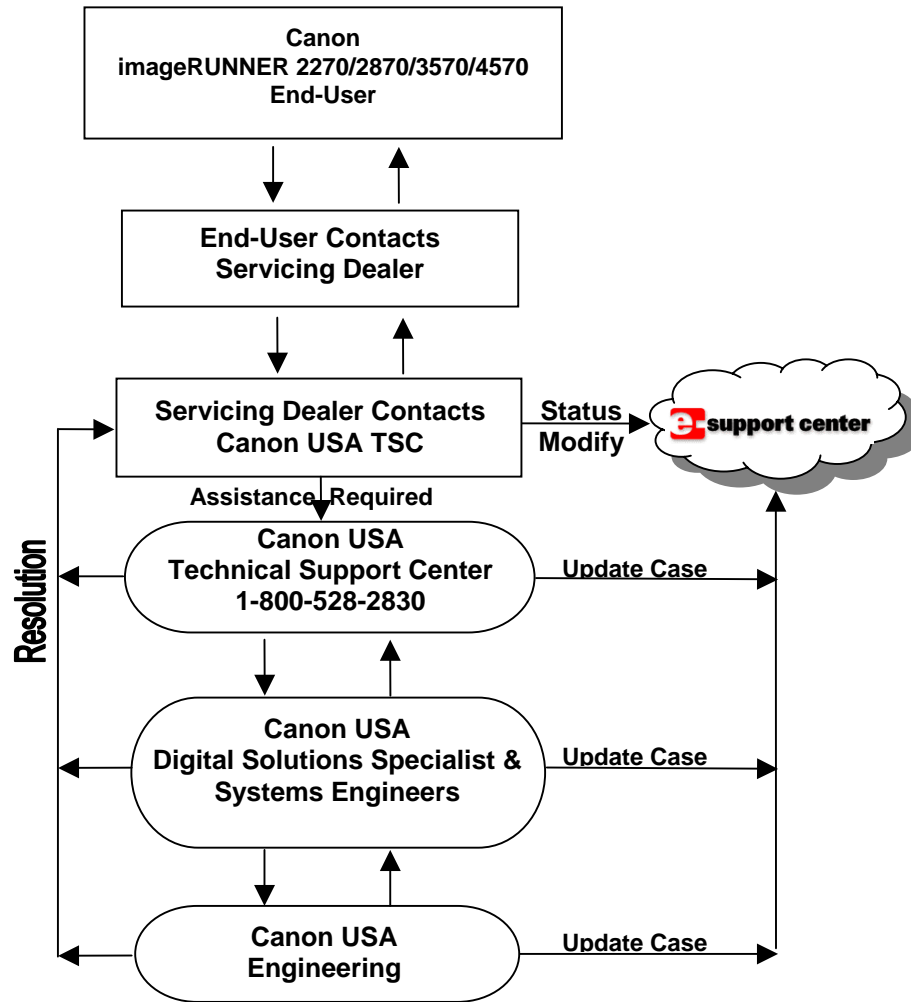
D. Recommended Monthly Print/Copy Volume

Suggested maximum monthly print/copy volume and optimum performance range is shown for each model in the chart below.

Model	Monthly Copy / Print Volume	Optimum Performance Range
imageRUNNER 2270	Up to 80,000 copies	3,000-32,000 copies
imageRUNNER 2870	Up to 105,000 copies	5,000-37,000 copies
imageRUNNER 3570	Up to 130,000 copies	10,000-45,000 copies
imageRUNNER 4570	Up to 170,000 copies	10,000-55,000 copies

E. Warranty Conditions

1. End-User Warranty Conditions

- Ninety (90) days after delivery to the original purchaser or 100,000 prints or copies or a combination of both, whichever comes first.

For detailed warranty information, please refer to the imageRUNNER 2270/2870/3570/4570 Limited Warranty card located in the Appendix. No warranty is given on any consumables or consumable parts, such as paper, chemicals, and toner.

- **GPR-15/16 Drum Unit Limited Warranty**

Full Credit:	17,000 prints/copies or 30 days from the date of original purchase, whichever comes first.
Prorated Credit:	32,000 or one year from the date of original purchase, whichever comes first.

2. Warranty Administration Reduction Program (WARP)

Dealers who purchase an imageRUNNER 2270/2870/3570/4570 will receive WARP credit during the month following their purchase. The credit will cover the dealer's cost for defective parts with a dealer cost under $300 replaced during the term of the end-user warranty. Defective parts with a dealer cost over $300 that are replaced during the term of the end-user warranty should be returned along with all applicable documentation to Canon USA for processing.

To request parts reimbursement credit, complete the e-Tag warranty claim form that can be found in the warranty section of the Canon USA's e-Support Center. Print out the e-Tag form and submit it to the address provided, along with the defective part(s), and a copy of the machine's service history log.

Refer to the Warranty terms and conditions in the Appendix of this Service Guide for complete details for warranty coverage.

Your Regional Service Office personnel can answer questions on the WARP program.

VII. Technical Training

A. Overview

The imageRUNNER 4570 Series Technical Training Program, which includes training for the imageRUNNER 2270/2870/3570/4570, is the first of its kind. The course consists of two different but integral components, an online course and a classroom course. The goal behind utilizing a blended approach is to leverage the advantages of the eLearning Center to complement an already successful classroom training approach and to deliver training in the most efficient and effective way possible.

The course has two major components:

1. Online Course: This portion of the imageRUNNER 4570 Series course consists of an eLearning session containing eighteen topics. The course is located in the eLearning center on the e-Support Center website: http://www.support.cusa.canon.com. The objective is to provide interactive training on theory, specifications, component identification, operations, and timing prior to attending the classroom training.

2. Classroom Course: Consists of an intense five days of lecture, hands-on, and practical application of the information learned on-line. Each student will have the opportunity to disassemble and install key components, and apply troubleshooting techniques. This new "hands-on" approach will improve the ability of each technician to support the products and meet customers' needs right from the start.

Benefits of this new approach will include increased hands-on time in the classroom with focus on the main unit and accessories within real-world troubleshooting scenarios. Additional focus will be given to a new version of Canon Controller, a new service support tool (SST), and new paper handling and finishing technologies incorporated into this product series.

B. Certification

Technician certification for the imageRUNNER 4570 Series is required for authorization to sell this product. The certification will include the following models and will be awarded when both the online and the classroom portions of the program are successfully completed:

- imageRUNNER 2270
- imageRUNNER 2870
- imageRUNNER 4570
- imageRUNNER 3570

C.   Who Should Attend

Given the importance of this new imageRUNNER Series and the advanced technology it incorporates, it is highly recommended that all technicians responsible for installing and supporting the new products successfully complete this valuable new training program.

Note:

Effective April 1, 2005 the Systems & Technical Support Division will be limiting imageRUNNER 4570 Series live phone based technical support to those technicians who have successfully completed or who are enrolled in the training program.   Self-Service Support (software downloads, knowledgebase, support forums, technical publications) will continue to be available through our e-Support Center for all Technicians and Systems Engineers (refer to the Technical Support section for entitlement details).

D.   Training Facilities

Training is available in each of the five Canon regional training centers.

- Jamesburg, New Jersey
- Norcross, Georgia
- Irving, Texas
- Itasca, Illinois
- Irvine, California

E.   Prerequisites

For those technicians that have already completed Basic Quest, and imageRUNNER Connectivity Quest, the only prerequisite will be to complete the online portion of the imageRUNNER 4570 Series training program. The online portion is located in the eLearning Center on the e-Support Center website http://www.support.cusa.canon.com.

F.   What You Will Learn

Online course:

During the online portion of this training program the student will be lead though approximately eight hours of online training. Items covered include:

- Overview and specifications
- Configuration
- Operations and timing
- Original and Laser Exposure
- Fixing
- Accessories
- Main points of Installation

<u>Classroom course:</u>

The classroom portion will be comprised of hands-on real world scenario labs and practical exercises that are designed to enhance the technician's ability to apply the information learned during the online portion of the training program. This advanced learning technique will serve to instill the knowledge gained during this application phase of the training. This new style of training program is designed to achieve the highest level of technical competence and improve customer satisfaction through better first call resolution. Additionally the course will cover the finer points of:

- The Licensing Management System (LMS)
- New Version of Service Support Tool (SST)
- New internal and external accessories with hands-on labs

G.   Course Highlights

- Classrooms are state-of-the-art, highly equipped and completely networked.
- Canon Technical Trainers are certified and deliver all the training.
- Five Regional Training Centers to choose from.
- Practical labs will offer real-world scenarios.
- Practical as well as written testing.

H.   Student Feedback and Course Follow-up

All students attending the imageRUNNER 4570 classroom course at a Canon regional training center will be asked to complete a 10-question feedback survey.

In addition, effective with this course all students completing the imageRUNNER 4570 technical training classroom course will receive a Training Survey ninety (90) days after the class. The purpose of this will be to find out how well each student was prepared to apply their knowledge in the field. The feedback will be utilized to continue to enhance the classroom course.

I.   Course Equipment

- imageRUNNER 4570
  - o DADF-N1
  - o Finisher-S1
  - o Cassette Feeding Unit-Y2
  - o Saddle Finisher-Q4 with Buffer Pass-E1
  - o Internal and External punchers

J. Service Materials

The service materials for the imageRUNNER 4570 Series Technical Training Program are listed in the table below.

Model/Accessory	Additional Accessories Included	Item	Part Number
imageRUNNER 4570 Series	Cassette Feeding unit-Y2 Inner 2Way Tray-D1 3Way Unit A1	Service Manual	DU7-1129-000
		Parts Catalog	DU7-3127-000
Super G3 FAX Board-Q1 Multi Line FAX Board-D1		Service Manual	DU7-1132-000
		Parts Catalog	DU7-3131-000
DADF-N1		Service Manual	DU7-1128-000
		Parts Catalog	DU7-3128-000
Finisher-Q3, Saddle Stitch Finisher-Q4	Buffer Pass Unit-C1 & E1 Puncher Unit-M1 Additional Finisher Tray-A1	Service Manual	DU7-1131-000
		Parts Catalog	DU7-3130-000
Finisher-S1	Inner Puncher Unit-R1 Additional Finisher Tray-B1	Service Manual	DU7-1130-000
		Parts Catalog	DU7-3129-000
Multi-PDL Printer Kit-E1	UFR II Printer Kit-E3 (included in Main body Parts Catalog)	Service Manual	DU7-1133-000
		Parts Catalog	DU7-3132-000
Paper Deck-Q1		Service Manual	DU7-1115-000
		Parts Catalog	DU7-3133-000
USB Application Interface Board-D1		Service Manual	DU7-1136-000
		Parts Catalog	DU7-3134-000
Universal Send Kit-B1	(software only; no parts)	Service Manual	DU7-1134-000
iR Security Kit-A2	(software only; no parts)	Service Manual	DU7-1135-000

Service materials may be ordered through the Canon Network Access (CNA) website http://www.cna.cusa.canon.com.

VIII. Support Authorization Requirements

A. Authorization Policy

To become authorized and maintain authorization to service the imageRUNNER 2270/2870/3570/4570, each Authorized Reseller's location must have at least one employee who has successfully completed the imageRUNNER 2270/2870/3570/4570 Training Program and received certified status.

For a Canon U.S.A. copier dealership, a System Engineer[13] (SE) working with Canon connectivity products should have the following basic job functions:

- Systems integration (pre-sale and post-sale)
- Installation
- Education of customers and dealership personnel
- Troubleshooting

In order to successfully perform these tasks, it is crucial that the SE have strong computer skills and a working knowledge in the following areas (listed in order of importance):

- The major computer platforms (IBM™ compatible and Macintosh™)
- Computer hardware (including cabling)
- Computer software (including drivers)
  - Operating systems (DOS, Windows 95/98, Mac OS® System 7, 8, & 9)
- Network Operating Systems:
  - o Novell® (3.x, 4.x, & 5.x)
  - o Windows NT & 2000
- Protocols:
  - o IPX/SPX™
  - o TCP/IP
- Printing
- Scanning

In addition, computer skills and a working knowledge in the following areas may also be helpful:

- Other computer platforms (mainframe and UNIX®)
- Networking (TokenRing)
- Basic electronics

Possible backgrounds, (listed in preferred order), of a successful Canon U.S.A. dealership SE are:

- Novell CNA^{SM} or Novell CNE^{SM} / Microsoft MCSE™ certification.
- Canon U.S.A. copier service technician with two years of experience centered on connectivity products.

A degree in computer science, engineering, or a computer technician with two years of experience is required in the above areas.

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[13] A System Engineer (SE) is a "professional title often used by hardware vendors for individuals who perform systems related tasks, such as analysis, design, and programming. System Engineers are also often involved in pre-sales activities."

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IX. Appendix

A. Specifications

Note: All specifications are subject to change without notice.

1. imageRUNNER 2270/2870

Type	Digital Multifunction Imaging System
Copying Method	Laser Dry Electrostatic Transfer
Developing System	Dry Mono Component Toner Projection
Fixing System	RAPID Fusing System
Acceptable Originals	Sheets, Books and 3D objects (up to 4.4 lbs)
Maximum Original Size	11" x 17" (Ledger)
Maximum Copy Size	11" x 17" (Ledger); Only lower cassettes will hold 11" x 17" size paper
Minimum Copy Size	4" x 5-1/2"
Image Server	Standard 512 MB RAM + 20 GB HDD
Maximum Copy Reservation	5
Engine Resolution	Up to 600 dpi x 600 dpi
Interpolated Resolution	Up to 2400 dpi x 600 dpi (Print) Up to 1200 dpi x 600 dpi (Copy)
Halftone	256 levels
Paper Feeding	2 cassettes, stack bypass
Paper Capacity	2 x 550 + 50 (Standard 1,150 Sheets / Maximum 4,750 Sheets)
Manual Bypass	Up to 50 Sheets
Acceptable Paper Weight	17 lb Bond – 20 lb Bond (Cassette), 17 lb Bond – 32 lb Bond (Stack Bypass)
Duplexing	Standard Automatic Trayless Duplexing
Magnification	From glass: 25% - 400% (in 1% increments) / From DADF: 25% - 200% (in 1% increments)
Preset Reduce / Enlarge	25%, 50%, 64%, 73%, 78%, 121%, 129%, 200%, 400%
Multi-page Print/Copy Speed	Up to 22/28 ppm/LTR
First Copy Speed	Approximately 4.9 seconds or less from platen glass, Approximately 6.9 seconds or less from DADF
Warm-Up Time	Approximately 30 seconds or less (Main Power Switch on), Approximately 10 seconds or less (From Sleep Mode)
Maximum Copy Run	1 – 999
Automatic Exposure	AE or Manual (Text, Photo or Text & Photo) (9 Levels)
Dimensions (H x W x D)	Approximately 29-7/8" x 22-1/4" x 27-5/8" (761. x 565 x 700 mm) Approximately 34" x 29-3/4" (862 x 755 mm) (When the stack bypass is extended)
Weight	Approximately 190 lb / 86.2 kg
Power Requirements	120V AC, 60Hz, 10A
Power Consumption	1.35 kW (Maximum)

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2. imageRUNNER 3570/4570

Type	Digital Multifunction Imaging System
Copying Method	Laser Dry Electrostatic Transfer
Developing System	Dry Mono Component Toner Projection
Fixing System	RAPID Fusing System
Acceptable Originals	Sheets, Books and 3D objects (up to 4.4 lbs)
Maximum Original Size	11" x 17" (Ledger)
Maximum Copy Size	11" x 17" (Ledger); Only lower cassettes will hold 11" x 17" size paper
Maximum Copy Size	4" x 5-1/2"
Image Server	Standard 512 MB RAM + 20 GB HDD
Maximum Copy Reservation	5
Engine Resolution	Up to 600 dpi x 600 dpi
Interpolated Resolution	Up to 2400 dpi x 600 dpi (Print) Up to 1200 dpi x 600 dpi (Copy)
Halftone	256 levels
Paper Feeding	2 cassettes, stack bypass
Paper Capacity	2 x 550 + 50 (Standard 1,150 Sheets / Maximum 4,750 Sheets)
Manual Bypass	Up to 50 Sheets
Acceptable Paper Weight	17 lb Bond – 20 lb Bond (Cassette), 17 lb Bond – 32 lb Bond (Stack Bypass)
Duplexing	Standard Automatic Trayless Duplexing
Magnification	From glass: 25% - 400% (in 1% increments) / From DADF: 25% - 200% (in 1% increments)
Preset Reduce / Enlarge	25%, 50%, 64%, 73%, 78%, 121%, 129%, 200%, 400%
Multi-page Print/Copy Speed	Up to 35/45 ppm/LTR
First Copy Speed	Approximately 3.9 seconds or less from platen glass, Approximately 5.9 seconds or less from DADF
Warm-Up Time	Approximately 30 seconds or less (Main Power Switch on), Approximately 10 seconds or less (From Sleep Mode)
Maximum Copy Run	1 – 999
Automatic Exposure	AE or Manual (Text, Photo or Text & Photo) (9 Levels)
Dimensions (H x W x D)	Approximately 29-7/8" x 22-1/4" x 27-5/8" (761. x 565 x 700 mm) Approximately 34" x 29-3/4" (862 x 755 mm) (When the stack bypass is extended)
Weight	Approximately 190 lb / 86.2 kg
Power Requirements	120V AC, 60Hz, 10A
Power Consumption	1.35 kW (Maximum)

B.   Duplex Automatic Document Feeder-N1

Acceptable Original Size	STMT, STMTR, LTR, LTRR, LGL, 11"x17"
Paper Capacity	50 Sheets: STMT, STMTR, LTR, LTRR, LGL, 11" x 17"
Different Size original	Same Width / Different Width
DADF Paper Weights	13 to 32 lb bond
Document Scanning Speed	Approximately 28 sheets/minute (LTR)
Original Feeding Method	From first page (top of the original)
Dimensions (H x W x D)	Approximately 8-7/8" x 22-1/4" x 21-1/4" (122mm x 565mm x 538mm)
Weight	Approximately 18.7 lb (8.5 kg)

C.   Cassette Feeding Unit-Y2

Paper Capacity	Cassettes / 2 x 550 sheets (20 lb. Bond)
Paper Size	EXEC, STMT-R, LTR, LGL, LTR-R, 11"x17"
Paper Weights	17 lb. Bond to 20 lb Bond
Power Source	From Main Unit
Dimensions (H x W x D)	Approximately 9-7/8'' x 22-1/4'' x 27-5/8 (251.5mm x 565mm x 700mm)
Weight	Approximately 50.71 lb (23 kg)

D.   Envelope Feeder Attachment-C1

Acceptable Envelopes	COM10 / Monarch / DL / ISO-B5 / ISO-C5 /Yougata 4
Copy Speed	imageRUNNER 2270/2870: Approximately 10 cpm (all Envelopes) imageRUNNER 3570/4570: Approximately 12 cpm (all Envelopes)
Number of Envelopes	Stack up to 1-1/4" high (approximately 50 envelopes)
Dimensions (H x W x D)	Approximately 3-1/4" x 12-1/8" x 11-5/8" (82mm x 306mm x 295mm)
Weight	Approximately 2.4 lb (1.1 kg)

E.   Paper Deck-Q1

Paper Capacity	Up to 2,500 Sheets
Paper Size	LTR
Paper Weight	17 to 28 lb bond
Dimensions (H x W x D)	Approximately 18-5/8'' x 14-5/8'' x 23-1/4''(473mm x 372mm x 591mm)
Weight	Approximately 65.3 lb (29.6 kg)

F.   Finisher-S1

Acceptable Paper Weight	17 lb bond to 32 lb index
Number of Trays	1 (Opt. 2nd tray)
Capacity per Tray	Up to 1,000 sheets LTR, STMTR w/ 1 Tray, 500 sheets LGL, LTRR, 11'' x 17'' w/1 Tray
Capacity per Tray (with the Additional Finisher Tray-B1)	Up to 300 sheets LTR, STMTR each Tray with 2 Trays, 150 sheets LGL, LTRR, 11'' x 17'' each Tray with 2 Trays
Paper Size	STMTR to 11'' x 17''
Staple Position	Corner Stapling 11'' x 17'', LGL, LTR, LTRR
Maximum Stapling Capacity	50 sheets LTR / 30 sheets 11'' x 17'', LGL, LTRR
Power Source	From Main Unit
Dimensions (H x W X D)	Approximately 7-7/8'' x 16-1/8'' x 21-1/4'' (201mm x 409mm x 534mm)
Installation Space (W x D)	Approximately 41-7/8'' x 29-3/4'' (1,065 x 755 mm) (when auxiliary tray is extended)
Weight	Approximately 25.3 lb (11.5 kg)

G.   Puncher Unit-R1 (Option for Finisher-S1)

Acceptable paper weight	17 lb Bond to 32 lb Bond
Paper Size	11" x 17", LGL, LTR, LTRR
Punch Method	Sequential Processing System (1 sheet at a time)
Punch Capacity	2 holes – LGL, LTR / 3 holes – 11" x 17", LTR
Punch Dust Access	Up to 2,500 sheets (2-holes), up to 1,500 (3-holes)
Punch & Staple Combo	Available
Power Source	From Finisher-S1
Dimensions (H x W x D)	Approximately 6-7/8" x 19-7/8" x 5-1/8" (175mm x 505mm x 130mm)
Weight	Approximately 8.6 lb (3.9 kg)

H.   Additional Finisher Tray-B1 (Option for Finisher-S1)

Paper Capacity	300 sheets LTR, STMTR / 150 sheets LGL, LTRR, 11" x 17"
Dimensions (H x W x D)	Approximately 3-1/8" x 7-7/8" x 15-5/8" (80mm x 200mm x 395mm)
Weight	Approximately 3.7 lb (1.7 kg)

I.   Finisher-Q3 Set (includes Buffer Pass Unit-E1)

Acceptable Paper Weight	17 lb. Bond to 32 lb Bond
Number of Trays	2 trays
Capacity per Tray	Up to 1,000 Sheets LTR, STMTR, EXEC / 500 Sheets LTRR, LGL, 11" x 17"
Paper Size	STMTR to 11" x 17"
Staple Position	Corner 11" x 17", LGL, LTR, LTRR, EXEC / Double 11" x 17", LTR
Max. Stapling Capacity	Up to 50 Sheets LTR, EXEC / 30 Sheets LGL, LTR-R, 11" x 17"
Power Source	From Main Unit
Dimensions (H x W X D)	Approximately 40 3/4" x 25 3/8" x 25 7/8" (1,036mm x 643mm x 657mm)
Weight	Approximately 91.7 lbs. (41.6 kg)
Type of Staple	Staple-J1
Attachable Accessories	Optional Puncher Unit-M1 (2 / 3 hole punch)

J.   Saddle Stitch Finisher-Q4 Set (includes Buffer Pass Unit-E1)

Acceptable paper weight	17 lb. Bond to 32 lb Bond
Number of Trays	3 trays
Capacity of Tray	Up to 1,000 Sheets LTR, STMTR, EXEC / 500 Sheets LTRR, LGL, 11" x 17"
Paper Size	STMT-R to 12" x 18"
Staple Position	1-Corner (Any Corner of page) 2-Side Margin (Book Staple) Saddle Stitch 3-Saddle Stitch Mode (Center Stapling)
Max. Stapling Capacity	Up to 50 Sheets LTR, EXEC / 30 Sheets LGL, LTR-R, 11" x 17"
Saddle Stitch Tray	
Paper Weight	17 to 20 lb bond (Up to 15 sheets), 20 to 28 lb bond (Up to 10 sheets
Stapling Capacity	Up to 15 Sheets
Total Sides Imaged	60 Total Sides (Up to 15 Sheets)
Total Sets	Approximately 25 sets (1-5 sheets), 15 sets (6-10 sheets), 10 sets (11-15 sheets)
Folding	V Folding Standard
Paper Size Supported	LTRR, LGL, 11" x 17"
Power Source	From Main Unit
Dimensions (H x W x D)	Approximately 40 3/4" x 29 3/4" x 25 7/8" (1,036mm x 756mm x 657mm)
Weight	Approximately 162 lbs. (73.4 kg)
Type of Staple	Staple - J1
Attachable Accessories	Optional Puncher Unit-M1 (2 / 3 hole punch)

K. Puncher Unit-M1 (Option for Finisher-Q3 and Saddle Stitch Finisher-Q4)

Acceptable Paper Weight	17 lb bond to 32 lb Bond
Paper Size	LTR / LGL / 11" x 17" (Cannot punch STMT and STMTR-size paper)
Punch Method	Sequential Processing System (1 sheet at a time)
Punch Capacity	2 hole / 3 hole (Auto change - 3 hole: LTR / 11" x 17", 2 hole: LGL / LTR)
Punch Dust Access	Approximately 3,000 sheets
Punch & Staple Combo	Available
Power Source	From Main Unit
Dimensions (H x W x D)	Approximately 34 1/8" x 4-1/4" x 24-1/2" (941mm x 107mm x 614.8mm)
Weight	Approximately 15.9 lb (7.2 kg)

L. Inner 2-way Tray-D1

Number of Trays	2
Capacity Per Tray	Upper Output Tray – Up to 100 sheets (LTR), 50 sheets (Other sizes)
	Lower Output Tray – Up to 250 sheets (LTR), 100 sheets (Other sizes)
Power Source	From Main Unit
Dimensions (H x W x D)	Approximately 6" x 7" x 21-1/2" (151mm x 176mm x 546mm)
Weight	Approximately 8.6 lb (3.9 kg)

M. Copy Tray-J1

Paper Capacity	Up to 150 sheets (LTR), 75 sheets (Other sizes)
Dimensions (H x W x D)	Approximately 4-3/4" x 13-5/8" x 13-7/8" (120mm x 347mm x 351mm)
Weight	Approximately 1 lb (471 g)

N. Card Reader-C1

Card Type	Magnetic
Card Readout Method	Magnetic readout
Card reading direction	Face up
Store/Replay	Replay
Power Source	From Main Unit
Dimensions (H x W x D)	Approximately 1-1/4" x 3-1/2" x 4" (32mm x 88mm x 100mm)
Weight	Approximately 10.4 oz. (295g)

O.   Super G3 Fax Board-Q1

Telephone Line Used	Public Switched Telephone Network (PSTN), Facsimile Network
Number of Connection Lines	1
Max. Size of Originals	11" x 17"
Effective Image Size	LTR, LTRR, LGL, 11" x 17", STMT,STMTR
Transmission Time	ECM-MMR: Approx. 3.2 seconds / page (33,600 bps) G3MR method: Approx. 13 seconds / page (33,600 bps) G3MH method: Approx. 13 seconds / page (33,600 bps) JBIG: Approx. 2.6 seconds / page (33,600 bps)
Scan Line Density	Standard: 8 pels/mm x 3.85 lines/mm Fine: 8 pels/mm x 7.7 lines/mm (200 dpi x 200 dpi) Super Fine: 8 pels/mm x 15.4 lines/mm Ultra Fine: 16 pels/mm x 15.4 lines/mm
Modem Speed	Super G3: 33,600 kbps G3: 14,400 kbps
Compression System	MMR, MR, MH, JBIG
Error Connection	ECM (cancellation function available)
Scanning Exposure Adj.	3 levels & AE Function (exposure correction in additional functions: 9 tones available)
Halftone	256 tones, AA (Auto Adjust Mode)
Transmission Type	Super G3, G3
Memory Capacity	Uses the imageRUNNER shared image server 512 MB Memory and 20 GB HDD. Holds approximately 8,000 pages.
Auto Dial Function	Address Book: up to 1,800 destinations (Including destinations stored in one-touch buttons)

P.   Super G3 Multi-Line Fax Board-D1

Telephone Line Used	Public Switched Telephone Network (PSTN), Facsimile Network
Number of Connection Lines	2
Max. Size of Originals	11" x 17"
Effective Image Size	LTR, LTRR, LGL, 11" x 17", STMT,STMTR
Transmission Time	ECM-MMR: Approx. 3.2 seconds / page (33,600 bps) G3MR method: Approx. 13 seconds / page (33,600 bps) G3MH method: Approx. 13 seconds / page (33,600 bps) JBIG: Approx. 2.6 seconds / page (33,600 bps)
Scan Line Density	Standard: 8 pels/mm x 3.85 lines/mm Fine: 8 pels/mm x 7.7 lines/mm (200 dpi x 200 dpi) Super Fine: 8 pels/mm x 15.4 lines/mm Ultra Fine: 16 pels/mm x 15.4 lines/mm
Modem Speed	Super G3: 33,600 kbps G3: 14,400 kbps
Compression System	MMR, MR, MH, JBIG
Error Connection	ECM (cancellation function available)
Scanning Exposure Adj.	3 levels & AE Function (exposure correction in additional functions: 9 tones available)
Halftone	256 tones, AA (Auto Adjust Mode)
Transmission Type	Super G3, G3
Memory Capacity	Uses the imageRUNNER shared image server 512 MB Memory and 20 GB HDD. Holds approximately 8,000 pages.
Auto Dial Function	Address Book: up to 1,800 destinations (Including destinations stored in one-touch buttons)

Q. Multi-PDL Printer Kit-E1 (Optional)

Type	Embedded Print Controller
CPU	Use main unit CPU (Canon Custom 300 MHz Processor)
Memory	Use main unit DIMM (512 MB Standard)
Storage	Use main unit HDD (20 GB)
Applicable Paper Size	LTR, LGL, STMT, 11"x17", COM10, Monarch, DL, Executive
Paper Source	2 Cassettes (550 Sheets each), Stack Bypass (50 Sheets), Optional Paper Deck (2,500 Sheets)
Supported PDL	PCL®5e, PCL 6, PostScript® 3 Emulation, UFR II
Internal Fonts	PS: 136 Scalable Fonts PCL5e/6: 80 Scalable Fonts, 30 Barcode Fonts, 2 OCR Fonts, 10 Bitmap Fonts
Supported Resolution	2400 x 600 dpi
Interfaces (Standard)	10 Base-T/100 Base-TX (RJ-45), USB High-Speed (2.0)
Interfaces (Optional)	Wireless LAN (Available at a later date)
Printer Drivers **UFR II** **PCL 5e/6** **Post Script 3** **Emulation**	Windows 2000/XP, Server 2003, Citrix® MetaFrame®, Macintosh OS X (OS 10.1.5 or later) Windows 98/Me, NT 4.0, 2000/XP, Server 2003, Citrix MetaFrame Windows 98/Me, NT 4.0, 2000/XP, Server 2003, Citrix MetaFrame, Macintosh OS X (OS 10.2 or later)
Network Protocol	IPX/SPX™, TCP/IP, Apple® Talk Phase II, NetBIOS
Frame Type	IPX/SPX: Ethernet II / Ethernet 802.2 / Ethernet 802.3 / Ethernet SNAP / Auto Detect TCP/IP: Ethernet II AppleTalk Phase II: Ethernet SNAP NetBIOS: Ethernet II
Network OS	Novell NetWare® v.3.2, 4.1, 4.11, 4.2, 5, 5.1, 6, 6.5 (IPX/SPX)
	Windows 98, Me (TCP/IP)
	Windows NT 4.0 (TCP/IP)
	Windows 2000, XP, Server 2003 (TCP/IP)
	Solaris 1.x,2.5 or later (TCP/IP)
	Apple Macintosh OS 8.0 or later (PPD) – PostScript Printer Description File
Print Service	IPX/SPX: Bindery Pserver, NDS Pserver, Rprinter, Nprinter, LPD, IPP
	TCP/IP: LPD, Raw, IPP, IPPS
	AppleTalk: PAP (Printer Access Protocol)
	NetBIOS: SMB
Attachable Accessories	USB Application Interface Board-D1, iR Security Kit-A2
Utility Software	Network ScanGear
	Remote UI (PDF R1.3, Post Script 3)
	NetSpot Console, NetSpot Job Monitor,
	NetSpot Resource Downloader, NetSpot Device Installer
	USB Class Driver, Fax Driver
	JBIG ImageViewer^SM
	Canon LPR 2
	Canon NDPS® (Novell Distributed Print Services) GW
	Canon Font Manager
	BMC PATROL, CA Unicenter, Tivoli® NetView®
	Hewlett Packard® P Web Jetadmin®, OpenView®, Microsoft Management Console
	Canon Watermark Add-in
	DSE (Device Status Extension), Address Book Conversion Utility

R.   Canon imageRUNNER 2270/2870/3570/4570 Limited Warranty

Canon U.S.A., Inc. and Canon Canada, Inc. (collectively "Canon") warrant the imageRUNNER 2270/2870/3570/4570 and options designed for use with the imageRUNNER 2270/2870/3570/4570 which are sold by Canon through its authorized dealers (collectively the "Product") to be free from defects in workmanship and materials under normal use and service for a period of 90 days after delivery to the original purchaser ("Purchaser") or 100,000 prints or copies (or a combination of both), whichever comes first. During such warranty period, Canon shall replace, without charge, any defective part with a new or comparable rebuilt part. This warranty shall not extend to consumables such as paper, chemicals, and toner as to which there shall be no warranty or replacement. Nor shall this warranty cover the Canon Drum Unit for the Product, for which a separate warranty is given. Warranty replacement shall not extend the original warranty period of the Product.

This limited warranty shall only apply if the Product is used in conjunction with compatible computers, peripheral equipment and software. Canon 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 equipment and software that may be distributed with the Product are sold "as is" and without warranty of any kind by Canon, including any implied warranty regarding merchantability or fitness for a particular purpose, and all such warranties are disclaimed. The sole warranty, if any, with respect to such non-Canon brand items is given by the manufacturer or producer thereof. For further information on software, see below.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES AND CONDITIONS REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, RELATING TO THE USE OR PERFORMANCE OF A PRODUCT.   NO OTHER EXPRESS WARRANTY, CONDITION OR GUARANTY, EXCEPT AS MENTIONED ABOVE, GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THE PRODUCT SHALL BIND CANON OR ANY AUTHORIZED DEALER. 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's user manual or other documentation, (c) installation or repair by other than authorized service representatives qualified by Canon who are acting in accordance with Canon's service bulletins, (d) use of supplies or parts (other than those distributed by Canon) 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 DISKETTES OR 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.   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 IMMEDIATELY IF YOU HAVE NOT RECEIVED A COPY OF THE SOFTWARE MANUFACTURER'S LICENSE AGREEMENT. CANON RECOMMENDS THAT DATA STORED ON THE PRODUCT'S HARD DISK DRIVE BE DUPLICATED OR BACKED UP TO PREVENT ITS LOSS IN THE EVENT OF FAILURE OR OTHER MALFUNCTION OF THE HARD DISK DRIVE.

NEITHER CANON NOR ANY AUTHORIZED DEALER SHALL BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE (UNLESS CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY AUTHORIZED DEALER), 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 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 ANY AUTHORIZED DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST CANON OR ANY AUTHORIZED DEALER 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 PROPERTY OF THE PURCHASER OR OTHERS ARISING OUT OF THE POSSESSION, USE, MISUSE, OR INABILITY TO USE THE PRODUCT SOLD BY CANON NOT CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY AUTHORIZED DEALER. THIS WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THE PRODUCT AND STATES SUCH PURCHASER'S EXCLUSIVE REMEDY.

CONDITIONS OF WARRANTY

Defective parts must be returned to Canon or an Authorized DEALER with all necessary documentation and will become the property of Canon.

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

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FA7-5901   (000)

S.   Canon GPR-15/16 Drum Unit Limited Warranty

Canon U.S.A., Inc. and Canon Canada, Inc. (collectively "Canon") warrant the Drum Unit incorporated into the imageRUNNER Series product (the "Product") packaged with this Limited Warranty (the "Drum Unit") to be free from defects in workmanship and materials under normal use and service, other than exterior defects, such as nicks, scratches, or dents, for a period of 30 days after delivery to the original purchaser of the Drum Unit or use of it to make 17,000 copies, whichever comes first. If the Drum Unit proves to be defective within this warranty period, Canon shall, at its sole option, replace it without charge.

Following the expiration of the 30 day warranty period, and continuing for a period of ONE YEAR after delivery to the original purchaser of the Drum Unit or use of it to make 64,000 copies, whichever comes first, Canon shall provide a credit ("Credit") to the original purchaser toward a replacement Drum Unit if the Drum Unit fails to operate under normal use and service by reason of any defect in workmanship and materials, other than exterior defects, such as nicks, scratches or dents. The Credit shall be a percentage of Canon's then current dealer price for the replacement Drum Unit determined as set forth in the example below.

Warranty replacement shall not extend the original warranty period of the Drum Unit.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES AND CONDITIONS REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, RELATING TO THE USE OR PERFORMANCE OF THE DRUM UNIT. NO OTHER EXPRESS WARRANTY, CONDITION OR GUARANTY, EXCEPT AS MENTIONED ABOVE, GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THE DRUM UNIT SHALL BIND CANON OR ANY AUTHORIZED SERVICE PROVIDER. NO WARRANTY IS GIVEN ON ANY USED DRUM UNIT.

This warranty shall be void and of no force and effect if the Drum Unit is damaged as a result of (a) abuse, neglect, mishandling, or alteration of the Drum Unit, a Product Accessory or a Product in which the Drum Unit is incorporated, electric current fluctuation, exposure to light, or accident, (b) improper use, including failure to follow operating, maintenance and environmental conditions prescribed in Canon's 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 Drum Unit or cause abnormally frequent service calls or service problems. Nor does this warranty extend to any Drum Unit on which the original identification marks or serial numbers 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 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, STORAGE CHARGES OR OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THE DRUM UNIT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED AND EVEN IF CANON OR ANY AUTHORIZED SERVICE PROVIDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST CANON OR ANY AUTHORIZED SERVICE PROVIDER BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE DRUM UNIT AND 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 DRUM UNIT NOT CAUSED SOLELY AND DIRECTLY BY THE NEGLIGENCE OF CANON OR ANY AUTHORIZED SERVICE PROVIDER. THIS WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THE DRUM UNIT AND STATES SUCH PURCHASER'S EXCLUSIVE REMEDY.

CONDITIONS OF WARRANTY

The defective Drum Unit must be returned to Canon, freight prepaid, in the original packaging with all necessary documentation (machine log, a sample copy, warranty claim tag or other documents as required from time to time) to receive the Credit or replacement Drum Unit.

Credits will be based on the then current dealer price for the replacement Drum Unit, and will be pro-rated based on the copies made as indicated by the service report submitted by the Canon Authorized Service Representative.

EXAMPLE OF CREDIT

Drum Unit inoperative after: 32,000 copies in less than ONE YEAR of use.

Calculation of the Credit may be illustrated by the following example:

Calculation:: $\underline{64,000 - 32,000}$ = $\underline{32,000}$ = 50% of the dealer price of the replacement Drum Unit.

                    64,000   64,000

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

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FA7-5902   (000)

T.   Acronyms

Acronym	Description
10 Base-T	10Mbps base band data transmission over twisted-pair copper wire
A	Ampere
AC	Alternating Current
C	Centigrade
CD-ROM	Compact Disc - Read Only Memory
CIS	Contact Image Sensor
cm	Centimeter
Cont	Contents
CPU	Central Processing Unit
CTT	Certified Technical Trainer
DADF	Duplex Automatic Document Feeder
DIMM	Dual In-line Memory Module
dpi	Dots-per-inch
DSE	Device Status Extension
ECM	Electronic Control Module
ECP	Enhanced Capabilities Port
F	Fahrenheit
FCOT	First Copy Output Time
FDIMM	Flash Double Inline Memory Module
GB	Gigabyte
gsm	Gram Per Square Meter
HDD	Hard Disk Drive
Hr	Hour
HxWxD	Height x Width x Depth
Hz	Hertz
ID	Identification
in	Inch
JBIG	Joint Bi-Level Image Experts Group
Kbps	Kilobits Per Second
kg	Kilogram
kW	Kilowatt
lbs.	Pounds
LCD	Liquid-Crystal Display
LDG	Ledger
LED	Light-Emitting Diode
LGL	Legal
LMS	Licensing Management Server
LPD	Line Printer Daemon (protocol)
LPR	Line Printer Request
LTR	Letter
MB	Megabyte
MCV	Monthly Copy Volume
MEAP	Multifunctional Embedded Application Platform
MHz	Megahertz
mm	Millimeter
NEMA	National Electrical Manufacturers Association

Acronym	Description
OCR	Optical Character Recognition
OS	Operating System
PAP	Printer Access Protocol
PC	Personal Computer
PCB	Printed Circuit Board
PCL	Printer Control Language
PDF	Portable Document Format
ppm	Pages-per-minute
QA	Quality Assurance
RAM	Random Access Memory
RAW	Read-After-Write
RJ-45	Registered Jack - 45 (8 wire connector used in networking)
RUI	Remote User Interface
SCS	System Controller Subsystem
SCSI	Small Computer Systems Interface
SE	System Engineer
Sq. Ft.	Square Feet
SST	Service Support Tool
TCP/IP	Transmission Control Protocol/Internet Protocol
TIFF	Tagged Image File Format
TSC	Technical Support Center
UFR	Ultra Fast Rendering
USB	Universal Serial Bus
V	Volt
W	Watts
WARP	Warranty Administration Reduction Program