GLOBAL SUPPLIER
CONTAINER LABEL REQUIREMENTS
STANDARD
(EDIFACT)

Revision Date: September 24, 2012

The Nexteer Automotive *Container Label Requirements Standard* contains specifications on barcode labels for material shipped to Nexteer Automotive from external suppliers.

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Preface

The purpose of this document is to clarify Nexteer Automotive *required* packaging label format, give specific data formats and barcode symbology to Nexteer suppliers, and communicate the acceptable labeling standards expected from Nexteer trading partners. These specifications are needed to allow a Nexteer Automotive prescribed supplier to become compliant with Nexteer label formats and placement requirements.

This is a living document with periodic updates as business processes change within Nexteer Automotive and new technology emerges. All suppliers needing support for any Portal application must dial 989-757-9196.

Supplier Portal Link: https://portal.covisint.com/portal/public/_l:en/tp/sssc

Audience:

A.   Direct suppliers of raw materials, subassemblies, or pre-manufactured goods used in the manufacturing process at Nexteer Automotive without third party packaging partner.*

B.   Third party packaging partner of a raw materials, subassemblies, or pre-manufactured goods used in the manufacturing process and shipping directly to Nexteer Automotive

C.   You are or plan to become a Nexteer Automotive EDI (Electronic Data Interchange) trading partner.

*Direct shippers to customers of Nexteer Automotive may not need to comply with this specification. Specific customer labeling requirements take precedence over the Nexteer Automotive requirements.

Nexteer Automotive discourages placing data on its shipping/parts identification label other than described in this specification. However, if state, federal, or country laws are passed which require a supplier to include information such as health, safety, or environmental data to be added to the label, the supplier should notify us of the requirement.

A. Introduction

A.1   Purpose

The *Container Label Requirements Standard* provides written requirements for the printing and application of container labels. Suppliers, both internal and external, SHALL use the label formats detailed in this document when shipping to all Nexteer facilities.

The *Container Label Requirements Standard* is based on the AIAG Standards, Nexteer Automotive decided to minimize the impact of a new label to their suppliers by using a similar format, known as the Nexteer Automotive Global Supplier label. Label standards from other customers were also referenced to enhance this document.

In this document, the word '**SHALL**' indicates a requirement and the word '**SHOULD**' indicates a recommendation. These words followed by **'NOT'** will help emphasize the opposite of the statement.

In order to facilitate efficient and effective operations, Nexteer Automotives labeling requirements SHALL be followed exactly. If there is any concern in meeting these requirements, please contact your representative listed in Appendix C. Failure to comply with these ***Container Label Requirement Standards*** could result in issuance of Problem Reporting Resolution (PRR).

A.2   Hardware and Software

We recommend the use of bar-coding software and hardware, which allows flexibility in label generation.

Printers SHALL produce labels that meet AIAG specifications and tolerances. Thermal printers and laser printers are strongly recommended. Dot matrix printers SHALL NOT be used as bar-coded data can become skewed.

A.3   Sample Label Approval

Suppliers SHALL submit sample labels to their labeling representative indicated in Appendix C prior to changing their label format. Written approval will be sent from Nexteer Automotive to the supplier once the label format is tested and passes. Please reference Appendix A for a copy of the approval sheet. Not all plants may use every field on the labels but your label printing application needs to be able to support printing them if required.

A.4   EDI certification

Nexteer Automotive suppliers **SHALL** become EDI certified. Please reference the Nexteer Automotive *Electronic Data Interchange (EDI) Requirements Standard.*

B. Normative References

AIAG Trading Partner Labels (B-10)
ANSI Data Application Identifier Standard
Nexteer Automotive EDI Standards

C. Definitions

Container Label

A label used to identify the contents of the container.

Data Identifier

A specified character string that defines the specific data that immediately follows as defined by ANSI MH10.8.2, Data Identifier Guideline

Electronic Data Interchange (EDI)

The computer communication of data between trading partners.

Item

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

Label

A card, strip of paper, etc. marked and attached to an object to convey information.

Label Designer

Person responsible for designing label format and determines the exact character heights corresponding to the eight text sizes.

Master Label

A label used to identify and summarize the total contents of a multiple pack of a single part number within the same container. (i.e. pallet of boxes of same material number.)

Mixed Load Label

A label used to identify the contents of a multiple pack of different part numbers. (i.e. pallet of boxes of differing material numbers.)

Shipping/Parts Identification Label

A single pack, master or mixed load label used to identify the contents of shipping pack.

Standard Quantity Pack

A single container, which contains the same quantity of like items.

Text Lines-per-block (LPB)

The height of text characters is defined by using this unit of measure rather than inches, millimeters, or points.

DUNS number

DUNS stands for "Data Universal Numbering System." It is a unique nine-digit numbering system that is used to identify a business. For purpose of the shipping labels, it SHALL represent the supplier's manufacturing and ship from location.

D. General Information

D.1. Size and Material

The label medium SHALL be white in color with black printing.

The size of the label medium SHALL be determined by a combination of the data requirements, size of the container and the printing technology used. For most shipping containers, the acceptable label size of 4.0 inches (101.6mm) high by 6.0 inches (152.4mm) wide should handle most conditions.

A smaller alternative sized label of 4.0 inches (101.6mm) wide by 2.0 inches (50.8) high SHALL also be used only when the container isn't large enough to accommodate the larger label. Your Nexteer Automotive customer plant packaging engineer will help determine which label application is best for them.

Adhesive label medium types can be pressure sensitive or dry gummed as long as adherence to the package substrate is assured and application is wrinkle-free until received at final shipping destination.

D.2. Types of Labels and Packaging

Three types of labels are required by Nexteer Automotive depending on how material is packaged for shipment as described below:

The Container Label (Global Supplier Label) SHALL be used to identify a single pack containing the same part number. It is the most commonly used shipping/parts identification label.

A Master Label SHALL be used for containers, pallets, skids, etc., holding more than one single pack of the same part number per divisional requirements. Each individual package should still contain a container label within the outer package.

A Mixed Load Label and the Dual Parts Label are used for containers, pallets, skids, etc., holding more than one single pack of different part numbers. These labels may be required based on specific Nexteer Automotive requirements.

D.2.1 Packaging and Label Placement

There are two types of packaging covered in this document; outer packages and inner packages. Inner packaging will utilize container labels while outer packages will utilize master labels. An outer package is any container that contains multiple packages of single materials. Inner packages are the smallest shippable packaged units of a material. Examples are pallets (outer packages) of boxes (inner container), bins (outer packages) of bags (inner packages), etc.
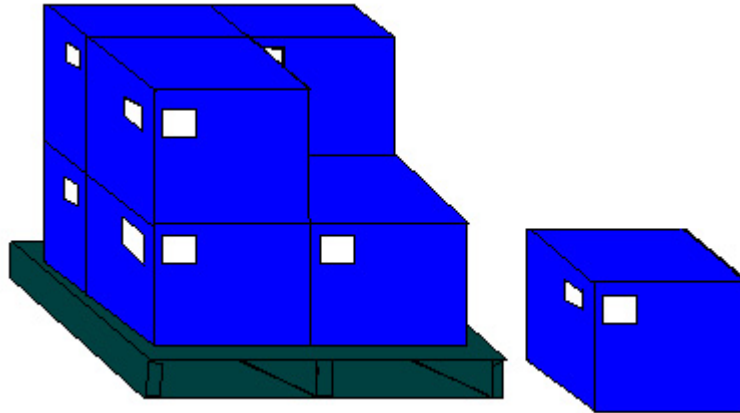
Figure1 Group of packages with container labels and a single package labeled only with container labels. Pallet is not ready for shipment.
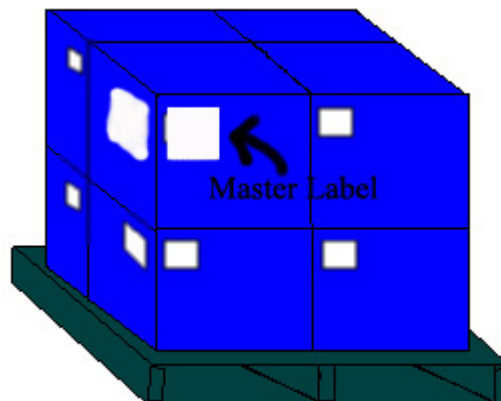
Master Label

Figure 2 Pallet with master labels attached on shrink wrap, ready for shipment. Notice the multiple container labels on each individual inner package.

Two (2) labels should be attached to either inner or outer packages on adjacent sides or opposite sides depending on packaging. See section I for label placement.

Additional label type may be required for Mixed loaded material. These are described below:

Mixed Load label format can be used for identification of materials of differing part numbers loaded within the confines of the same container or pallet. These can be of the same or differing quantities.

On smaller packaging where the lid of the container covers the complete lower portion of the container, it will also be necessary to apply an additional label to the inner end of the container so that the material can still be identified when the lid is discarded.

D.3   General Label Format

For the most part the label formats for the container label, and master label are similar. The exception is that some data may exist on one label type but not the other. Also, the master label has wording at the bottom of the label to identify it as a master label. The following identifies the data blocks for the container and master labels.

Block A1	Block A2	2D Barcode
Block B1		Block B2
Block C1	Block C2	
Block D1	Block D2	
Block E1	Block E2	

Sample master load wording:

MASTER LOAD

The mixed load label format is significantly different to allow for more part data. The following identifies the data blocks for the mixed load label.

Block A1	Block A2	Block A3 2D Barcode
Block B1		
Block C1	Block C2	
Block D1	Block D2	

MIXED LOAD

D.4 Text (Human readable) Information

The height of text characters is defined by using a unit of measure called Lines-Per-Block (LPB), rather than inches, millimeters or points. This enables the printer of the label to determine the actual height and font of text for a given LPB.

Eight sizes may be specified for text, ranging from one to eight Lines-Per-Block (LPB). The exact character heights corresponding to the eight text sizes SHALL be chosen by the label designer based on the capabilities of the printing process.

Labelers SHALL choose a single height for each of the eight sizes so that clear distinctions SHALL be evident between text sizes. Table below shows suggested point, inch, and metric sizes.

Generally speaking, you should try to make the human readable characters as large as possible to fit the given space keeping mind the maximum number of characters a field would have to represent. Fields SHALL NOT at any time overlap. You should avoid printing characters so high and narrow that they are difficult to read.

Note: *Based on label width of 6.0 inches and block height of 1 inch, specific font size will depend on the capability of the suppliers' printer and software*

D.5 Barcode Information and Symbology

For the 6.0 inch wide by 4.0 inch high label and in accordance with the current Global Supplier Shipping Label Specs, the barcode symbology used SHALL be Code 39 and Code 128.

Because the Nexteer Automotive part number could reach a maximum length of 14 characters and the physical space on the label for the Lot # field, Code 128 SHALL be utilized. Use of Code 128 allows for the proper quiet zone (see D.3.7).

For the smaller labels mentioned previously in D1, Code 128 SHALL be used for all barcoded fields.

All Labels will contain a PDF 417 2D Barcode.

D.5.1 Code Configuration

The four characters ($, /, +, %) SHALL NOT be used on the Shipping/Part Identification Label. Suppliers SHALL NOT include spaces in barcode fields unless Nexteer Automotive passes the data to you with embedded spaces.

D.5.2 Check Digits

For code 39 or code 128, the check digits SHALL NOT be added to the barcodes or human readable interpretation.

D.5.3 Code Density and Dimensions

This standard requires that the barcode meets a minimum height and that the bars and spaces maintain specific sizes and rations. Acceptable (100%) scanner read rates also require that quiet zones and gap widths be a specific size.

D.5.4 Barcode Height

For the larger 6.0 x 4.0 inch labels, the bar height SHALL be a minimum of 0.5 inches (13mm) unless otherwise noted. For the smaller 4.0 x 2.0 inch labels, the bar height SHALL be a minimum of 0.25 inches (6mm).

D.5.5 Narrow Elements

The bars and spaces in a symbol are called elements. For each barcode 39 symbol, the narrow element width (known as the X dimension) SHALL be within the range of 0.013 to 0.017 inches (0.33 to 0.43 mm).

D.5.6 Wide to Narrow Element Ratio

The ratio for code 39 of the average width of the wide elements to the average width of the narrow elements SHALL be 3:1, with an allowable range of 2.8:1 to 3.2:1.

D.5.7 Quiet Zone

For optimum scanning, a symbol's leading and trailing clear area known as the quiet zone SHALL be at least 0.25inches (6.4mm).

D.5.8 PDF 417 – 2D Barcode information

The following characters are used in the 2D barcode. They help determine the beginning and ending of data streams and data fields.

DESCRIPTION	ASCII/ISO 646 CHARACTER	DECIMAL VALUE	HEX VALUE
Right bracket	[	91	5B
Left parenthesis	)	41	29
Greater than sign	>	62	3E
Group separator	^G_S (Non Printable)	29	1D
Record separator	^R_S (Non Printable)	30	1E
End of transmit	$^E_{O_T}$ (Non Printable)	04	04

Each 2D label must start with the Message and Format Header:

[)>^R_S06

Each field must start with the group separator before the data identifier:

^G_SP12345678

Each 2D label must end with the record separator and message trailer:

$^R_S$$^E_{O_T}$

The mixed load label requires that a record separator and format header be used for each block of part data. In the following example the part number, rev level, PO and quantity make up the block of part data:

^R_S06^G_SP12345678^G_S2PRA12^G_SK123456789012^G_SQ1536^R_S

Note: Using additional barcode symbols on shipping packages is discouraged but may be appropriate in certain circumstances.

D.5.9 Use of Data Identifiers

A data identifier is one or more character that defines a general category type or specific use of barcoded data. **The barcoded field SHALL start with the data identifier and will identify the type of information encoded in that symbol.** Care must be taken that the barcoded data has the proper data identifier.

The data identifier SHALL be printed in human readable characters in parentheses under the title for the appropriate data area.

The data identifier SHALL NOT be included in the human readable interpretation of the barcode symbol.

All lengths specified in the following sections do not include the data identifier within the bar-coded fields.

D.5.10 Barcode Data Fields

The data fields that are used in the barcodes on the container label, master label and mixed load label are identified in the table below.

BARCODE DATA FIELDS				CONTAINER LABEL		MASTER LABEL		MIXED LOAD LABEL	
DESCRIPTION	HOW PROVIDED	DATA Identifier	DATA LEN	LINEAR Barcode	2D Barcode	LINEAR Barcode	2D Barcode	LINEAR Barcode	2D Barcode
Part Number	EDI – NAD*ST	P	8	Required	Required	Required	Required	Not used	Required
Rev Level	EDI	2P	0-3	Required	Required	Required	Required	Not used	Required
Quantity	EDI – QTY	Q	1-6	Required	Required	Required	Required	Not used	Required
Serial Number (Container)	Supplier	3S	6-10	Required	Required	Not used	Not used	Not used	Not used
Serial Number (Master)	Supplier	4S	6-10	Not used	Not used	Required	Required	Not used	Not used
Serial Number (Mixed)	Supplier	5S	6-10	Not used	Not used	Not used	Not used	Required	Required
Unit Of Measure	"PCS"	M	3	Not used	Required	Not used	Required	Not used	Not used
Purchase Order Number	EDI – RFF*ON	K	8-12	Not used	Required	Not used	Required	Not used	Required
Lot Number	Supplier	1T	0-10	Optional	Optional	Not used	Not used	Not used	Not used
KANBAN Number	EDI – GIN*AL	15K	0-6	Required	Required	Not used	Not used	Not used	Not used
Supplier (Mfg. DUNS)	EDI – NAD*SU	V	1-9	Not used	Required	Not used	Required	Not used	Not used
DUNS (Ship DUNS)	Supplier	U	1-9	Not used	Required	Not used	Required	Not used	Not used
DLOC	EDI – PCI*11Z	20L	0-6	Not used	Required	Not used	Required	Not used	Not used
Plant / Dock	EDI – PCI*12Z	21L	0-6	Not used	Required	Not used	Required	Not used	Not used
Date (YYMMDD)	Supplier	D	6-8	Not used	Required	Not used	Required	Not used	Not used

Note: Fields sent through EDI that are required and are blank, would still have the field identifiers in the barcodes with the field being blank.

Sample Label:

E. Container Label (Standard Label)

The purpose of this label is packaging identification allowing for some scan-able fields for data collection purposes at its' final destination. This label is used as the smallest shippable packaging unit (inner package) used to ship a single material number.

E.1   Required Data Areas and Titles

Shown are the required data fields for a container label:
- --- Supplier Location's Address
- --- Purchase Order – EDI DELJIT Segment RFF*ON
- --- Country of Origin
- --- Plant Address Line 1 – EDI DELJIT Segment NAD*ST
- --- Plant Address Line 2 – EDI DELJIT Segment NAD*ST
- --- Plant Address Line 3 – EDI DELJIT Segment NAD*ST
- --- DLOC – EDI DELJIT Segment PCI*12z
- --- Nexteer Automotive Part number – EDI DELJIT Segment LIN*IN
- --- Engineering Change/Revision Level *
- --- PLT/DOCK – EDI DELJIT Segment LOC*11 or PCI*11z
- --- Quantity
- --- Unit of Measure – EDI DELJIT Segment QTY
- --- Lot Number *
- --- Serial Number
- --- KANBAN – EDI DELJIT Segment GIN*AL
- --- Supplier MFG. DUNS number – EDI DELJIT Segment NAD*SU
- --- Supplier Ship from DUNS number
- --- Manufacturing Date (YY\MM\DD)
- --- Part Description – EDI DELJIT Segment PKG*14z

The 'Supplier Free Space' area can be used by the supplier for any additional data determined by the supplier.

E.4 Data Area Characteristics (Container Label)

Block A1	Block A2	2D Barcode
Block B1		Block B2
Block C1	Block C2	
Block D1	Block D2	
Block E1	Block E2	

Figure 3 Container Label Standard Sample

All lengths specified in the following sections do not include the data identifier within the bar-coded fields.

E.4.1 Block A1 – Supplier Information:
Supplier Name, Supplier City, State, Zip, Purchase Order (K), Country of Origin

Supplier Name SHALL be a minimum of 6 LPB high, with a maximum length of thirty six (36) characters. Supplier Street SHALL be a minimum of 7 LPB high, with a maximum length of thirty six (36) characters. Supplier City, State, Postal code and Country of Origin SHALL be on one line and be a minimum of 7 LPB high, with a maximum length of fifty (50) characters. The characters "MADE IN:" should appear before the country name.

The data for the Purchase Order comes from the EDI segment REF*ON. The Purchase Order is in the 2D barcode with the data identifier of (K).

E.4.1 Block A2– Nexteer Plant Information: Plant Name, Plant City, State, Zip, and DLOC (20L)*

Plant Name SHALL be a minimum of 6 LPB high, with a maximum length of thirty six (36) characters. Plant Street SHALL be a minimum of 7 LPB high, with a maximum length of thirty six (36) characters. Plant City, State, Postal code SHALL be on one line and be a minimum of 7 LPB high, with a maximum length of fifty (50) characters.

The DLOC information indicates Delivery Location where the material will be stored internally at a Nexteer Automotive division. The maximum length should be eight (8) characters. The human readable text of DLOC SHALL be bold and a minimum 3 LPB high. This data is typically from the EDI segment PCI 11Z. The DLOC is in the 2D barcode with the data identifier of (20L).

*DLOC may be optional for some Plants.

E.4.2.1 Block B1 - PART # CUST (P)

The part number SHALL be the Nexteer Automotive part number.

The Nexteer Automotive part number has a maximum length of ten (10) alphanumeric characters.

The human readable part number characters SHALL be bold and a minimum 2 LPB high.

The barcode symbol for the part number SHALL be directly below the human readable characters, SHALL be a minimum of 2 LBP high, and SHALL contain the data identifier (P) at the beginning of the barcode.

E.4.2.2 Block B1 (2ndField) – REV. LVL (2P)

The human readable Revision Level, also known as Engineering Change Number SHALL be a minimum of 5 LPB in height. The barcode symbol for the revision level SHALL be directly after the human readable characters and SHALL contain the data identifier of 2P at the beginning of the barcode and SHALL be 3 LPB in height. The maximum field length SHALL be three (3) characters alphanumeric. The data identifier is (2P) in the linear and 2D barcodes.

E.4.3 Block B2 -- PLT/DOCK (20L)

It indicates Plant and Dock designation. The data SHALL be bold and a minimum 3 LPB high, with a maximum length of 7 characters. The data comes from the EDI PCI 12Z segment. The data identifier is (21L) in the 2D barcode.

E.4.4 Block C1 - QUANTITY (Q)

The maximum length for the quantity field is six (6) numeric characters. The human read-able quantity characters SHALL be bold and a minimum of 2 LPB high. The barcode symbol for the quantity SHALL be printed directly above the human readable characters, SHALL be a minimum of 2 LBP high, and SHALL contain the data identifier (Q). The field data SHALL not start with zero (0) in the human readable nor should the data following the data identifier in the barcode be zero.

The unit of measure SHALL appear in human-readable form printed after the human readable of the quantity field with a maximum length of 3 characters and be a minimum of 6 LPB high. Unit of measure is assumed to be PC for pieces. The Unit of measure for other types of commodities will be transmitted to the supplier in the EDI Release or Pull. The data identifier is (M) in the 2D barcode.

E.4.5 Block C2 -- LOT NUMBER/EDI SEGMENTS (1T)

LOT Number is a supplier assigned lot control number (when and if needed). Format is at the supplier's discretion. If used, the human readable SHALL be a minimum of 5 LPB high, with a maximum length of ten (10) characters. The barcode symbology used SHALL be code 128 and be 4 LPB in height with a data identifier of 1T preceding the data. The human readable should be directly below the barcode. The title LOT NO. (1T) should precede the human readable.

E.4.6 Block D1 --- SERIAL NUMBER (3S)

Each shipping container or pack SHALL have a unique number called a serial number. This number is assigned by the supplier, not Nexteer Automotive, and does not necessarily need to be in sequential order. This unique number helps link the barcode data on the labels to EDI for traceability. The serial number SHALL NOT be repeated to Nexteer Automotive on another label within a twelve-month period.
The serial number has a maximum length of nine (9) alphanumeric characters + Data Identifier (3S)
The human readable serial number characters SHALL be bold and a minimum 2 LPB high.
The barcode symbol for the serial number SHALL be directly below the human readable characters, SHALL be a minimum of 2 LPB high.

E.4.7 Block D2 - KANBAN (15K)

This section of data varies. In the case of Kanban Number if included in EDI transmission to supplier, the Kanban Number and the corresponding barcode with the correct field title and data identifier, should be in this area.

This field has a maximum length of twelve (12) alphanumeric characters, the human readable characters SHALL be bold and a minimum 2 LPB high. The barcode symbol for this item SHALL be directly below the human readable characters, SHALL be a minimum of 2 LBP high, and SHALL contain the data identifier of (15K) for Kanban Number. For Kanban info, use KANBAN (15K) for box title. It may be necessary to use Code 128 for the barcode field if your Nexteer Automotive customer plant has longer data to be represented.

E.4.8 Block E1 – SUPPLIER FREE SPACE

Population of this block is left to the discretion of the supplier.

E.4.9 Block E2 – Supplier Information
<u>Supplier ship from Code Number (V), Duns number (U), Part Description, and Manufacture Date (D)</u>

Supplier(Mfg. Duns) and (Ship from Duns) number fields as recognized by Nexteer Automotive. For the Supplier Code, the barcode field has a maximum length of twelve (12) alphanumeric characters + Data Identifier of (V). The human readable characters SHALL appear below the barcode and be bolded and a minimum 4 LPB high. The title and data identifier symbol for the Supplier Ship from Duns number field SHALL be directly to the left of the human readable characters. The data identifier for the DUNS number is (U) in the 2D barcode.

Part Description has a maximum length of forty (40) characters, and SHALL be bold and a minimum 7 LPB high with the heading "DESC." at a minimum of 7 LPB. If you are EDI Certified, the part description of your customers PCI 17Z segment should appear here. If you are not certified, it should represent the part description your customer dictates.

MFG. DATE SHALL be minimum height of 7 LPB high, and formatted as YY/MM/DD with the heading "MFG. DATE:" at a minimum of 7 LPB. The data identifier for the date is (D) in the 2D barcode.

E.4.10 2D Barcode Data Stream

The 2D barcode of the sample label above has the following data stream:

[)>^R_S06^G_SP28134443^G_S2PRA12^G_SQ1536^G_S1TM10492003^G_S3S525604964
^G_SV123456789^G_SK123456789012^G_S15K110608^G_S20LB-11^G_S21L06
^G_SD12/03/20^G_SMPCS^G_SU123456789$^R_S$$^E_T$

E.4.11 Alternate 4.0 inch wide x 2.0 inch high Container label

VERTICAL

Horizontal

The bar height SHALL be a minimum of 0.25 inches (6 mm).

Barcode symbology SHALL be Code 128. Maintain quiet zones to 0.25 inches.

Human readable fields should be sized appropriately in order for the data to fit the label.

Your Nexteer Automotive packaging engineer will help you in determining which containers the above sized label is to be used for.

E.5 Electronic Data Interchange (EDI) Coordination

When EDI is used in conjunction with the Shipping/Parts Identification Label, the data areas SHALL be coordinated. The barcode data on the label must be consistent with the transmitted ASN (Advance Ship Notice) data sent to Nexteer Automotive.

F. Master Label

A master label SHALL be used to identify the total contents of a multiple pack load of the same part number. If the multiple common items loaded are in a closed container, the container SHALL bear a label identifying the receiving facility and delivery location. Each pack of the multiple pack SHALL be identified with a single pack label, except shipping parts & service support material, or unless otherwise instructed in the Nexteer Automotive purchase order.

Additional master label requirements can also be found in section G which talks of Mixed loads.

F.1 Required Data Elements

Shown are the required data fields for a Master Load label:
--- Supplier Location's Address
--- Purchase Order – EDI DELJIT Segment RFF*ON
--- Country of Origin
--- Plant Address Line 1 – EDI DELJIT Segment NAD*ST
--- Plant Address Line 2 – EDI DELJIT Segment NAD*ST
--- Plant Address Line 3 – EDI DELJIT Segment NAD*ST
--- DLOC – EDI DELJIT Segment PCI*12z
--- Nexteer Automotive Part number – EDI DELJIT Segment LIN*IN
--- Engineering Change/Revision Level *
--- PLT/DOCK – EDI DELJIT Segment LOC*11 or PCI*11z
--- Quantity
--- Unit of Measure – EDI DELJIT Segment QTY
--- Serial number
--- Supplier Mfg. Duns number – EDI DELJIT Segment NAD*SU
--- Supplier Ship from Duns number
--- Manufacturing Date (YY\MM\DD)
--- Part Description– EDI DELJIT Segment PKG*14z

F.2 Use of Data Identifiers

Click to see section on Use Of Data Identifiers

F.3 Text Lines-Per-Block

Click to see section on Information on human readable text

F.4   Data Area Characteristics (Master Label)

Block A1	Block A2	2D Barcode	
Block B1			Block B2
Block C1		Block C2	
Block D1		Block D2	
Block E1		Block E2	

Figure 4: Master Load Label format

F.4.1 Block A1 – Supplier Information:
Supplier Name, Supplier City, State, Zip, Purchase Order (K), Country of Origin

Supplier Name SHALL be a minimum of 6 LPB high, with a maximum length of thirty six (36) characters. Supplier Street SHALL be a minimum of 7 LPB high, with a maximum length of thirty six (36) characters. Supplier City, State, Postal code and Country of Origin SHALL be on one line and be a minimum of 7 LPB high, with a maximum length of fifty (50) characters. The characters "MADE IN:" should appear before the country name.

The data for the Purchase Order comes from the EDI segment REF*ON. The Purchase Order is in the 2D barcode with the data identifier of (K).

F.4.1 Block A2 – Nexteer Plant Information: Plant Name, Plant City, State, Zip, and DLOC (20L)*

Plant Name SHALL be a minimum of 6 LPB high, with a maximum length of thirty six (36) characters. Plant Street SHALL be a minimum of 7 LPB high, with a maximum length of thirty six (36) characters. Plant City, State, Postal code SHALL be on one line and be a minimum of 7 LPB high, with a maximum length of fifty (50) characters.

The DLOC information indicates Delivery Location where the material will be stored internally at a Nexteer Automotive division. The maximum length should be eight (8) characters. The human readable text of DLOC SHALL be bold and a minimum 3 LPB high. This data is typically from the EDI segment PCI 11Z. DLOC is in the 2D barcode with the data identifier of (20L).

*DLOC may be optional for some Plants.

F.4.2.1 Block B1 - PART # CUST (P)

The part number SHALL be the Nexteer Automotive part number.

The Nexteer Automotive part number has a maximum length of ten (10) alphanumeric characters.

The human readable part number characters SHALL be bold and a minimum 2 LPB high.

The barcode symbol for the part number SHALL be directly below the human readable characters, SHALL be a minimum of 2 LBP high, and SHALL contain the data identifier (P) at the beginning of the barcode.

F.4.2.2 Block B1 – REV. LVL (2P)

The human readable Revision Level, also known as Engineering Change Number SHALL be a minimum of 5 LPB in height. The barcode symbol for the revision level SHALL be directly after the human readable characters and SHALL contain the data identifier of (2P) at the beginning of the barcode and SHALL be 3 LPB in height. The maximum field length SHALL be three (3) characters alphanumeric.

F.4.3 Block B2 -- PLT/DOCK (20L)

It indicates Plant and Dock designation. The data SHALL be bold and a minimum 3 LPB high, with a maximum length of 7 characters. The data comes from the EDI PCI 12Z segment. The data identifier in the 2D barcode is (20L).

F.4.4 Block C1 - QUANTITY (Q)

The maximum length for the quantity field is six (6) numeric characters. The human read-able quantity characters SHALL be bold and a minimum of 2 LPB high. The barcode symbol for the quantity SHALL be printed directly above the human readable characters, SHALL be a minimum of 2 LBP high, and SHALL contain the data identifier (Q). The field data SHALL not start with zero (0) in the human readable nor should the data following

the data identifier in the barcode be zero. The unit of measure SHALL appear in human-readable form printed after the human readable of the quantity field with a maximum length of 3 characters and be a minimum of 6 LPB high. Unit of measure is assumed to be PC for pieces. The Unit of measure for other types of commodities will be transmitted to the supplier in the EDI DELJIT.

F.4.5 Block C2 – No Data

F.4.6 Block D1 --- SERIAL # (4S)

Each shipping container or pack SHALL have a unique number called a serial number. This number is assigned by the supplier, not Nexteer Automotive, and does not necessarily need to be in sequential order. This unique number helps link the barcode data on the labels to EDI for traceability. The serial number SHALL NOT be repeated to Nexteer Automotive on another label within a twelve-month period.
The serial number has a maximum length of nine (9) alphanumeric characters + Data Identifier (4S)
The human readable serial number characters SHALL be bold and a minimum 2 LPB high.
The barcode symbol for the serial number SHALL be directly below the human readable characters, SHALL be a minimum of 2 LPB high.

F.4.7 Block D2 – No Data

F.4.8 Block E1 – SUPPLIER FREE SPACE

Population of this block is left to the discretion of the supplier.

F.4.9 Block E2 – Supplier Information
Supplier ship from Code Number (V), Duns number (U), Part Description, and Manufacture Date (D)

Supplier(Mfg. Duns) and (Ship from Duns) number fields as recognized by Nexteer Automotive. The barcode field has a maximum length of twelve (12) alphanumeric characters + Data Identifier of (V). The human readable characters SHALL appear below the barcode and be bolded and a minimum 4 LPB high. The title and data identifier symbol for the Supplier Ship from Duns number field SHALL be directly to the left of the human readable characters. The data identifier for the DUNS number is (U) in the 2D barcode.

Part Description has a maximum length of forty (40 characters, and SHALL be bold and a minimum 7 LPB high with the heading "DESC." at a minimum of 7 LPB. If you are EDI Certified, the part description of your customers PCI 17Z segment should appear here. If you are not certified, it should represent the part description your customer dictates.

MANUFACTURE. DATE SHALL be minimum height of 7 LPB high, and formatted as YY/MM/DD with the heading "MFG. DATE:" at a minimum of 7 LPB. The data identifier for the date is (D) in the 2D barcode.

E.4.10 2D Barcode Data Stream

The 2D barcode of the sample label above has the following data stream:

[)>^R_S06^G_SP28134443^G_S2P014^G_SQ1536^G_S4S987654^G_SV123456789

^G_SK123456789012^G_S20LB-11^G_S21L06^G_SD11/05/23^G_SMPCS

^G_SU123456789^R_S^{E}O$_T$

G. Mixed Load Label –Multiple Single Packs of Differing Parts

The mixing of containers on a single skid/pallet destined for different plants or delivery docks SHALL NOT be allowed.

The Mixed load label SHALL be used to identify a load of multiple single packs of different part numbers. The Mixed load label SHALL appear on two adjacent sides of the pallet load. Additionally, the following rules **SHOULD** also be followed:

For a mixed part number skid/pallet, a MASTER label for each part number **SHOULD** be required. A Master label of each individual part **SHOULD** be applied on one side of the pallet where each can be scanned easily. When the pack is broken apart, the labels are discarded. See example below

1. Individual Master labels
2. Mixed label
3. Container label
4. Cardboard placard or similar where Master labels are applied. As an alternative, labels can be neatly applied to the shrink wrap in a way that barcode fields can be scanned.
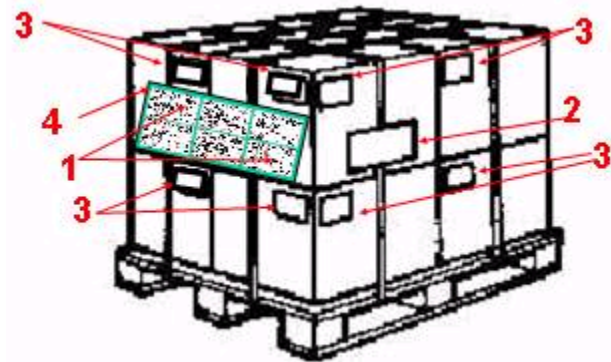
MULTIPLE PLANT LOCATIONS ARE NOT ALLOWED ON A SINGLE SKID OR PALLET.

G.1   Required Data Elements

Shown are the required data fields for a container label:
--- Supplier Location's Address
--- Plant Address Line 1 – EDI DELJIT Segment NAD*ST
--- Plant Address Line 2 – EDI DELJIT Segment NAD*ST
--- Plant Address Line 3 – EDI DELJIT Segment NAD*ST
--- Nexteer Automotive Part number – EDI DELJIT Segment LIN*IN
--- Engineering Change/Revision Level *
--- Purchase Order – EDI DELJIT Segment RFF*ON
--- Country of Origin
--- Quantity
--- Serial Number
--- PLT/DOCK – EDI DELJIT Segment LOC*11 or PCI*11z
--- Supplier Mfg. Duns number – EDI DELJIT Segment NAD*SU
--- Supplier Ship from Duns number
--- Part Description – EDI DELJIT Segment PKG*14z
--- Manufacturing Date (YY\MM\DD)

The 'Supplier Free Space' area can be used by the supplier for any additional data determined by the supplier.

G.2   Use of Data Identifiers

(Click to see section E.2)

G3.   Text Lines-Per-Block

(Click to see section E.3)

G4. Data Area Characteristics (Mixed Load Label)

Block A1	Block A2	Block A3 2D Barcode
Block B1		
Block C1	Block C2	
Block D1	Block D2	

Figure 5: Mixed Load Label format

G.4.1 Block A1 – Supplier Information:
Supplier Name, Supplier City, State, Zip

Supplier Name SHALL be a minimum of 6 LPB high, with a maximum length of thirty six (36) characters. Supplier Street SHALL be a minimum of 7 LPB high, with a maximum length of thirty six (36) characters. Supplier City, State, Postal code and Country of Origin SHALL be on one line and be a minimum of 7 LPB high, with a maximum length of fifty (50) characters. The characters "MADE IN:" should appear before the country name.

G.4.2 Block A2 – Nexteer Plant Information: Plant Name, Plant City, State, Zip

Plant Name SHALL be a minimum of 6 LPB high, with a maximum length of thirty six (36) characters. Plant Street SHALL be a minimum of 7 LPB high, with a maximum length of thirty six (36) characters. Plant City, State, Postal code SHALL be on one line and be a minimum of 7 LPB high, with a maximum length of fifty (50) characters.

G.4.3 Block A3 – 2D Barcode

This block only contains the 2D barcode.

G.4.4 Block B1 --- PART DATA: PART NUMBER (P), REVISION LEVEL (2P), PURCHASE ORDER NUMBER (K), COUNTRY OF ORIGIN, AND QUANITITY (Q)

This block contains the human readable part data.

G.4.4 Block C1 --- SERIAL # (5S)

Each shipping container or pack SHALL have a unique number called a serial number. This number is assigned by the supplier, not Nexteer Automotive, and does not necessarily need to be in sequential order. This unique number helps link the barcode data on the labels to EDI for trace-ability. The serial number SHALL NOT be repeated to Nexteer Automotive on another label within a twelve-month period.
The serial number has a maximum length of nine (9) alphanumeric characters + Data Identifier (5S)
The human readable serial number characters SHALL be bold and a minimum 2 LPB high.
The barcode symbol for the serial number SHALL be directly below the human readable characters, SHALL be a minimum of 2 LPB high.

G.4.2 Block C2 -- PLT/DOCK

It indicates Plant and Dock designation. The data SHALL be bold and a minimum 3 LPB high, with a maximum length of 7 characters. The data comes from the EDI PCI 12Z segment.

G.4.5 Block D1 – SUPPLIER FREE SPACE

Population of this block is left to the discretion of the supplier.

## G.4.5 Block D2 – Supplier Information
Supplier ship from Duns number, Part Description, and Manufacture Date

Supplier(Mfg. Duns) and (Ship from Duns) number fields as recognized by Nexteer Automotive. The barcode field has a maximum length of twelve (12) alphanumeric characters + Data Identifier of "V". The human readable characters SHALL appear below the barcode and be bolded and a minimum 4 LPB high. The title and data identifier symbol for the Supplier Ship from Duns number field SHALL be directly to the left of the human readable characters.

Part Description has a maximum length of forty (40 characters, and SHALL be bold and a minimum 7 LPB high with the heading "DESC." at a minimum of 7 LPB. If you are EDI Certified, the part description of your customers PCI 17Z segment should appear here. If you are not certified, it should represent the part description your customer dictates.

MFG. DATE SHALL be minimum height of 7 LPB high, and formatted as YY/DD/MM with the heading "MFG. DATE:" at a minimum of 7 LPB.

E.4.10 2D Barcode Data Stream
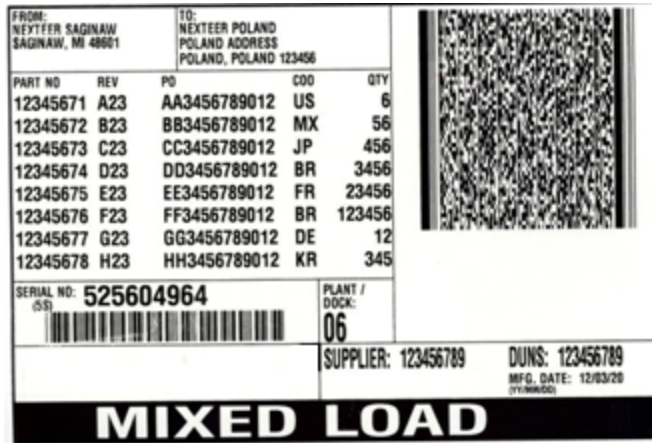
The 2D barcode of the sample label above has the following data stream:

[)>^R_S06^G_SP12345671^G_S2PA23^G_SKAA3456789012^G_SQ6

^R_S06^G_SP12345672^G_S2PB23^G_SKBB3456789012^G_SQ56

^R_S06^G_SP12345673^G_S2PC23^G_SKCC3456789012^G_SQ456

^R_S06^G_SP12345674^G_S2PD23^G_SKDD3456789012^G_SQ3456

^R_S06^G_SP12345675^G_S2PE23^G_SKEE3456789012^G_SQ23456

^R_S06^G_SP12345676^G_S2PF23^G_SKFF3456789012^G_SQ123456

^R_S06^G_SP12345677^G_S2PG23^G_SKGG3456789012^G_SQ12

^R_S06^G_SP12345678^G_S2PH23^G_SKHH3456789012^G_SQ345

^R_S06^G_S21L06^G_SU123456789^G_SMPCS^G_SD12/03/20^G_SV123456789

^G_S5S525604964$^R_S$$^E_T$O

J.   Placement

Labels SHALL be placed no closer than 1.25 inches (32mm) from any container edge. Label placement toward the center of the sides of rectangular, corrugated containers SHOULD be avoided because excessive abrasion damage may result during transportation and render the label not usable.

For placement on various types of containers, labels SHOULD be applied in an easily accessible location[*].

For unit loads, the placement of the label SHALL be on the upper half of the unit load. The bottom edge of the label SHALL NOT be higher than 60 inches (152cm) from the bottom of the unit load.

Unit loads SHALL have identical labels on two adjacent or opposite sides to reduce the destruction of both labels in the event of mishap.

NOTE: Additional labeling requirements may be dictated by each individual plant as needed.
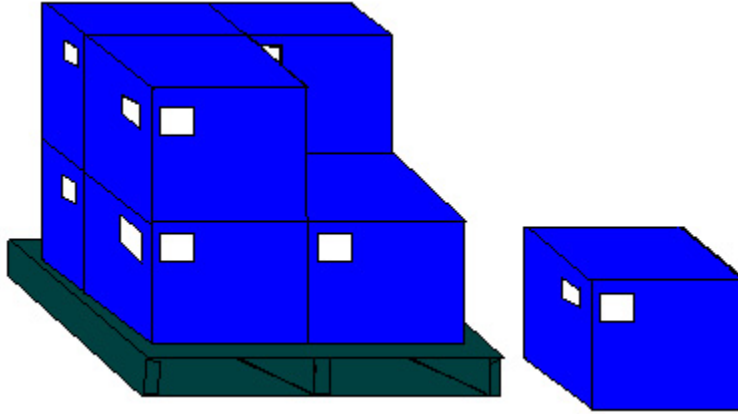

Figure 6: Example of possible label locations on a palletized box.

K. Quality Check

Suppliers have a responsibility to provide barcoded labels that meet Nexteer Automotive standards and Nexteer Automotive has a responsibility to alert suppliers of any persistent label non-conformance.

The ANSI X3.182, Barcode Print Quality Guideline SHALL be used to determine barcode symbol print quality. It is suggested that the supplier's minimum internal print quality grade SHALL be (B) 3.0/10/660, to guarantee a customer print quality grade of (C) 1.5/10/660 where:

- Minimum print quality grade = 3.0 (B)
- Measurement aperture =0.010 inch (0.254 mm)
- Inspection wavelength = 660 nanometers +/- 10 nanometers.

Verification audits shall be used in conjunction with statistical process control to assure label quality.

L. Packing List minimum requirements

Nexteer Automotive will not dictate the exact format of the Packing list, it does have some basic data requirements that SHALL appear on the document. The packing list SHALL contain a barcode field for the Advanced Shipment Notice number or ASN. This number is assigned by the supplier and does not necessarily need to be in sequential order. This unique number helps link the barcode data on the labels to EDI for receiving purposes. The ASN number SHALL NOT be repeated to Nexteer Automotive within a twelve-month period.

L.1 Sample Packing Slip Approval

Your sample packing list SHALL be submitted at the same time your shipping containers labels are sent for approval.

L.2 Barcode Symbology for Advanced Shipment Notice or ASN.

Code 128 SHALL be used with no check digits. The same rules for the barcode fields on the shipping container labels SHALL also apply to the ASN barcode field on the packing list. Adequate quiet zones before and after are required.   The data identifier of 2S SHALL be used in the barcode field and SHALL NOT appear as part of the human readable field. The human readable ASN SHALL NOT be less than 0.25 inches in height and SHALL appear below the barcode. The barcode field SHALL have a title of ASN (2S). Each packing list SHALL have a unique ASN. The barcode field SHALL appear in the upper right portion of the document.

The SID (Shipment ID) Number SHALL be the exact same number as sent in the ASN DELJIT Transaction.   As the ASN data is transmitted via EDI, suppliers are strongly encouraged to become EDI certified. Please reference the Nexteer Automotive Electronic Data Interchange (EDI) Requirements Standard.

L.3 Other data requirements

Complete Nexteer Automotive Address including receiving dock information.

Complete Supplier Address including phone number and contact person's name.

Each part and its quantity on the shipment.

Appendix

Appendix A: Label Approval Form

For approval of the shipping label format, fax this form to:

Name: Nexteer Automotive Labeling Divisional Representative (App. C)

Company: Nexteer Automotive

Phone: 989-757-9196 or 989-757-3538

Approval Signature:_____.

Approval Date: _____.

From: Supplier Name:

       Supplier Company:

       Supplier Phone, e-mail, Fax:

Appendix B: Label Approval Checklist by Nexteer Automotive Internal Usage

Nexteer Automotive uses an internal database to qualify a label for certification. Each field of the label is tested for the criteria listed. Note this list only displays the criteria for one bar-code field and one non-bar-coded field. Your actual form will contain a block as shown below for each bar-coded field on your particular label format.

Header information

Supplier Name:

Supplier Duns:

Ship to Locations:

Type of Label: Container   Initiative: Shipment

Team Contact & Phone:

Fax Number: (248)267-8854

Date: March 27, 2002

Analyst Name:

Field information

Bar-coded field

1. Part Number	Passed	Comments
Barcode scanable	☑	_____
Barcode contains identifier	☑	_____
Barcode matched data	☑	_____
Barcode height (.5 inches)	☑	_____
Font size (.4 inches)	☑	_____
Wide/Narrow Ratio (2.8-3.2	☑	_____
Quiet zone	☑	_____
Other	▨	

A check in the Passed block means the item met or exceeded expected minimums.

Non-Bar-Coded Field

These fields are qualified on the premise of data integrity, font size and positioning. This is denoted by a comment on the form used by Nexteer Automotive with the heading "Human Readable Text Fields". In the event you have an issue with one of these fields, a copy of the label can be sent depicting the problem along with the above form.

Appendix C:
Nexteer Automotive Labeling Contact List

Terry Richter = 989-757-3538 (label approval)

Dan Lupu = 989-757-4451 (label approval)

Pat Rickman = 989-757-9196 (contact for supplier

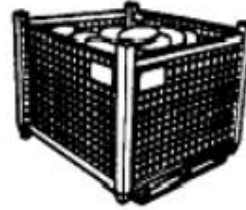certification questions / EDI / General Information)

Brenda Hasso = 989-757-4915 (Information Flow Manager)

Supplier Portal Link: https://portal.covisint.com/portal/public/_l:en/tp/sssc

Appendix D: Suggested Label Placement

BASKET, WIRE MESH CONTAINER
Identical labels **SHALL** be located on two adjacent sides.

METAL, BIN or TUB
Tag one visible piece near top or use a label holder.

PALLET BOX
Identical labels **SHALL** be located on two adjacent sides.
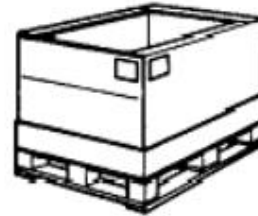
TELESCOPE OR SET- UP CONTAINERS
Identical labels **SHALL** be located on two adjacent sides of the outer box. Some applications may also require identification of the inner box.
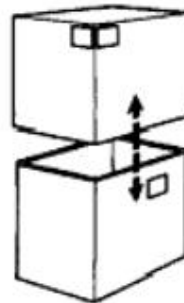
BUNDLE
Identical tags **SHALL** be located at each end.

BAG
Place one label at the center of face.

ROLL
Hang one tag 2.0 in (51 mm) from end of material.

RACK
Tag one visible piece near top, or use a label holder.
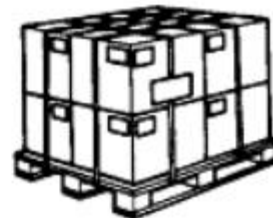
BOX or CARTON
Identical labels **SHALL** be located on adjacent sides.

CARTONS ON PALLET
Identical Master Load or Mixed Load Labels
SHALL be used on adjacent sides.

DRUMS, BARRELS, or CYLINDRICAL CONTAINERS

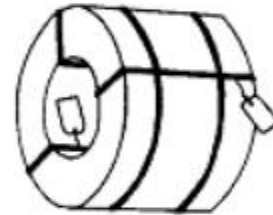Identical labels **SHALL** be located on the top and near the center of the side.

BALES

Identical labels **SHALL** be located at the upper corner of an end and the adjacent side (wraparound label acceptable).
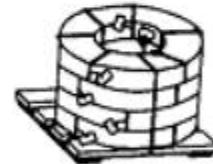

SINGLE COIL

Identical labels **SHALL** be used. Locate one on the inside of the coil and one on the outside.

SLIT COILS

Identical labels **SHALL** be used. Locate one on the inside of each coil and one on the outside of each coil.
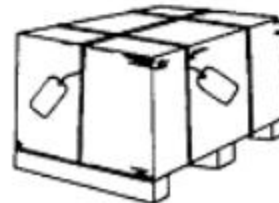

TUBING and BARS

Identical labels **SHALL** be used. Attach one to each end of the bundle.

SHEETS/CUT LENGTHS/BLANKS

Identical labels **SHALL** be located on two adjacent sides.

RETURNABLE CONTAINERS

Refer to applicable AIAG standards (RC-1 through RC-8).

Appendix E: Revision History

Date	Revision
12/01/2011	• Updated Appendix C contact names and phone numbers • Created Appendix E, Revision History
1/27/2012	• Removed North America
2/29/2012	• Add Horizontal Label to the Alternate 4.0 inch wide x 2.0 inch high container label.
10/24/2012	• Changed DUNS fields definition.
	•