Pitney Bowes Bar Code Standard Revision Summary
As of March 2003

Pitney Bowes has two corporate standards for Bar Code implementation:
B1385: Bar Code Symbology; and,
B1386: Bar Code Labels for Shipping/Receiving Packages

The standards were developed in 1986 with reference to Automotive Industry Action Group (AIAG) and Military Standards.

B1385: Bar Code Symbology lays the groundwork for a bar code implementation. It identifies which bar code language will be used along with all its technical definitions. The coded language chosen by Pitney Bowes is Code 39 (3-of-9). It is a variable length, discrete, self-checking, bi-directional, alphanumeric bar code. The technical definitions included in this document address: Reference Documents (Military Standards), Definitions (Start/Stop Characters, Quiet Zone…..), General Requirements (Height, Spacing…), Print Quality (Contrast, Spots, Voids…), Print Methods (Process, Tolerance…) and Label Materials (Opacity, Gloss….).

Changes Incorporated in the March 2003 release:

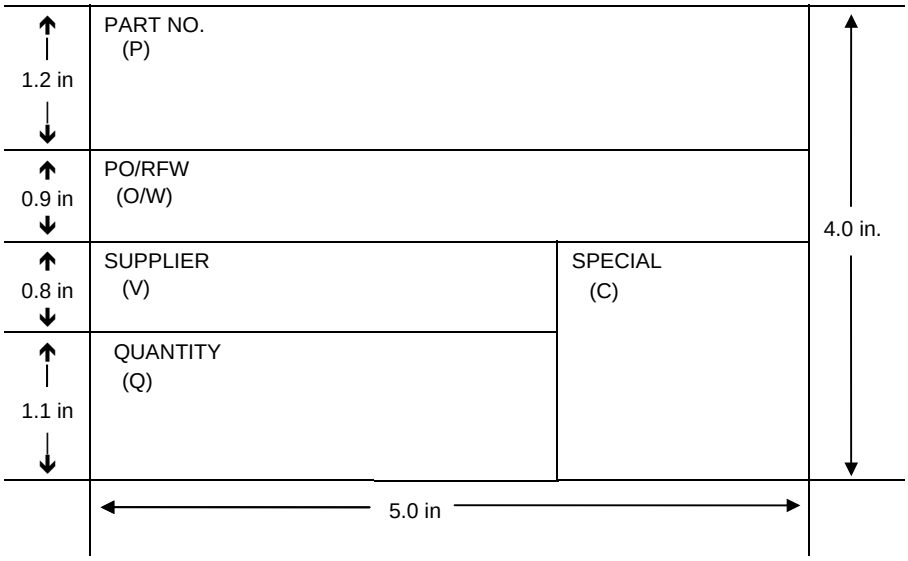
- Embedded Data Identifier Eliminated (Reference paragraph 4.6) and respective Appendix "A" was removed

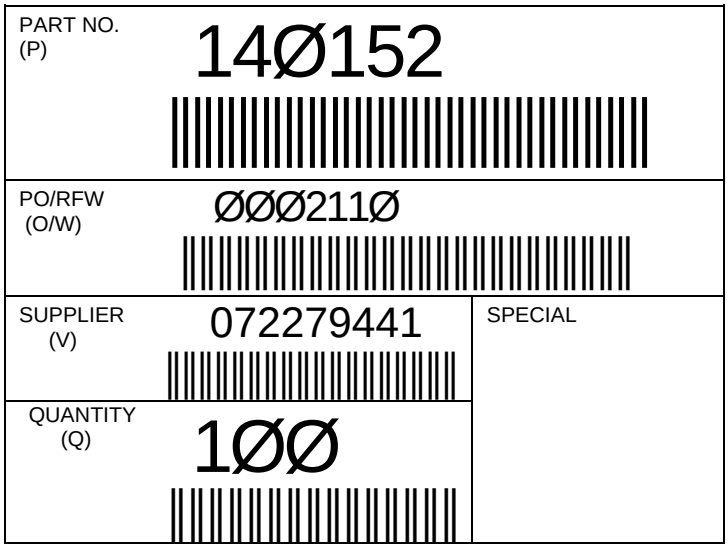
B1386: Bar Code Labels for Shipping/Receiving Packages defines the use of bar coded labels, with recommendations on label placement on packages. It contains Label Definitions (Carton, Mixed Load, Subpack…), Size and Material (Dimensions, layout,…), Bar Code Symbology (Print Density, Quality….), Label Location and Protection, and Special Labels (Master Pack, Mixed Load…). It also includes illustrations of label layout, samples and adhering positions.

Changes Incorporated in the March 2003 release:

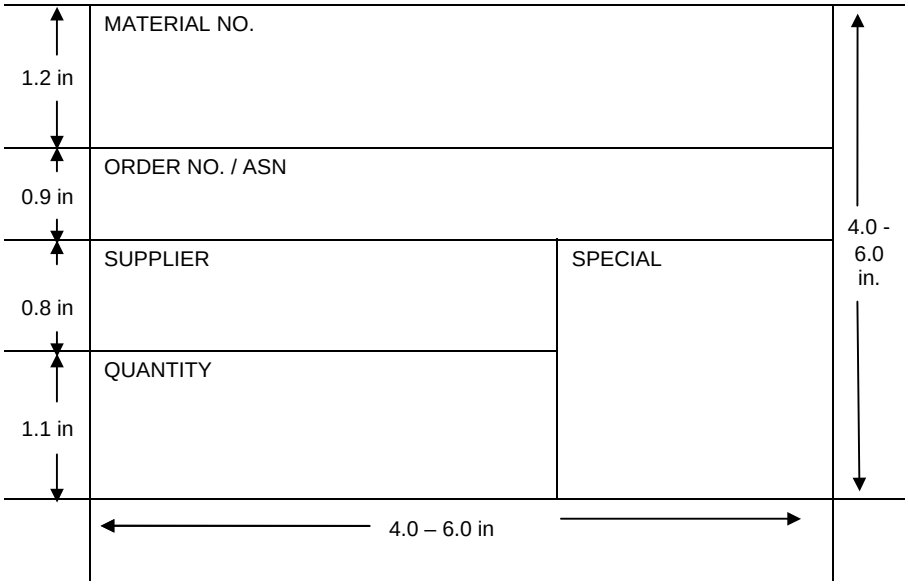
- Label Types Redefined: Preferred Label, Batch Control Label
- A Minimum requirement Label and a Individual Material Label were added
- Label sizes were redefined to allow for label selection flexibility
- Data Area Titles changed and the Embedded data identifier reference was removed
- Label Characteristics and definitions were updated to reflect changes in business definitions
- Bar coded Vendor Number removed
- Human readable minimum print size reduced for greater flexibility
- Future processes (Advance Ship Notifications) added
- Country of Origin

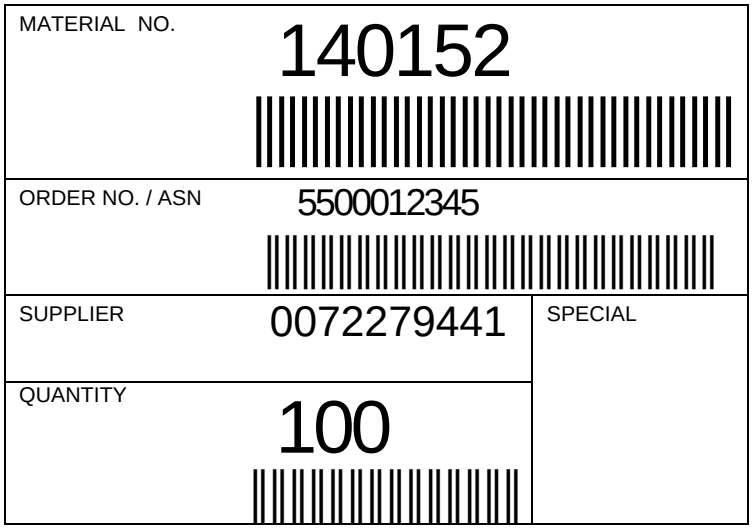
OLD MANUFACTURING SHIPPING IDENTIFICATION LABEL





NEW PREFERRED SHIPPING IDENTIFICATION LABEL





BAR CODE SYMBOLOGY

1.0 SCOPE AND PURPOSE

This specification defines a standard symbology for marking parts, containers, etc., by means of bar coding. Bar coding may be used for inventory control, serialization, material tracking through production, order processing, and many other applications. The word “shall” indicates a requirement; the word “should”, a recommendation.

2.0 REFERENCE DOCUMENTS

- MIL-STD-l 29, “Marking for Shipment and Storage”
- MIL-STD-l 189, “Standard Symbology for Marking Unit Packs, Outer Containers, and Selected Documents”
- 056-0001, “Bar Code Label, Printed Wiring Board”
- 056-0003, “Bar Code Label, Ten Part Production”

3.0 DEFINITIONS

3.1 Bar -- The darker element of a bar code.

3.2 Bar Code -- An array of rectangular marks and spaces in a predetermined pattern.

3.3 Bidirectional Code -- A bar code format which permits reading (scanning) in either direction.

3.4 Binary Code -- A code which makes use of exactly two distinct characters, usually 0 and 1.

3.5 Character Set -- Those characters which are available for encoding within the bar code.

3.6 Check Digit -- A calculated character included within a message, used for error detection.

3.7 Code Density -- The number of characters that can appear per unit of length.

3.8 Discrete Code -- A bar code in which the intercharacter gap is not part of the code and is allowed to vary dimensionally within wide tolerance limits.

3.9 Element -- A generic term used to refer to either a bar or a space.

3.10 Film Master -- A negative or positive transparency of a specific barcode symbol from which a printing plate is produced.

3.11 Human Readable Interpretation (HRI)-- The interpretation of the encoded barcode data presented in a human readable font.

3.12 Intercharacter Gap -- The space between the last element of one character and the first element of the adjacent character of a bar code.

3.13 Label Opacity--The ratio ofdifuse reflectance of a sample sheet of label materials, backed with a black surface to the difuse reflectance of the same sample sheet backed with a white surface.

3.14 Print Contrast Signal (PCS) -- A comparison between the reflectance of the bars and of the spaces. It is defined as:

Pcs = (RL - RD) / RL where RL = Space Reflectance and RD = Bar Reflectance.

3.15 Quiet Zone -- The area immediately preceding the start character and following the stop character. This area contains no markings.

3.16 Self-Checking Bar Code -- A bar code which uses a checking algorithm which can be applied against each character to guard against undetected errors.

3.17 Smoothness/Gloss -- Smoothness is a description of the textural characteristics of a label substrate. Gloss is the property of a surface responsible for a lustrous or mirror-like appearance.

3.18 Space-- The lighter element of a bar code.

3.19 Start and Stop Characters – Distinct characters used at the beginning and end of each bar code which provide initial timing references and direction of read information to the coding logic.

3.20 Substrate -- The supporting material upon which a bar code is printed.

4.0 GENERAL REQUIREMENTS

4.1 Code Description: The code required by this specification is Code 39 (3-of-9 code). Code 39 is variable length, discrete, self-checking, bidirectional, alphanumeric bar code. Its character set contains 43 characters (O-9, A – Z, –, .,$, +, Y./, and space) and a unique start / stop character.

4.1.1 Each character is composed of nine (9) elements: Five (5) bars and four (4) spaces. Three (3) of the nine elements are wide (Binary Value 1) and six (6) elements are narrow (Binary Value O). Spaces between characters are not significant; therefore, Code 39 is discrete. A common character (*) is used for both start and stop delimiters. Unless otherwise specified, a check digit is not required.

4.1.2 Code 39 can be printed at several densities to accommodate a variety of printing and reading processes. The density of the Bar Code shall be as specified on the drawing.

4.1.3 Bars and spaces are both considered elements: Element dimensions and tolerances for the various densities are shown in Table 1.

TABLE 1

Density CPI	Nominal Width Narrow Elements (in)	Wide/Narrow Ratio	Nominal Width Wide Elements (in)	Element Tolerance (in) + / -
12.0	.0052	3.0	.0156	.0018
9.5	.0066	3.0	.0198	.0022
9.4	.0075	2.24	.0168	.0017
8.6	.0080	2.5	.0200	.0022
8.3	.0075	3.0	.0225	.0026
7.4	.0100	2.2	.0220	.0023
6.6	.0104	2.5	.0260	.0036
6.3	.0100	3.0	.0300	.0035
6.0	.0104	3.0	.0312	.0036
5.7	.0120	2.5	.0300	.0033
4.0	.0156	3.0	.0468	.0054

4.1.4 The intercharacter gap shall be .0058 - .060 inch.

4.2 Human Readable Interpretation (HRI): Unless otherwise specified, the human readable interpretation is optional. If used, the HRI shall represent the encoded characters. The required size shall be specified on the drawing. Unless otherwise specified, the encoded start / stop characters, check characters and data identifier shall be suppressed when printing the HRI.

4.3 Spacing

- Spacing between barcode and HRI shall be .10 inch min. to **.25** inch max.
- Spacing of stacked codes shall be .375 inch min. to .75 inch max.
- Spacing of in-line codes shall be.5 inch min.

4.4 Bar Code Height: Barcode height shall be specified on the part drawing, but shall be no less than 5/32 inch.

4.5 Check Digit: The 3-of-9 bar code is self checking and is not normally used with a check digit. If, however, a specific application requires the use of a check digit, it can be added to the encoded message or HRI, as shown in Table 2.

TABLE 2

CHECK DIGIT GENERATION OF 3-OF-9 BAR CODE

Numeric values are assigned to each 3-of-9 bar code per the following example:

Serial Number:1234567

Multiply each digit of serial number by 2 or 1 as shown; add results as shown:

1 2 3 4 5 6 7
x x x x x x x
2 1 2 1 2 1 2
2 + 2 + 6 + 4 + 10 + 6 + 14 = 44

Subtract result (44) from next higher unit of 10 (50):

50-44 = 6 The Check Digit

Therefore, serial number with check digit is as follows:

1234567-6

4.6 Data Identifier Codes: The data identifier code in the first position following the start code will NOT be required . The implementation of system driven radio frequency bar coded readers, along with label changes, will prevent reading wrong data into the system therefore the use of an embedded data identifier will not be required.

4.7 Drawing Requirements: Bar code label drawings for parts shall specify the following:

- Label material and adhesive.
- Label size.
- Code 39 per B1385.
- Density (from Table 1).
- Characters to be used in the symbol.
- The location of the HRI, if required (top, side or bottom).
- Size of HRI.
- Bar code height.

5.0 PRINT AND QUALITY ASSURANCE REQUIREMENTS

5.1 Reflectivity and Contrast: Two spectral bands are specified:

Spectral Band	Wave Length Peak (Nanometers)	Maximum Band Width 50 % Level (Nanometers)
B633	633 + / - 5%	120
B900	900 + / - 10%	40

Bands B633 and B900 represent spectral responses required from the measuring instrument (light source, filter, detector). These responses should be smooth curves without secondary peaks within the band and with no major pafl of the response curve beyond the specified 50% points. Band B900 corresponds to reading devices that use light sources and detectors operating in the near infra-red. Band B633 corresponds with scanners using helium-neon lasers or other sources emitting with a peak wavelength in the visible red spectrum. All the measurements shall be made in the final package configuration as it is to be scanned.

Note: All printjng processes used for PB shall incorporate carbon jn the bar element.

Reflectivity measurements shall be made with incident irradiation at 45° from a normal to the surface and reflected flux collected within a 15° angle centered on the normal. The maximum allowable reflectivity of the dark bars is related to the reflectivity of the light spaces. Bar code symbols with spaces that are less reflective will require bars that are "darker" (less reflective). Table 3 illustrates the maximum bar reflectance R_D as functions of space reflectance R_L. The minimum space reflectance shall be 25% for bar code symbols with narrow bar widths greater than 0.020 inch. The minimum space reflectance shall be 50% for bar code symbols with narrow bar width Iess than or equal to 0.020 inch. Reflectance values are referred to magnesium oxide or barium sulfate standards which are considered 100%.

Note: *In Table 3, the minimum ratio of R_L/R_D is 4.0 and the minimum print contrast signal (PCS) is 75 percent. The PCS is defined as:*

$PCS = (R_L – R_D) / R_L$

5.2 Quiet Zone: The minimum quiet zone shall be ten times the width of one narrow element of the bar code symbol or 0.100 inch, whichever is greater. For optimum scanning, the quiet zone should be at least 0.25 inch.

5.3 Bar Edge Roughness, Spots, and Voids: A certain degree of bar edge roughness is permitted in the bar and space width tolerances. The white to black and black to white transition points are determined where the center of a circle with a diameter 0.8 times the nominal width of a narrow element is 50% covered by the dark area. Spots and voids which meet either of the following criteria are permitted:

1) The spot or void can be contained within a circle whose diameter is 0.4 times the nominal width of the narrow element.
2) The spot or void occupies no more than 25% of the area of a circle whose diameter is 0.8 times the nominal width of the narrow element.

Larger spots or voids can be expected to reduce the first read rate depending on their size.

TABLE 3

ALLOWABLE VALUES OF BAR REFLECTANCE

Space Reflectance R_L (%)	Maximum Bar Reflectance R_D(%)
25	6.25
30	7.50
35	8.76
40	10.00
45	11.25
50	12.50
55	13.75
60	15.00
65	16.25
70	17.50
75	18.75
80	20.00
85	21.25
90	22.50
95	23.75
100	25.00

5.4 Quality Assurance Requirements: Verification of printed barcode symbols shall consist of checking for proper message encodation, measurement of reflectivity and contrast values, and measurement of bar and space widths for compliance with the tolerances specified in Section 4 of this standard, as applicable. Equipment is available which is designed specifically to verify that bar code symbols meet these requirements.

6.0 PRINTING METHODS

6.1 BarCode Symbol Printing: Abroad range of printing processes may be applied to the printing of bar code symbols. Compliance with the requirements of this standard shall be verified for each process.

6.2 Film Masters: Bar code symbols to be printed by conventional printing press processes require precise film artwork, called a film master, in the manufacture of printing plates. The film master tolerance as applied to the individual bar and space measurements shall be 570 of the value that appears in the column entitled “Element Tolerance” (See Table 1), but shall not be less than 0.00002 inch, and shall not exceed 0.00005 inch. This tolerance does not apply to intercharacter gap.

7.0 LABEL MATERIALS

7.1 Substrates: Bar code symbols may be printed on a variety of substrates such as paper, plastic, and metal. The selection of substrates and associated adhesives, if required, is based on the requirements of the application and Engineering Performance Standards.

7.2 Label Opacity: Label opacity is defined as the ratio of diffuse reflectance of a sample sheet of label materials, backed with a black surface with a reflectivity not to exceed 0.5%,to the diffuse reflectance of the same sample sheet backed with a white surface which has a reflectance of 89% or greater. The prime objective of label opacity criteria is to limit the condition known as “see-through”, where a bar code reader is adversely affected by optical noise from background surfaces (i.e., the surface upon which the label is applied). The “seethrough” phenomenon varies with the thickness of the substrate and, in many cases, the adhesive used. The opacity of the label including the adhesive backing shall permit the label to meet the reflectance criteria of Section 5.1 when the label is secured to the final package.

7.3 Smoothness and Gloss: Smoothness is a of the textural characteristics of a label substrate (i.e., the flatness of the label surface). Very smooth and very coarse surface papers both tend to produce poor print quality and are not recommended for use as bar code labels. Gloss is the property of a surface responsible for a lustrous or mirror-like appearance. The effect of gloss is to reflect more incident light in a specular manner, and to scatter less. Smoothness and gloss should be evaluated in terms of the printed results.

BAR CODE LABELS FOR SHIPPING/RECEIVING PACKAGES

1.0 SCOPE AND PURPOSE

The standard defines bar coded labels for shipping and receiving of materials and/or parts at both our Manufacturing and Distribution locations. It also recommends label locations for the most common shipping picks.

2.0 APPLICABLE DOCUMENTS

- B1385 “Bar Code Symbology”
- MIL - STD - 1189 “Standard Symbology for Marking Unit Packs, Outer Containers, and Selected Documents”

3.0 DEFINITIONS

3.1 COMMON ITEM (STANDARD) PACK

A pack which contains all like items i.e. same part/item number.

3.2 ITEM

A single part or material purchased, manufactured, and/or distributed.

3.3 LABEL

A card, strip of adhesive paper, etc. marked and attached to an object to indicate its item number, nature, contents, ownership, destination, etc.

3.4 MASTER LABEL

A label used to identify and summarize the total contents of a multiple pack or carton.

3.5 MIXED ITEM PACK

A pack containing items with different part/item numbers.

3.6 MIXED LOAD LABEL

A label used to designate mixed item shipping packs.

3.7 MULTIPLE PACK

A pack containing smaller packages (sub packs) of items.

3.8 SUB PACK

One of the smaller packs that make up a larger multiple pack.

3.9 TAG

A label that is hung from an object usually with wire/string placed through a reinforced eyelet in the label/tag.

4.0 SIZE AND MATERIAL OF LABELS AND TAGS

4.1 LABELS

The preferred shipping label and size shall be 4.0 - 6.0 inch high by 4.0 - 6.0 inch wide (Figure 1). Large part numbers and large shipping quantities may require a wider label. A width of 5.0 inches minimum to 6.5 inches maximum is optional.

Batch (Lot) Controlled Material shipping label and size shall be 4.0 - 6.0 inch high by 4.0 - 6.0 inch wide (Figure 2). Optional wide format: width of 5.0 inches minimum to 6.5 inches maximum.

Minimum shipment label (Figure 3) should meet the Receiving requirement unless the carton received is smaller than 4.0 - 6.0 inches by 4.0 - 6.0 inches. The label then would be 1/2 the size of carton allowing for shipment address information.

Individual Material (Part) Number labels when required will be applied to each item received within the shipping carton. Item/part label sizes are to be such that the label comfortably fits on the packaged item not exceeding 2.0 inch high by 4.0 inch wide label.

The label paper shall be white in color with black printing. Adhesive types can be pressure sensitive or dry gummed, as long as adherence to the package substrate is assured and application is wrinkle free. Minimum paper weight to be 45 lbs. If the specified label cannot be affixed to the package/container because of container size or design, special arrangements will be required.

4.2 TAGS

The tag shall be the same size as the label described in section 4.1 plus the material necessary to add a reinforced eyelet. The tag should be durable enough to assure readability at its destination. (See Figure 6) Minimum tag weight to be 80 lbs. Tags are to be used for unpackaged items that cannot be labeled.

4.3 DATA AREA CHARACTERISTICS

The Material (Part) Number, Order Number / Advance Ship Notification, Quantity and Batch (Lot) Number shall be included on each shipping label in the designated data areas and shall be displayed in both human readable characters and bar code symbols.

Supplier Number shall be included on each shipping label in the designated data areas and shall be displayed in only human readable characters.

All data may vary in the number of characters. (See Figures 5 and 6)

4.4 DATA AREAS AND TITLES

There are 6 possible data areas for a shipping label, Material (Part) Number, Quantity, Order Number / Advance Ship Notification, Supplier Number, Batch (Lot) Number and Special Data.

Each data field shall be separated by thin lines and shall contain its title in the upper left hand corner, as shown in the figures. Outer borders are not required. Titles should be printed in 0.06 inch high letters. Respective data area titles are: Material No., Order No. / ASN, Supplier, Quantity, Batch No., and Special.

4.4.1MATERIAL (PART) NUMBER AREA

The human readable Material (Part) number characters shall be bold and a minimum of 0.25 inches high. The bar code symbol of the Material (Part) number shall be directly below the human readable characters and shall be a minimum of 0.25 inches high.

Depending on the nominal dimension of the narrow bar code elements, part number of varying lengths are to be printed on one line. Long part numbers will require the use of a larger label to ensure the bar code remains unbroken. The maximum length of any bar code symbol should not exceed 5.5 inches.

4.4.2 QUANTITY AREA

The human readable quantity characters shall be a minimum of 0.25 inches high. The bar code symbol for the quantity shall be directly below the human readable characters and shall be a minimum of 0.25 inches high. The maximum length anticipated for the quantity is six (6) numeric characters, there will be no leading zero's. The length of this area (the line separating the quantity area from the special area) may be adjusted to handle bar code printing.

When the unit of measure is each ("EA"), no notation is required. When the unit of measure is not an "Each", (e.g. pounds, pars, feet, etc.) the unit of measure shall be directly to the right of the human readable quantity and will be placed in the "Special Data Area". The minimum height will be 0.2 inches high and will not be bar coded.

4.4.3 SUPPLIER NUMBER AREA

The human readable supplier number character shall be a minimum of 0.2 inches high. The supplier number will be human readable only and be a minimum of 0.5 inches high.

The maximum length anticipated for the supplier number is ten (10) characters utilizing leading zero's. The supplier number shall be determined by the customer. This number should be consistent with the sender and receiver I.D. numbers as used in electronic data interchange applications.

4.4.4 ORDER NUMBER / ADVANCE SHIP NOTIFICATION AREA

The human readable Order Number / Advance Ship Notification characters shall be a minimum of 0.25 inches high. The bar code symbol for the Order Number / Advance Ship Notification shall be directly below the human readable characters and is a minimum of 0.25 inches high. When the label generated is an Advance Ship Notification, the letters "IBD" will be printed in the special box to denote "In Bound Delivery". The maximum length anticipated for the Order No. / ASN is ten (10) characters.

4.4.5SPECIAL DATA AREA

This area may be used for any additional information or special instructions needed by industry users but not specifically detailed in this document. When the label generated is an Advance Ship Notification, the letters "IBD" will be printed in the special data box to denote "In Bound Delivery". Packaging requirements where the item is packed other than an "Each" is to be placed in human readable characters within this field. Suppliers and customers shall communicate with each other and agree on any unique requirements for this area.

4.4.5.1 COUNTRY OF ORIGIN MARKING REQUIRED

Unless excepted by law, section 304, Tariff Act of 1930, as amended (19 U.S.C. 1304), requires that every article of foreign origin (or its container) imported into the U.S. shall be marked in English in a conspicuous place to indicate its country of origin to an ultimate purchaser. To meet this requirement, the country of origin note will be added to the Special Data Area. Designations of "Made in USA", "Made in China", "Assembled in USA", "Assembled in China" are some examples. Additional requirements for adherence to the Tariff Act may be required.

4.4.6 BATCH (LOT) NUMBER

The human readable Batch (Lot) Number characters shall be bold and a minimum of 0.25 inches high. The bar code symbol of the Batch (Lot) Number shall be directly below the human readable characters and shall be a minimum of 0.25 inches high.

Depending on the nominal dimension of the narrow bar code elements, Batch (Lot) Numbers of varying length are to be printed on one line. Long Batch (Lot) Numbers will require the use of a larger label to ensure the bar code remains unbroken. The maximum length of any bar code symbol should not exceed 5.5 inches.

5.0 BAR CODE SYMBOLOGY

Bar codes shall be 3 of 9 and shall conform to PB Standard B1385 "Bar Code Symbology". In addition, the following are specific requirements for the "Shipping Identification Label".

5.1 CODE DENSITY AND DIMENSIONS

The bar code heights shall be a minimum of 0.5 inches (13 mm). The width of the narrow elements ("X" dimension) shall be within the range of .007 to .016 inch. The ratio of the nominal width of the wide to narrow elements shall be 3.1, with an allowable range of 2.8:1 to 3.2:1.

5.2 CHECK DIGITS

Check digits shall not be used in the bar codes.

5.3 REFLECTIVITY AND CONTRAST

The printed barcode symbols shall meet a PCS (Print Contrast Signal) of 75% or greater as specified in PB Standard B1385.

5.4 QUALITY ASSURANCE REQUIREMENTS

It is the responsibility of the supplier to provide bar coded labels that meet the specifications of PB Standard B1385.

5.5 QUIET ZONE

The minimum quiet zone for each bar coded data element shall be 0.25 inch.

6.0 TEST METHODS

6.1 LABEL LOCATION

Illustrations of the most common shipping packs and recommended label locations are shown in figure 11A, 11B, and 11C. In most cases, two labels are specified. Where possible, the bottom edge of the label should be parallel to the base of the package/container.

6.2 LABEL PROTECTION

Label protection against moisture, weathering, abrasion, etc., may be required in harsh environments and is encouraged wherever practical. Laminates, sprays, window envelopes, and clear plastic pouches are examples of possible protection methods.

7.0 SPECIAL LABELS

While this specification will cover most situations, there will be circumstances where requirements will dictate special arrangements between customers and suppliers. Every effort to minimize these situations should be a goal of all so that complexities and costs are not added.

Two situations where special labels may be needed for better handling are multiple and mixed item packs. Sections 7.1 and 7.2 outline recommended practices for these situations. They are to be used only when supplier and customer mutually agree.

7.1 MASTER PACK LABEL

A Master Label (as shown in figure 7) shall be used on all shipments when the supplier or customer agree that the total contents of a multiple, common item pack should be identified. Each subpack of the multiple pack shall be identified with a Shipping Identification Label or other agreed upon label. The total multiple pack shall be identified with a Master Label in a location specified by

Pitney Bowes. To the extent possible, the label should be placed with the packing list in such a manner that proper receiving will be accomplished.

The label format should conform to the specifications for the Shipping Identification Label. The quantity on the Master Label shall be the total in all the subpacks. It will be at the discretion of the vendor to add the literals “Master Label” in the “Special” area if needed.

7.2 MIXED ITEM LOADS

Mixed item loads should have a label with the word “Mixed Load” in bold 0.5 - 1.0 inch letters attached in the Part Number Area (see figure 9). Most importantly, on mixed item loads, each subpack or item shall be identified with a Shipping Identification Label or a Master Label, as described earlier. The balance of the label format should conform to the specification.

PREFERRED SHIPPING IDENTIFICATION LABEL

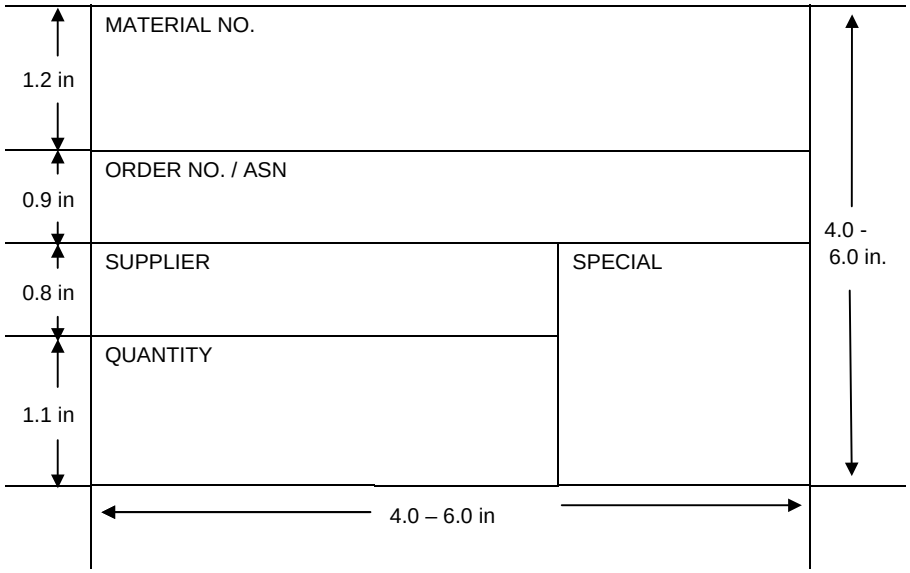


FIGURE 1

BATCH CONTROLLED MATERIAL SHIPPING IDENTIFICATION LABEL

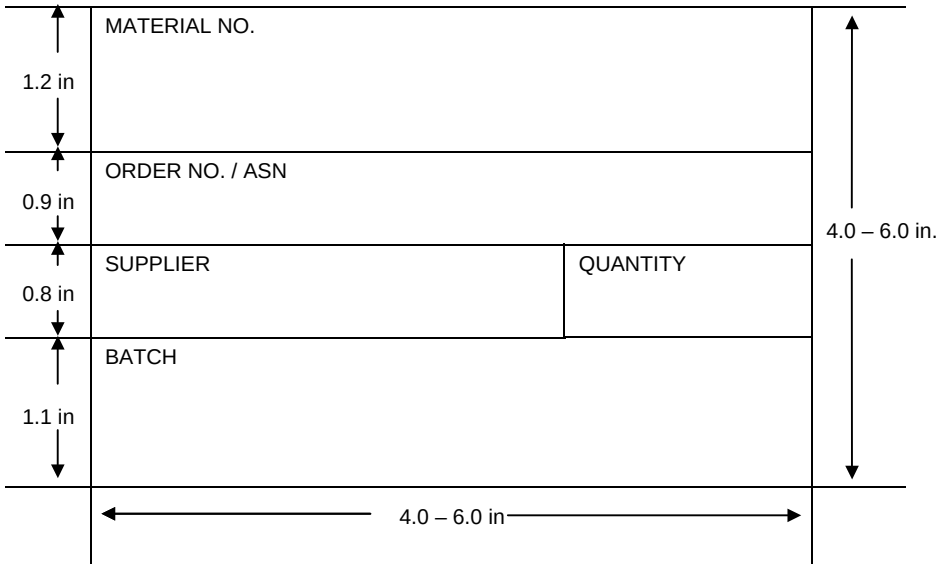


FIGURE 2

MINIMIUM REQUIREMENT LABEL

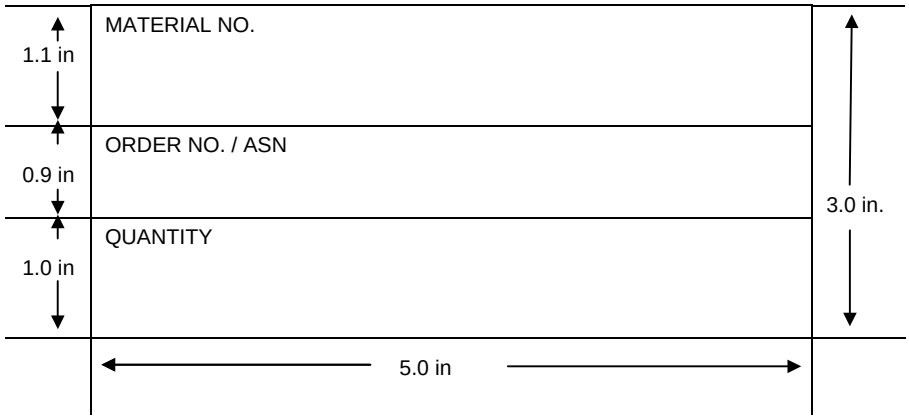


FIGURE 3

INDIVIDUAL MATERIAL LABEL

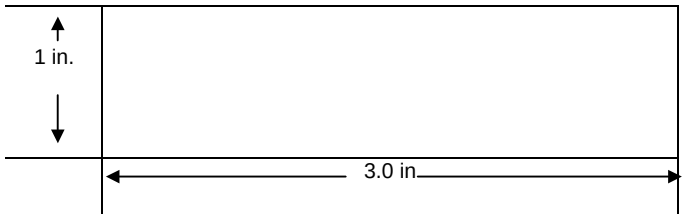


FIGURE 4

SAMPLE SHIPPING IDENTIFICATION LABEL

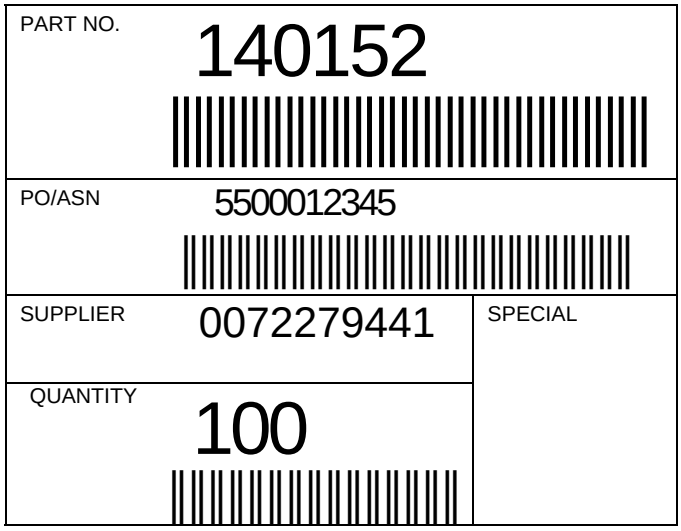


FIGURE 5

SAMPLE SHIPPING IDENTIFICATION TAG

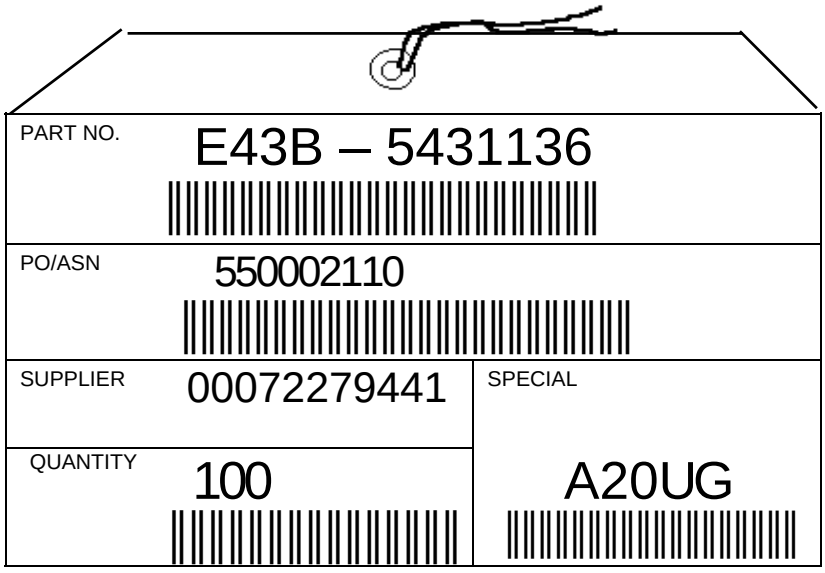


FIGURE 6

MASTER LABEL

PART NO.	FBØ163Ø4	
PO/ASN	3031301234	
SUPPLIER	0003094823	SPECIAL
QUANTITY	10	**IBD**

FIGURE 7

MASTER LABEL

PART NO.	FBØ163Ø4	
PO/ASN	5500012345	
SUPPLIER	0003094823	SPECIAL
QUANTITY	1000	**LBS**

FIGURE 8

MIXED LOAD LABEL

PART NO. MIXED LOAD	
PO/ASN 5500012345	
SUPPLIER 0003094823	SPECIAL
QUANTITY	

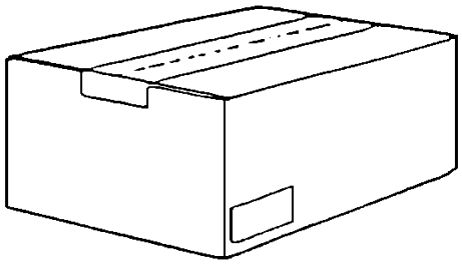
FIGURE 9

ITEM LABEL

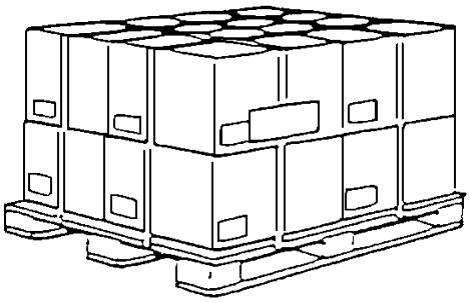
12345678901

FIGURE 10

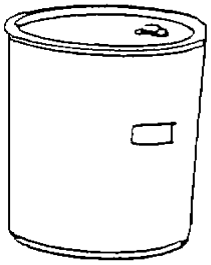
LABEL LOCATIONS ON VARIOUS SHIPPING PACKS



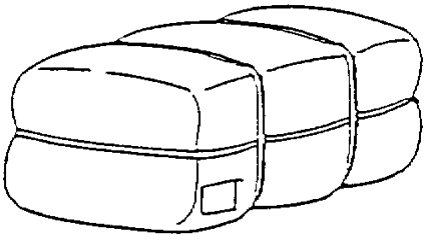
BOX OR CARTON
A label shall be located in the lower corner of one side, one inch off the bottom and sides.



CARTONS OR PALLET
Each carton shall be individually labeled as described above. One master label may be used as described in section 7.1.



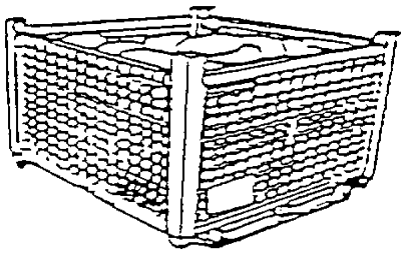
DRUMS, BARRELS, OR CYLINDRICAL CONTAINERS
A label shall be located near the center of the side.



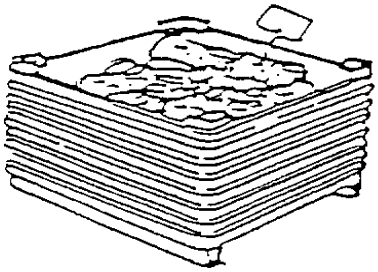
BALES
A label shall be located at the lower corner of one side.

FIGURE 11A

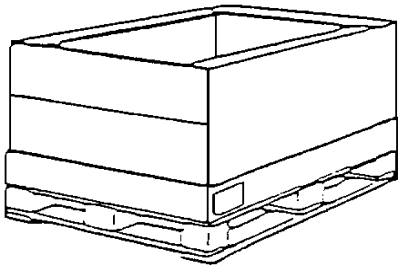
LABEL LOCATIONS ON VARIOUS SHIPPING PACKS



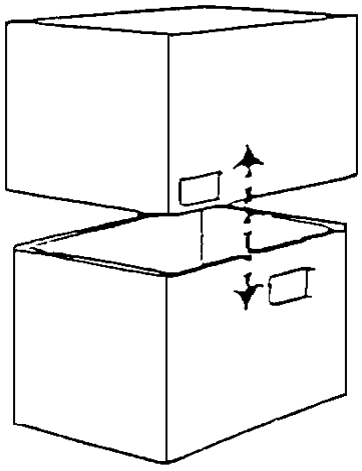
BASKET, WIRE MESH CONTAINER
A label shall be located on the lower corner of one side.



METAL BIN OR TUB
One tag shall be attached to one piece in top of bin.



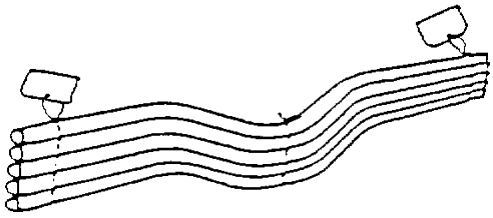
PALLET BOX
A label shall be located on the lower corner of one side.



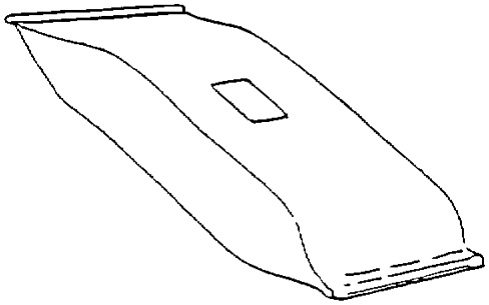
TELESCOPIC OR SET-UP CONTAINERS
A label shall be located in the lower corner of one side of the outer box. Some applications may also require identification of the inner box.

FIGURE 11B

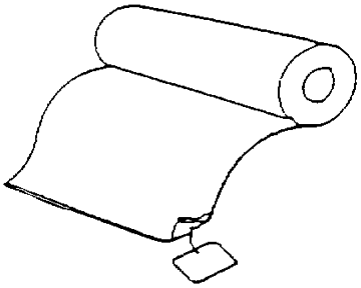
LABEL LOCATIONS ON VARIOUS SHIPPING PACKS



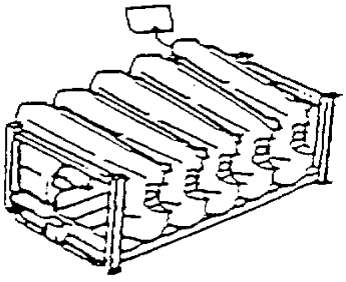
BUNDLE
Identical tags shall be located at each end.



BAG
Place one label at the center of face.



ROLL
Hang one tag 2.0 in. from end of material.



RACK
Tag one visable piece near top.

FIGURE 11C