



IBM Global Labeling Guide

Volume 6 - FRU Package Labels

IBM Part Number 31L5241, EC Level P62512

Release: 5.7

Current edition: October 10, 2014

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1. Introduction

This is volume 6 of the Global Labeling Guides which defines the FRU label requirements for IBM and IBM's business partners and customers.

Before reading this volume you should first read volume 1 "Overview and General Rules" (IBM Part Number 31L5038). It contains background information and references that pertain to all of the volumes in the Global Labeling series.

A list of all the volumes of the Global Labeling Guide series is contained in volume 1.

2. Definition and Scope

FRU is the acronym for "Field Replaceable Unit". A FRU is an orderable product identified by its FRU part number and can be a single part, a kit or a complete assembly. FRUs can either be serialized or not serialized.

The labeling and marking requirements of this document apply to FRU packages for field use only. They do not apply to parts packages for manufacturing use.

A FRU package can contain just one (major) item or the FRU can be a kit of several items, each having a separate (manufacturing) part number.

FRU packages can also contain used parts which have undergone a certain inspection or test procedure. Refer to IBM Corporate Standard C-S 0-5103-007 for classification of FRU parts and the corresponding test requirements.

The following terms are equivalent for this specification and may be used interchangeably

- Field Replaceable Unit (FRU)
- Customer Replaceable Unit (CRU)
- Service Part / Field Service Part
- Spare Part

According to the differences outlined above, FRU package label contents may vary depending on the configuration, type, serialization or reutilization.

3. Related Documentation

The following documents (standards and engineering specifications) are referred to in this guideline and contain further information and advice on specific topics.

- C-S 1-1121-015 - Automatic Identification for Packaging, Distribution and Manufacturing
- C-S 0-2535-004 - Marking of IBM Parts
- C-S 0-5103-007 - Reutilization of Parts in IBM Products
- ES 31L5038 - Global Labeling Guide Volume 1 – Overview and General Rules
- ES 36P3127 - Global Labeling Guide Vol.8 – Symbols and Special Labels
- ES 39Y7456 - Global Labeling Guide Vol.9 – IBM Global RID Barcode Label
- ES 46G3772 - Baseline Environmental Requirements for Supplier Deliverables to IBM
- CP 10.13 - Corporate Logistics Procedure
- ISO 3166 - English country names and code elements

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4. Requirements on FRU Package Labels

This section addresses the minimum labeling requirements for FRU packages. These requirements reflect the specific differences and characteristics of the FRUs.

4.1 General Label Layout

Figure 1 below shows the general layout of the FRU package label. Please refer to table 1 of section 3.2 and the label examples in Annex A for details of the label format and the data elements presentation.

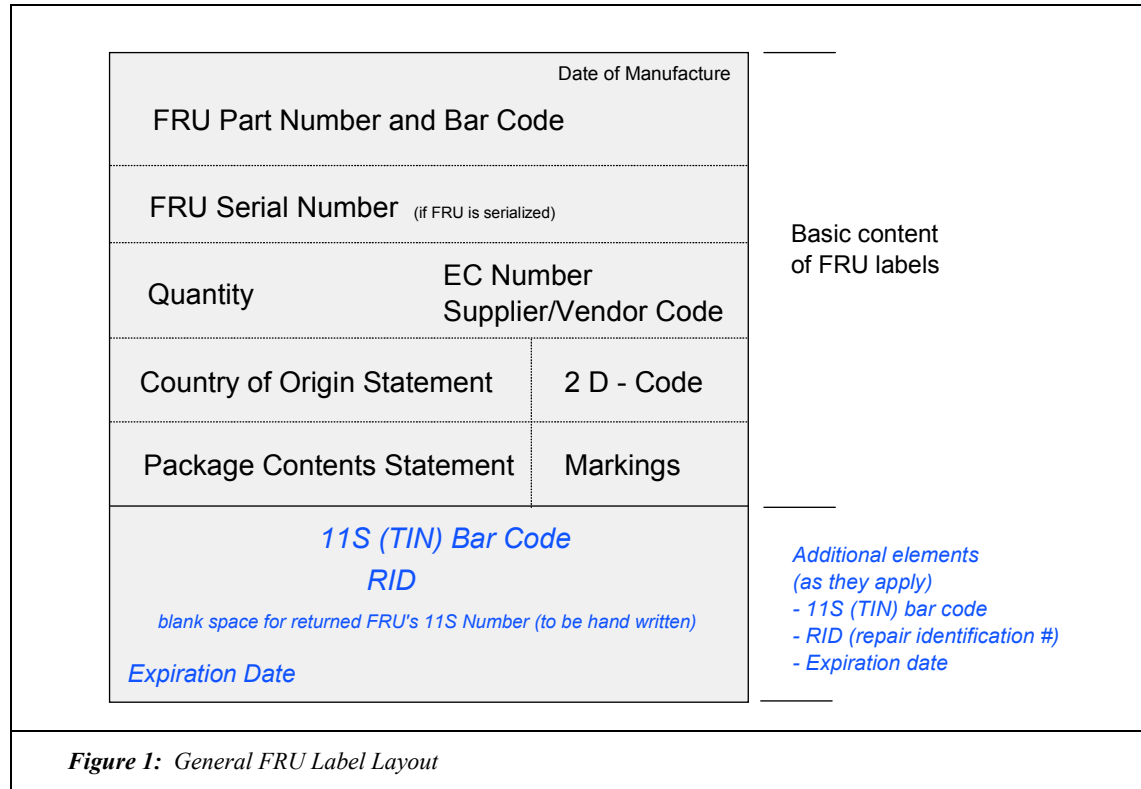


Figure 1: General FRU Label Layout

4.2 Data Elements used on FRU Package Labels

	Description	Format*	DI*	Detailed Explanation and Requirements
1	FRU Part Number (human readable and bar coded)	AN 7 Pxxxxxxx	P	REQUIRED. Use 5 mm minimum BOLD characters for easy reading. LARGER SIZES ARE RECOMMENDED. For the bar code title use one of the following formats 'FRU Part #:', 'FRU P/N:' or 'FRU PN:'. The number itself must be the most prominent text item (word) on the label. No other text item should be printed larger (the bar code is not a text item). For small labels, the size may be reduced to 3 mm. Use data identifier "P" with the bar code. Example: FRU part number 1234567 must be encoded as P1234567 in the bar code.

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	Description	Format*	DI*	Detailed Explanation and Requirements
2	Date of manufacture (human readable text)	yyyy-mm-dd	-	REQUIRED. Date of manufacture must be printed in yyyy-mm-dd format. The date must be preceded by the abbreviation 'Mfg.Date.' If not available, the date of packing and labeling may be shown. Descriptive text like "(YYYY-MM-DD)" must be printed following or directly below the date of manufacture. See examples in appendix A. Note: the manufacturing date shown on the FRU package label must match the date shown on the FRU part label.
3	EC Level (human readable and/or bar coded)	AN 6..8	2P	OPTIONAL. E/C level is optional on FRU packages. However, each brand should decide this based on anticipated 'Distribution Stock Actions' (DSAs). This would enable the field to sort parts for DSA's without opening the packages! It may also work with the date, E/C, assembly number, serial number, or others. Individual brand requirements may supersede this option for certain parts. Products that are typically EC sensitive should carry the EC number on the label.
4	Supplier/Vendor Code (human readable text)	AN 10	-	OPTIONAL. SAP VLC (vendor lead client) code that is assigned to the IBM plant or vendor manufacturing the FRU. The plant of control must decide whether this is required on the label for any reasons, for example Distribution Stock Actions (DSAs).
5	Country of Origin Statement (human readable text)		-	REQUIRED. The Country of Origin statement must be printed on the FRU package label as per section 7.0 of the Global Labeling Guide Volume 1 (IBM part number 31L5038). Example: "Made in Japan". Note: if a FRU package contains merchandise from different countries of origin, then the full English names of all the countries of origin of the merchandise must be specified on the FRU package label. The country of origin of the article that represents the essential character of the kit must be listed first. Example: "Contains merchandise from : Canada, Mexico". Note: do not use the word 'countries' in the origin statement.
6	Country of Origin Code (only in 2D symbols)	AN 2	4L	REQUIRED if data is encoded in a 2D symbol. Use the 2 character ISO 3166 country code. Put in sequence after quantity Note: If there are items of multiple countries in the package, do not encode any origin codes.

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	Description	Format*	DI*	Detailed Explanation and Requirements
7	Quantity (human readable text)	N 1..8	Q	REQUIRED Pertains to the FRU part number. Use 'Qty: x' or 'Quantity: x'. Show the quantity, even if it is 1. Default unit of measure is "each". List the unit of measure if not "each".
8	Serial Number (human readable)	AN 7..12		OPTIONAL This specification does not mandate serialization of FRUs, nor does it require that serialized parts carry this on the package exterior unless required by element 9 (below). However, it is suggested that serialized parts include this information on the FRU label since this can be used to verify if returned parts are new returns versus used ones.
9	'11S' Bar Code Tracking Identification Number (TIN) (human readable and bar coded)	AN 16..22	11S	REQUIRED if the FRU is serialized and classified as APC 4 (see Corporate Logistics Procedure CP 10.13). OPTIONAL, but strongly recommended for all other serialized (non APC 4) FRUs. Note : the 11S bar code (TIN) combines the production part number (not the FRU part number unless they are the same) and the serial number into one single bar code. On the label, leave adequate space for hand writing the 11S (TIN) of the old part that is sent back to the IBM parts warehouse using the same packaging. Note: refer to IBM Corporate Standard C-S 0-2535-004 for information about the 11S.
10	Package Contents Statement: Production Part Number or Assembly Part Number or Manufacturing Part Number, or CSP Number (human readable text) and the parts' quantities	AN	-	REQUIRED if a) the FRU part number is not printed on the actual part or b) the FRU is a kit containing different parts. Customs officials will be checking this information. It will reduce problems when packages are opened for inspection to identify the parts inside. However, it must be printed in a smaller font than the FRU part number. Example: "Contains Assembly Part Number xxxxxxxx (1pcs) and Packing Material". Note: do not use "P/N" designations with assembly, production, manufacturing or CSP numbers. Only the FRU P/N should have it.
11	Battery Recycling Markings - the EU crossed-out wheeled bin container	-	-	REQUIRED if the specific marking is necessary to meet regulatory/legal requirements. Note: the EU crossed-out wheeled bin container with

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	Description	Format*	DI*	Detailed Explanation and Requirements
	- Taiwan battery mark			<p>supplemental wording and the Taiwan battery mark (see figures 9 and 10 in appendix B) must be printed on the FRU package label, the package directly or applied as a separate label if the FRU package contains a device battery or a part containing a battery. The EU crossed-out wheeled bin's size must be 1cm x 1cm at a minimum excluding the supplemental wording.</p> <p>Refer to Engineering Specification P/N 46G3772 for legal requirements and Global Labeling Guide vol.8 - P/N 36P3127 for additional information and references to drawings, labels and artwork.</p>
12	Battery Capacity Marking in Ah (Ampere hours) or mAh (milli Ampere hours)	-	-	<p>REQUIRED if</p> <p>the FRU is a portable rechargeable battery. The capacity rating in Ah (Ampere Hours) or mAh (milli Ampere hours) must be shown on the label of the package according to the EU Battery Directive 2006/66/EC and corresponding Commission Regulation No 1103/2010. The minimum size of the capacity marking text on the package must be 5 x 12 mm (height x length)</p> <p>Example: 1.2 Ah or 1200 mAh</p> <p>Note 1: rechargeable battery packs that have the capacity marking on the battery case do not require the capacity marking on the packaging of these FRUs.</p> <p>Note 2: Uninterruptible Power Supplies (UPSs), or Integrated Battery Backup Features (IBFs) including their replacement batteries are not considered portable batteries and therefore do not require capacity marking on the packaging of these FRUs.</p> <p>Note 3: FRUs that contain small rechargeable cells or batteries that are too small to have a capacity marking on the cell or battery, must have a capacity marking on the FRU package as described above.</p> <p>Please refer to IBM Engineering Specification 46G3772 for information on capacity marking of the batteries themselves.</p>
13	RID (Repair Identification) number and bar code	AN 22		<p>REQUIRED if</p> <p>the FRU has been processed by a repair vendor and made available again for use as spare part. Definition of the data structure and segments see Global Labeling Guide Vol.9 - P/N 39Y7456</p>
14	Expiration Date	yyyy-mm-dd	-	<p>REQUIRED if</p> <p>the FRU by its nature and definition has an expiration date after which it needs to be retrieved from stock and made unavailable for regular use as a spare part. This date must be preceded by the abbreviation 'Exp.Date:'. Descriptive text "(YYYY-MM-DD)" must be printed following or directly</p>

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	Description	Format*	DI*	Detailed Explanation and Requirements
				below the expiration date. See examples in appendix B. Note 1: the date shown on the FRU package label must match the date shown on the FRU itself. Note 2: An expiration date for stand alone rechargeable batteries SHOULD NOT be printed on the FRU package label unless the battery is not approved for recharge. For batteries approved for recharge, the 'Expiration Date' has been replaced by the 'Recycle Date' on the 'Recharge Schedule Label'
15	Recharge Dates	yyyy-mm-dd	-	REQUIRED if the FRU is a stand alone rechargeable battery, or UPS, or IBF. Note that this information needs to be shown on the 'Battery Recharge Schedule' label which needs to be placed in close proximity to the FRU package label. The entire recharge history must be recorded on this label. The date represents the year, month and day where the battery was last recharged and the date the next recharge is due. See section 4.4 for details.
16	Recycle Date	yyyy-mm-dd	-	REQUIRED if the FRU is a stand alone rechargeable battery, or UPS, or IBF. This date represents the year, month and day when the battery can no longer be used and must be recycled. It must be included on the 'Battery Recharge Schedule' label. See section 4.4 for details.
17	Other Data Elements / Bar Codes (human readable and/or bar coded)		-	OPTIONAL. Human readable and / or bar coded data elements that support secondary processes may be added at the bottom of the FRU label or applied as a separate label in direct proximity to the FRU label.
18	Part Name, Description		-	PROHIBITED. Reason is that this description must match exactly any description residing elsewhere on packing lists, invoices, or other paperwork accompanying shipments. Errors lead to delays and lost articles and can attract pilferage. All FRUs must be prepared for shipping globally.
19	Supplier Name or Logo		-	PROHIBITED. On FRU labels no supplier names and / or logos shall appear. Exceptions to this rule must be very carefully considered and need approval by business unit management. Supplier names and logos however may appear on the package surface (carton) or tamper evident tapes and sealing.

Table 1: Data elements used on FRU package labels

* = see Appendix A. of Global Labeling Guide Volume 1 (IBM part number 31L5038).

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4.3 Special Marking Instructions

This section defines any special marking requirements and explains the details of the marking instructions.

- For a single item FRU package, the FRU part number on the package **must** be the same as the FRU part number on the item itself. This is to avoid confusion and trouble at customs clearance.
- If a FRU package contains a kit with different items, the items' part numbers **must** be listed on the FRU package label and must match those applied on the parts. Same reason as above. Use the words 'This FRU P/N is a kit containing following parts : ' and list each part number and their quantity in the package. If there is material which does not have a part number, print their generic name or description. See example A2. Alternatively to printing all part numbers of the kit items on the FRU package label, a 'manifest sheet' could be put into the FRU box that shows all part numbers and their quantities.

Parts which are individually packaged for production, but are not intended to be used for field replacement purposes should be identified and marked, "Manufacturing Use Only; Container not Intended for FRU Shipment".

- Interior packages which are part of a larger cushioned assembly should be marked "Interior package, not suitable for shipment alone". This will help prevent misuse of these interior packages in the field.
- Packaging of battery FRUs and FRUs that contain batteries must be marked with the EU crossed-out wheeled bin container with supplemental wording and the Taiwan battery mark indicating that the battery must not be disposed of to the 'normal' household waste. This marking must be either on the FRU label or shown (printed or labeled) on the FRU package. See figures 10 and 11 of Appendix A for example labels and figures 12 and 13 of Appendix B for pictures of the marks. Note that the EU crossed-out wheeled bin's size must be 1cm x 1cm at a minimum excluding the supplemental wording. For more details on the requirements see IBM Engineering Specification 46G3772 and Global Labeling Guide vol.8 - P/N 36P3127 for additional information and references to drawings, labels and artwork.
Note: the symbols are mandatory for battery FRUs and FRUs containing batteries, but they may also be shown on FRUs that don't contain batteries.
- Packaging of lithium battery FRUs and FRUs that contain more than 4 lithium cells or 2 lithium batteries (button cells are exempt) per package must be marked with a 'Lithium Batteries Handling Label'. Refer to Global Labeling Guide volume 8 (section 7) and IBM Engineering Spec 92F6933 (section 6.3.2) for details.
- Some FRUs, e.g. non-rechargeable batteries, do have an expiration date. This is the date by which the FRU needs to be removed from stock and made unavailable for field orders. This date must be shown on the FRU package label in the format as defined in table 1.
Other products, such as Field Use Materials (Chemicals), may also require an expiration date. The disposition of the treatment of 'expired' FRUs (e.g. scrap/discard) needs to be determined by procedures controlling the process.
- FRUs that are rechargeable batteries/accumulators need to be recharged after a certain period on shelf. The recharge dates must be shown on a separate Battery Recharge Schedule label. See section 4.4 for details.

The following Table gives a general overview by commodity on the application of manufacturing, expiration and recharge dates.

Commodity	Mfg Date	Exp Date	Recharge/ Recycle Date
Mechanical Parts	X		
Electronic Components w/o batteries	X		
Electronic Components w/ non rechargeable batteries	X	X	
Field Use Materials (Chemicals)	X	X	
Chemical Product Supplies	X	X	

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Non-rechargeable batteries	X	X	
Rechargeable batteries	X		X
UPS/BBU systems	X		X
Any other item not covered above that has an expiration date.	X	X	

Table 2: Manufacturing, expiration and recharge date application

4.4 Special Requirements for FRU Packages containing Rechargeable Batteries and UPS/IBFs

FRUs that are stand alone rechargeable batteries, Uninterruptible Power Supplies (UPS), or Integrated Battery Features (IBFs) must be recharged according to a defined battery recharge schedule. This recharge schedule is determined by the battery manufacturer and normally allows for a maximum of two recharges to ensure quality. The ‘Recycle’ date is used as a guideline for removal from stock and proper disposal/recycling.

To monitor and control the recharge process a ‘Battery Recharge Schedule’ label must be applied to the FRU package and – if space permits – to the battery itself. Depending on the number of allowed recharges, either the label of figure 2 or the label shown in figure 3 must be used. The size of the label must be such that the print is still legible. Minimum font size to be 1.8 mm.

Note: There may be some Battery PNs where IBM may approve more recharges than 2. In those cases the label should be adjusted accordingly to accommodate the extra recharge cycles.

Each recharge must be documented by filling in the appropriate date on the dotted lines of the ‘Battery Recharge Schedule’ label. Alternatively printing a new label with added dates and covering the old label with it would be an option.

Note: there are rechargeable batteries that are not to be recharged while they are in stock. Those batteries will not get a ‘Battery Recharge Schedule’ label, but will just show an expiration date on the FRU package label.

The expiration date is used as a guideline for removal from stock and proper disposal/recycling.

<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p>Battery Recharge Schedule (Date representation: YYYY-MM-DD)</p> <p>Date next recharge or recycling is due: Date last recharged:</p> <p>Recharge: <u>2010-08-15</u></p> <p>Recycle:</p> </div>	<div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p>Battery Recharge Schedule (Date representation: YYYY-MM-DD)</p> <p>Date next recharge or recycling is due: Date last recharged:</p> <p>Recharge: <u>2010-08-15</u></p> <p>Recharge:</p> <p>Recycle:</p> </div>
<p><i>Figure 2: Battery Recharge Label allowing for 1 recharge cycle</i></p>	<p><i>Figure 3: Battery Recharge Label allowing for 2 recharge cycles</i></p>

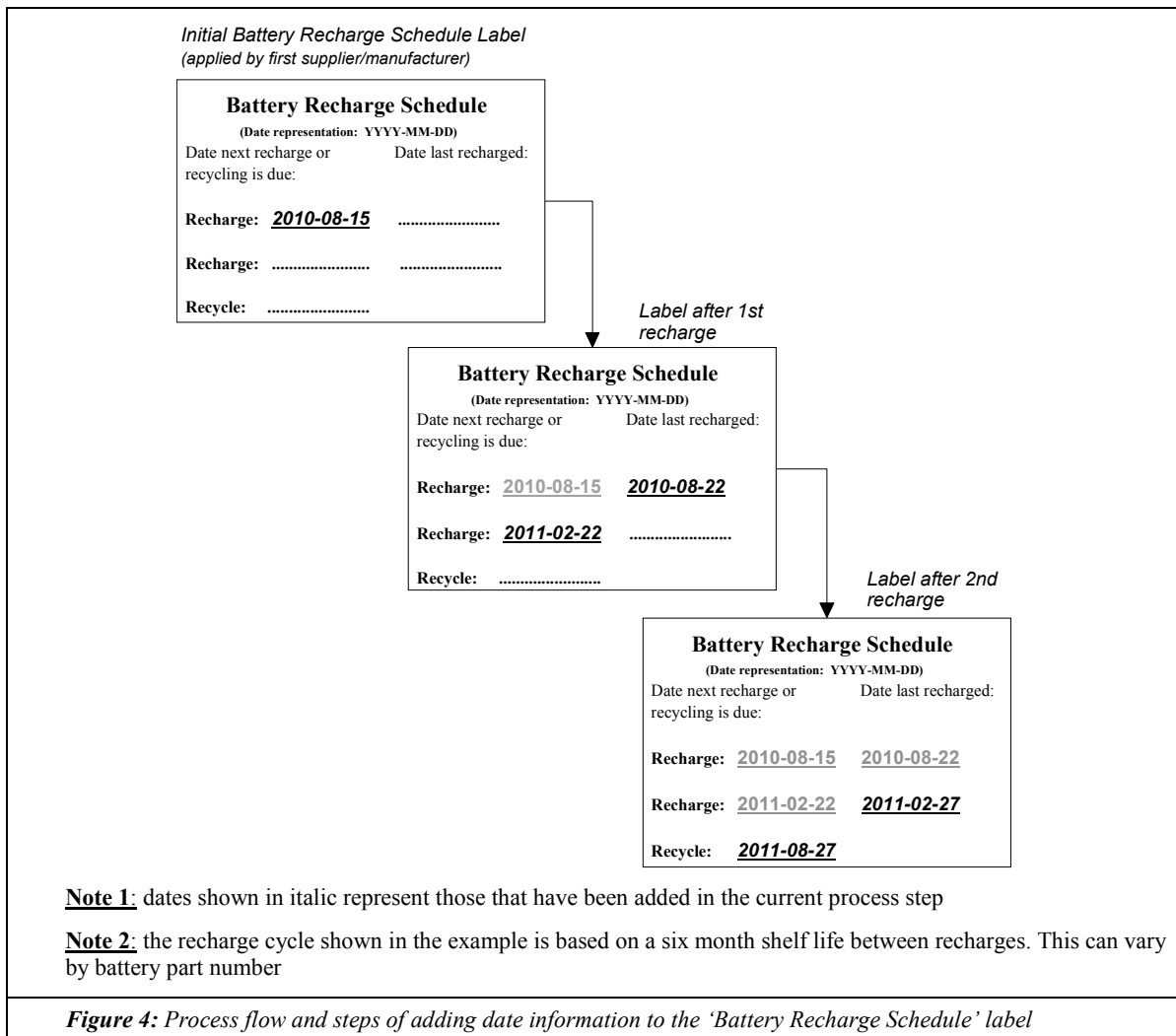
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The 'Battery Recharge Schedule' label must follow these requirements:

- The initial label must be applied by the Supplier to IBM.
- The label must be applied in close proximity to the FRU package label.
- The battery Supplier must include the date of first recharge in the column 'Date next recharge is due', but should leave all other dates blank.
- The recharge vendor must add the 'Date of last recharge' and the corresponding 'Date next recharge is due' based on the technical battery specifications.
- The recharge vendor must add the recycle date after the final recharge
- The dates must be stamped or legibly hand written on the label in the corresponding fields using the specified date format, i.e. YYYY-MM-DD.

Figure 4 below shows a flow diagram of the process using an example for a battery approved for 2 recharge cycles.



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4.5 Special Requirements for FRU Packages containing Reutilized Parts

As per Corporate Standard C-S 0-5103-007, reutilized parts are categorized as follows :

- ETN (ETN = equivalent to new)
- CSP (CSP = certified spare part)
- Used (= not ETN nor CSP)

FRU packages for field use that contain ETN or CSP parts must be marked with a “**Certified Reutilized Part**” label in addition to the FRU package label. Refer to Corporate Standard C-S 0-5103-007 for details and further requirements on reutilized parts. FRU packages containing ‘Used’ class parts must be labeled with the ‘Used Parts’ label.

Note: do not print the word ‘Used’ on the FRU package label.

Examples of “Certified Reutilized Part” and “Used Parts” labels are shown in section A.4, A.5 and Annex B of this document, in volume 8 of the Global Labeling Guide (part number 36P3127) and in C-S 0-5103-007.

4.6 Label Size

The size of the label must ensure that all applicable data element requirements per the table in section 3.2 are met.

4.7 Label Placement

If the package size allows, apply two labels in the upper right corners of adjacent vertical sides of the package. Refer to volume 1 of the Global Labeling Guides (P/N 31L5038) for further details.

4.8 2D Symbols

Although 2D symbols are not mandatory at the moment for all FRU package labels, it is strongly recommended to print a 2D symbol on the FRU package label. Use Data Matrix ECC200 symbology. Include all data elements listed in the table of section 4.2 that have a data identifier assigned.

Data structure and syntax of the encoded data in the 2D symbol must be per Corporate Standard C-S 1-1121-015, section 19.

4.9 Field Reseal – IBM internal use only

The “Field Reseal” label (PN 45D3079) must be used by SSRs (System Service Representative) to seal the part box if it has been opened and the part has not been used, unless there is an equivalent process for resealing new parts in the field. See figure 16 in Appendix B for an example label. Refer to C-S 0-5103-007 for additional process details.

4.10 Special Country Requirements

4.10.1 Indonesia

Any FRU part that is a Printer, Monitor or Laptop/Notebook/Notepad with the HS Code noted in the table below, that are imported into Indonesia must have a label in Bahasa Indonesia language affixed to both the physical product and the immediate package. The scope of affected products is limited to specific HS (Harmonized System) Codes. The label content requirement for each HS code is shown in the table below.

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<u>Product Type</u>	<u>HS Code(s)</u>	<u>Information Element on the Label</u>	<u>Immediate Package Label</u>	<u>Article/Physical Goods Label (for reference)</u>
Monitor	8528.41.10.00	(1) Brand Name	X	X
	8528.41.20.00	(2) Importer Name & Address	X	Not required
	8528.49.10.00		X	
	8528.49.20.00	(3) Voltage (Volt) and Frequency (Hz): 100-240v / 50/60Hz	X	X
	8528.51.10.00	(4) Country of Origin	X	X
8528.51.20.00	X			
8528.51.30.00				
Printer	8443.32.10.10	(1) Brand Name	X	X
	8443.32.20.10	(2) Importer Name & Address	X	Not required
		(3) Printer Type/Model	X	Not required
		(4) Voltage (Volt) and Frequency (Hz): 100-240v / 50/60Hz	X	X
		(5) Country of Origin	X	X
Laptop, Notebook, Notepad	8471.30.10.00	(1) Brand Name	X	X
	8471.30.20.00	(2) Importer Name & Address	X	Not required
		(3) Voltage (Volt) and Frequency (Hz): 100-240v / 50/60Hz	X	X
		(4) Country of Origin	X	X

Table 3: Information required on labels, by product type and HS Code

The following tables show label examples in Bahasa Indonesian language for all product categories. The labels are also shown in English for reference purposes only.

Note 1: When using any of the labels, be sure to only use those with the Indonesian language.

Note 2: The labels are only required for shipments into Indonesia.

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Immediate FRU Package Labels:

<u>Product Type</u>	<u>Label in Bahasa Indonesia</u>	<u>Label in English</u> <u>(for reference only)</u>
<u>Monitor</u>	<p align="center">Monitor Komputer</p> <p>Diimpor oleh : PT. IBM Indonesia Jakarta – Indonesia Tegangan : 100-240 V Frekuensi : 47 – 63 Hz Dibuat di : Cina</p>	<p align="center">Monitor Computer</p> <p>Imported by : PT. IBM Indonesia Jakarta – Indonesia Voltage : 100-240 V Frequency : 47 – 63 Hz Made in : China</p>
<u>Printer</u>	<p align="center">Mesin Pencetak (Printer)</p> <p>Jenis : Hitam Putih / Berwarna Diimpor oleh : PT. IBM Indonesia Jakarta – Indonesia Tegangan : 100-240 V Frekuensi : 47 – 63 Hz Dibuat di : Cina</p>	<p align="center">Printer</p> <p>Type/Model : White / Color Imported by : PT. IBM Indonesia Jakarta – Indonesia Voltage : 100-240 V Frequency : 47 – 63 Hz Made in : China</p>
<u>Laptop</u> <u>Notebook</u> <u>Notepad</u>	<p align="center">Komputer Laptop</p> <p>Diimpor oleh : PT. IBM Indonesia Jakarta – Indonesia Tegangan : 100-240 V Frekuensi : 47 – 63 Hz Dibuat di : Cina</p>	<p align="center">Computer Laptop</p> <p>Imported by : PT. IBM Indonesia Jakarta – Indonesia Voltage : 100-240 V Frequency : 47 – 63 Hz Made in : China</p>

Table 4: Examples of Package Labels by Product Type (English version for reference only)

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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Article/Physical Goods Label (for reference)

<u>Product Type</u>	<u>Label in Bahasa Indonesia</u>	<u>Label in English</u> (for reference only)
<u>Monitor</u>	Monitor Komputer Tegangan : 100-240 V Frekuensi : 47 – 63 Hz Dibuat di : Cina	Monitor Computer Voltage : 100-240 V Frequency : 47 – 63 Hz Made in : China
<u>Printer</u>	Mesin Pencetak (Printer) Tegangan : 100-240 V Frekuensi : 47 – 63 Hz Dibuat di : Cina	Printer Voltage : 100-240 V Frequency : 47 – 63 Hz Made in : China
<u>Laptop</u> <u>Notebook</u> <u>Notepad</u>	Komputer Laptop Tegangan : 100-240 V Frekuensi : 47 – 63 Hz Dibuat di : Cina	Computer Laptop Voltage : 100-240 V Frequency : 47 – 63 Hz Made in : China

Table 5: Examples of Article Labels by Product Type (English version for reference only)

4.11 Engineering Change (EC) Stock Actions – Re-Labeling of FRUs

EC's can drive relabel stock actions which require the old down level field replaceable unit (FRU) part number (P/N) to be relabeled to the new up level FRU P/N for all Service parts inventory worldwide.

The "EC P/N Change Label" shown in Figure 5 contains both the old down level FRU PN and the new up level FRU PN for cross reference purposes. This allows Service to label the FRU packaging "only" with the new up level FRU part number in the field stocking locations and provide Customs the relationship between the FRU P/N label on the FRU packaging and the FRU P/N label physically on the FRU part.

The label layout includes the title "EC P/N Change" at the top of the label. The new up level P/N must be shown below the title and printed in a larger font than the down level P/N and be bar coded. The old down level P/N must be shown below the new up level P/N bar code and it must not be bar coded.

The label must be placed next to the existing FRU package label and it must be positioned on the package to ensure it does not cover any information on the existing FRU package label.

See section 4.3 for any further special marking instructions.



Figure 5: EC P/N Change Label for FRU Packages

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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Appendix A. Examples of FRU Package Labels

This section shows a variety of different FRU package labels that may occur in practice, depending on whether the FRU is serialized or not, new, used, repaired, single item or multi part kit.

A.1 Single Item FRU Package Label (non-serialized)

A label for a non-serialized FRU should look like shown in the following example:

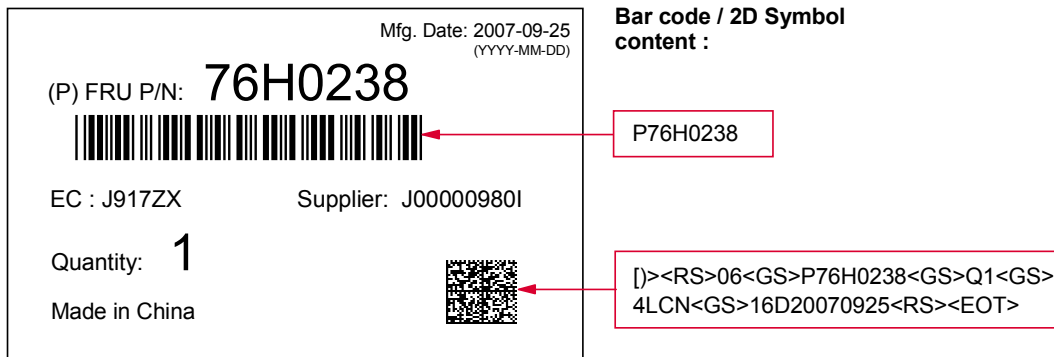


Figure 6 : FRU Package Label for a non-serialized FRU containing a single item

A.2 Multiple Item (Kit) FRU Package Label (non-serialized)

A label for a non-serialized FRU containing a kit with multiple items may look like shown in the following example:

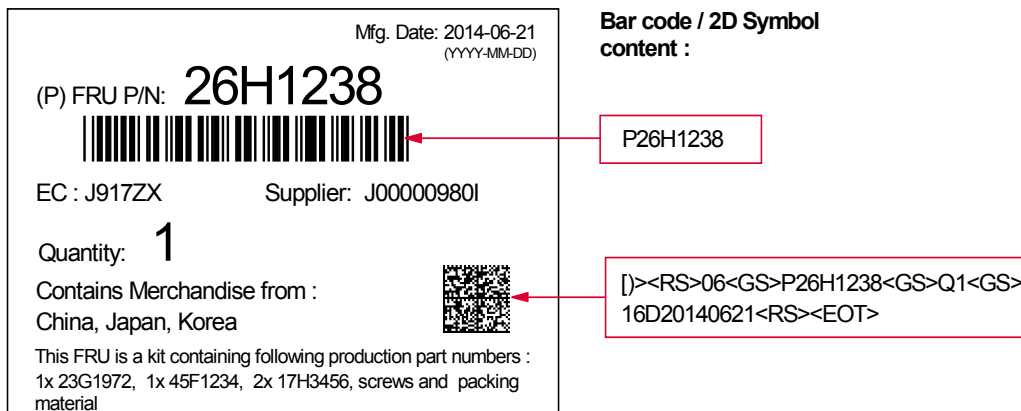


Figure 7: FRU package label for a single, non-serialized FRU kit containing several items

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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A.3 Serialized Item FRU Package Label

A label for a serialized, single item FRU should look like shown in the following example:

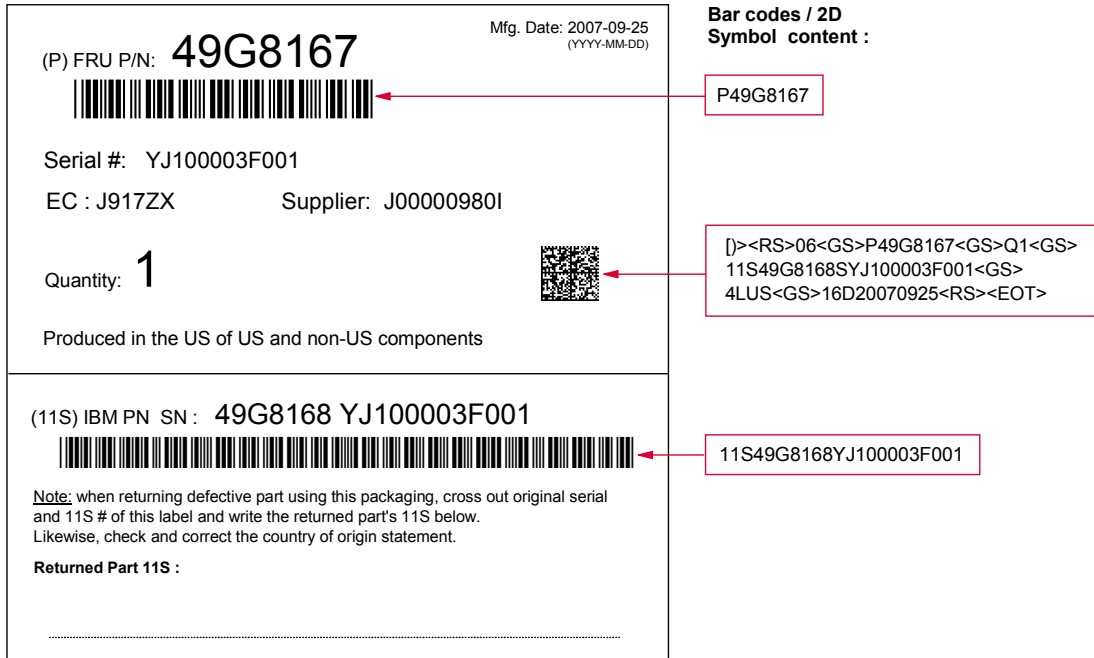


Figure 8 : FRU package label for a serialized, single item FRU

A.4 FRU Package Label Containing an ETN Part

Following is an example of a non-serialized FRU package label required for a ETN (equivalent to new) part:



Figure 9 : FRU package label for an ETN non-serialized single item FRU and its companion 'Certified Reutilized Part' label (PN 45D3078)

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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A.5 FRU Package Label of a Repaired/Reconditioned Part

A label for a serialized, single item FRU that has been repaired (by e.g. a repair vendor) should look like the following example:




<p>(P) FRU P/N: 25H2011</p>  <p>EC: J917ZX Supplier: J00000980I</p> <p>Serial #: YJ1ACDC3G992</p> <p>Quantity: 1</p> <p>Made in Japan</p> <p>(11S) IBM PN SN : 25H2010YJ1ACDC3G992</p>  <p>Note : when returning defective part using this packaging, cross out original serial and 11S # and hand write the returned part's 11S below. Likewise check and correct the country of origin statement.</p> <p>Returned Part 11S :</p> <p>.....</p> <hr/> <p>(52S) RID : 25H2011USVC0725C008</p> 	<p>Bar code / 2D Symbol content :</p> <p>P25H2011</p> <p>[]><RS>06<GS>P25H2011<GS>Q1<GS>4LJP<GS>16D20070925<GS>11S25H2010SYJ1ACDC3G992<RS><EOT></p> <p>11S25H2010YJ1ACDC3G992</p> <p>52S25H2011USVC0725C008</p>
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Figure 10 : FRU package label for a used and repaired, serialized single item FRU

Note: the ‘Certified Reutilized Part’ label (PN 45D3078) is not shown, but needs to accompany the FRU label.

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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Appendix B. Examples of FRU Package Labels containing Batteries

B.1 FRU Package Label with Expiration Date

Mfg. Date: 2013-07-01 (YYYY-MM-DD)	
(P) FRU P/N: 76H0238	 廢電池請回收
	
EC : J917ZX	Supplier: J00000980I
Quantity: 1	Batteries 
Made in China	Exp.Date: 2015-06-30

Figure 10 : FRU package label for a single item FRU with expiration date

B.2 FRU Package Label with Recharge Date






Mfg. Date: 2009-08-25 (YYYY-MM-DD)		Bar code / 2D Symbol content : P59P0017
(P) FRU P/N: 59P0017		
EC : J917ZX	Supplier: J00000980I	[]><RS>06<GS>P59P0017<GS>Q1<GS>4LJP <GS>16D20070925<GS>11S59P0018YJ1ACDC3F001 <GS>14D20100925<RS><EOT>
Serial No.: YJ1ACDC3F001	 	
Quantity: 1		
Made in Japan		11S59P0018YJ1ACDC3F001
(11S) IBM PN SN : 59P0018YJ1ACDC3F001		Battery Recharge Schedule (Date representation: YYYY-MM-DD)
		
Note : when returning defective part using this packaging, cross out original serial and 11S # and write the returned part's 11S below. Likewise check and correct the country of origin statement.		Date next recharge or recycling is due: _____
Returned Part 11S :		Recharge: 2010-08-25
.....		Recycle:

Figure 11 : FRU package label for a serialized, single item FRU having an expiration/recycle and a 'last recharge' date

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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B.3 FRU Package Label with Multiple Serialized Items and Recharge Date (Example)










<p>(P) FRU P/N: 22R4420</p>  <p>EC: J917ZX Supplier: J000009801 Quantity: 1 kit Made in Japan</p> <p>Mfg. Date: 2014-07-25 (YYYY-MM-DD)</p> <p>Batteries </p>  <p>原電池請回收</p>  <p>This FRU is a kit and contains 3 x Mfg P/N 22R4418 :</p> <p>(11S) IBM PN SN : 22R4418 YJ100003F001</p>  <p>(11S) IBM PN SN : 22R4418 YJ100003F002</p>  <p>(11S) IBM PN SN : 22R4418 YJ100003F003</p> 	<p>Bar code / 2D Symbol content :</p> <p>P22R4420</p> <pre>[]><RS>06<GS>P22R4420<GS>Q1<GS>4LJP<GS>16D20140725<GS>14D20150725<GS>11S22R4418YJ100003F001<GS>11S22R4418YJ100003F002<GS>11S22R4418YJ100003F003<RS><EOT></pre>
<p>Note : when returning defective part(s) using this packaging, cross out original 11S numbers of this label and note the returned part's 11S below. Likewise check and correct the country of origin statement if required.</p> <p>Returned Part 11S :</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>Battery Recharge Schedule (Date representation: YYYY-MM-DD)</p> <p>Date next recharge or recycling is due: Date last recharged:</p> <p>Recharge: 2015-07-25</p> <p>Recharge:</p> <p>Recycle:</p>



Figure 12: FRU package label for a serialized, multiple item FRU having a last recharge and expiration date


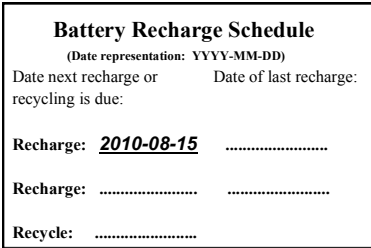
PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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Appendix C. Symbols and Marks used on FRU Package Labels

	<p>Batteries</p> 
<p>Figure 12 : The Taiwan Battery Recycling Mark</p>	<p>Figure 13 : EU Battery Recycling Mark - Crossed out wheeled bin with supplemental wording added for use on packaging</p>

	
<p>Figure 14 : Certified Reutilized Part Label, available in 3 sizes: P/N 45D3078 (package label), 45D3080 (small part label) and 45D3081 (large part label).</p>	<p>Figure 15 : Used Part Label, available in 3 sizes: P/N 74Y1049 (small part label), 74Y1050 (large part label) and 74Y1051 (package label).</p>

	
<p>Figure 16 : Service Field Reseal Label P/N 45D3079</p>	<p>Figure 17 : Battery Recharge Schedule Label (this example is for batteries that are specified for 2 recharge cycles)</p>

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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Appendix D. Revision History

Date	EC Level	Changes
2000-06-04	F84029	Created as a separate volume. Previously it existed as several pages in GA21-9261 "Packaging and Handling - Supplier and Interplant Requirements".
2001-09-26	F84029E	<ol style="list-style-type: none"> Made labels clearer. The Production number, Assembly Number, manufacturing use only number, or CSP number must be printed on the FRU package label if the FRU part number does not appear on the actual part. Removed the section on label material, because it's covered in volume 1. Removed Machine type, model from the list of "Data Fields used on FRU Package Labels". Made small changes to several of the "Detailed Explanations" in the "Data Fields used on FRU Package Labels".
2004-10-20	H70632	<ol style="list-style-type: none"> Added table of contents Moved revision history to new Appendix A Added Definition section Added general label layout section Moved label examples to new Appendix B Added requirement for compliance on label data vs. markings on parts Added an example of a label where the FRU is a kit contained of several items from several country of origins Added the plant code data element in the table of data elements and on one of the examples. Added requirements and an example for used parts labeling. Removed the 'Renovated / Reconditioned for' statement from the label example Added 2D codes on label examples
2007-11-01	L80080	<ol style="list-style-type: none"> Introduced expiration date and recharge date on FRU labels to which these apply Introduced uniform date formats for all date types: Manufacture, Expiration, and Recharge Introduced headers for all dates Replaced the plant code by the 'Vendor Lead Client' (VLC) code. Added a table to clarify applicability of dates Introduced the 52S RID (Repair Identification) number as separately defined element Moved label placement details to GLG volume 1 Replaced the term 'TIN' by 11S Removed origin bar code requirement Opened 11S bar code application for non APC4 parts for traceability purposes. Redone all label examples and added some with RID, expiration date and recharge date
2008-05-23	L80800	<ol style="list-style-type: none"> Introduced the EU crossed-out wheeled bin container and the Taiwan battery mark as new elements in table 1 Changed the sequence of some of the data elements of table 1 to a reflect their placement on the labels from top to bottom Modified figure 1 to include markings and figures 6 and 7 to show the crossed-out wheeled bin container and the Taiwan battery mark
2008-08-06	L81024	<ol style="list-style-type: none"> Modified the crossed out wheeled bin symbol for FRU packaging application with supplemental wording
2010-04-23	L80800D	<ol style="list-style-type: none"> Added requirements on lithium batteries handling labels (section 3.3) Change of the Country of Origin wording for US origin parts from "Assembled in the US of US and non-US components" into "Produced in the US of US and non-US components" to meet the Korean requirements on Country of Origin marking. This was requested and approved by the Import Compliance Office.

PN 31L5241	EC H70632 20 Oct 2004	EC L80080 01 Nov 2007	EC L81024 06 Aug 2008	EC L80800D 23 Apr 2010	EC L80800G 02 May 2011	EC L80800K 30 Mar 2012	EC P62512 21 Oct 2014
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IBM Labeling Specification

FRU Package Labels

Version No. 5.7
October 21, 2014

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Date	EC Level	Changes
2011-02-02	L80800F	<ol style="list-style-type: none">1. Clarified the interpretation and the presentation of 'recharge date'2. Added battery capacity marking requirement for battery FRUs3. Added label requirements for rechargeable batteries to reflect the recharge history4. Replaced the 'Serviceable Used Part' label by the new 'Certified Reutilized Part' label5. Added the new 'Used Part' label per C-S 0-5103-0076. Added new section to cover the new Field Reseal label7. Added section 3 for 'Related Documentation' showing other relevant documents references8. Converted the document from WordPro to Word9. Adapted layout of header and footer to GLG vol. 1
2011-05-02	L80800G	<ol style="list-style-type: none">1. Detailed the text of figures 14 and 15
2012-03-30	L80800K	<ol style="list-style-type: none">1. Added rechargeable battery capacity marking requirements in table 12. New section 4.10 for country specific requirements3. New section 4.10.1 for Indonesia local language labeling requirements4. Modification of the battery trash bin symbol: removed text "Europe only"
2014-10-21	P62512	<ol style="list-style-type: none">1. Introduced the 'EC P/N Change' label in new section 4.112. Created a new, separate Appendix with examples of FRU package labels that show an expiration date for non rechargeable batteries and a recharge schedule label for rechargeable batteries.3. Add flyer solution for showing FRU kit parts4. Added requirement to show quantities of FRU kit parts5. Section 4.8 : corrected wrong reference to element table and detailed reference to section of C-S 1-1121-015

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