

Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

Table of Contents

Scope and Purpose	Page 2
Responsibility	Page 2
Definitions	Page 2
Container Label	Page 3
Bundle Label	Page 4
Pizza Box Label	Page 4
Hide Label	Page 5
Master Label	Page 5
Mixed Load Label	Page 6
Additional Information	Page 7



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

February 1, 2018

2D Code Labeling

1.0) Scope and Purpose:

This document defines how to use the 2D Code Label. For positioning labels on a container, roll or pallet, see the Lear website, www.lear.com under Suppliers then select, Web Guides Supply Chain Requirements for Suppliers followed by, Supplier Packaging Requirements & Guidelines.

2.0) Responsibility:

It is the responsibility of a Lear supplier to adhere to the requirements listed in this document and Lear Corporate purchase order terms and conditions. If an inconsistency between this document and the purchase order terms and conditions exists, the purchase order terms and conditions shall supersede this document.

3.0) Definitions:

- **3.1) 2D Code** A type of two-dimensional (2D) code representation of multiple data elements, that can be read with an image reader.
- **3.2) 1D Barcode** An optical, machine-readable representation of data using bars and read with a laser scanner or an image reader.
- **3.3)** Data Matrix Code consisting of black and white "cells" or modules, arranged in either a square or rectangular pattern; also known as a matrix.
- **3.4)** AIAG Automotive Industry Action Group.
- **3.5)** ANSI American National Standards Institute.
- 3.6) Odette Pan European Collaboration and Services.
- **3.7)** Container Label A label that is attached to a shipping container returnable or expendable or a roll of material, that identifies the contents of the container or roll.
- **3.8)** Bundle Label A label that is attached to a bundle of material that may or may not reside within a shipping container; usually used in Bulk Shipments.
- **3.9)** Pizza Box Label A label that is attached to a shipping container that resembles a pizza box shape, and requires the 2D Code label to be attached to the narrow side of the box for accessibility.
- **3.10)** Master Label A label that is attached to a pallet of material, that is all the same part number.
- **3.11) Mixed Load Label** A label that is attached to a pallet of material, that contains multiple part numbers.
- **3.12)** Human Readable Characters that can be read by a human being.



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

- **3.13)** Data Identifier A character or characters, that define the data element immediately followed by the data.
- **3.14)** Group Separator/Data Separator A control character or characters, used to divide data elements within the 2D Code.
- 3.15) Header Characters with control characters used to indicate the beginning of the record.
- **3.16)** Trailer Control characters indicating the end of the record.
- **3.17) Serial Number** A unique numeric or alpha numeric identifier, used to identify a container, liquid container, roll, or hide, that never repeats.
- **3.18)** License Plate Number A unique numeric or alpha numeric identifier, used to identify a pallet of material.

4.0) Container Label:

The Container Label, is a label that identifies the material within a container or contained within a roll or liquid container. Every container within a shipment, must have a container label attached to it, as specified by the Lear Supplier Packaging Requirements & Guidelines. The following data elements are contained within the 2D Code and or the label itself, as Human Readable Characters. All data cell titles and data identifiers as shown in the 2D Barcode Global Guidelines are to be followed.

- **4.1)** Supplier Lear defined supplier code 2D Code and Human Readable
- **4.2)** Part Number Lear defined part number 2D Code and Human Readable
- **4.3)** Supplier Part Number Supplier part number if used 2D Code and Human Readable
- **4.4) Description** Lear defined part description 2D Code and Human Readable
- **4.5)** Quantity Quantity of material contained within the container or roll 2D Code and Human Readable
- **4.6) Unit of Measure (UOM)** Unit of Measure as it appears in the Lear Purchase Order Human Readable
- **4.7) Serial Number** A unique number or alpha numeric identifier, identifying a container or roll, that never repeats 2D Code and Human Readable
- **4.8)** Lot Number If used in a supplier's manufacturing process 2D Code and Human Readable
- **4.9) Location** Lear Plant defined storage location; can appear in electronic communications such as schedule releases 2D Code and Human Readable
- **4.10)** Ship From Suppliers address for the supplier shipping location 2D Code and Human Readable
- **4.11) Ship To** Lear Plant address that the shipment is destined; can appear in an electronically transmitted schedule 2D Code and Human Readable



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

4.12) Free Form – Any additional data that the supplier or Lear plant deems necessary to help identify the material – Human Readable

5.0) Bundle Label:

The Label that is attached to bundles of material, that may or may not be shipped inside a shipping container. Used mainly in bulk shipments. Format and data elements are identical to the Container Label with one exception.

5.1) Serial Number – The serial number on a bundle label must have a relationship with the Container Label so it is easily connected to the correct Container Label. Example: Container Serial Number = 123456 - Bundle Serial Numbers = 123456001 - 123456002 - etc.

6.0) Pizza Box Label:

The Pizza Box Label is a label used on containers that are similar to the pizza box shape, with a narrow side, where the label needs to be positioned for visibility and access. This type of container can be used for shipments such as the leather die cut sets. The following data elements are contained within the 2D Code and or the label itself, as Human Readable Characters. All data cell titles and data identifiers as shown in the 2D Barcode Global Guidelines are to be followed.

- **6.1)** Supplier Lear defined supplier code 2D Code and Human Readable
- **6.2)** Part Number Lear defined part number 2D Code and Human Readable
- **6.3)** Supplier Part Number Supplier part number if used 2D Code and Human Readable
- **6.4) Description** Lear defined part description 2D Code and Human Readable
- **6.5)** Quantity Quantity of material contained within the container 2D Code and Human Readable
- **6.6) Unit of Measure (UOM)** Unit of Measure as it appears in the Lear Purchase Order Human Readable
- **6.7) Serial Number** A unique number or alpha numeric identifier, identifying a container, that never repeats 2D Code and Human Readable
- **6.8)** Lot Number If used in a supplier's manufacturing process 2D Code and Human Readable
- **Manufacture Date** Date the part was manufactured two data formats available based upon Lear plant discretion, 2D Code US Format "YYYYMMDD" and European Format "DDMMYYYY", Human Readable US Format MM-DD-YYYY European Format DD-MM-YYYY
- **6.10)** Engineering Revision Engineering change revision/level for the material inside the container 2D Code and Human Readable



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

- **6.11) Ship From** Suppliers address for the supplier shipping location 2D Code and Human Readable
- **6.12) Ship To** Lear Plant address that the shipment is destined; can appear in an electronically transmitted schedule 2D Code and Human Readable
- **6.13)** Free Form Any additional data that the supplier or Lear plant deems necessary to help identify the material Human Readable

7.0) Hide Label:

The Hide Label, is a label attached to each individual finished leather hide, that identifies the hide. The following data elements are contained within the 2D Code and or the label itself, as Human Readable Characters. All data cell titles and data identifiers as shown in the 2D Barcode Global Guidelines are to be followed.

- 7.1) Supplier Lear defined supplier code 2D Code and Human Readable
- **7.2)** Part Number Lear defined part number 2D Code and Human Readable
- **7.3) Description** Lear defined part description 2D Code and Human Readable
- **7.4)** Quantity Quantity of material the finished hide contains 2D Code and Human Readable
- **7.5) Unit of Measure (UOM)** Unit of Measure as it appears in the Lear Purchase Order Human Readable
- **7.6) Serial Number** A unique number or alpha numeric identifier, identifying a hide, that never repeats 2D Code and Human Readable
- **7.7)** Lot Number If used in a supplier's manufacturing process 2D Code and Human Readable
- **7.8) Manufacture Date** Date the part was manufactured two data formats available based upon Lear plant discretion, 2D Code US Format "YYYYMMDD" and European Format "DDMMYYYY", Human Readable US Format MM-DD-YYYY European Format DD-MM-YYYY

8.0) Master Label:

The Master Label is a label attached to a pallet of material, that identifies the material within or on the pallet and all containers containing the same part number. Each individual container has container labels attached to each. For some data elements within the Master Label, there are unique Data Identifiers used. The data identifiers are to define the difference between data in the Master Label and similar data contained in a Container Label on the pallet. A maximum of 1,310 characters can be contained in the 2D Code of a Master Label. The reason for this restriction, is because Image Readers, are not reading the 2D Code with more than 1,310 characters. The following data elements are contained within the 2D Code and or the label itself, as Human Readable Characters. All data cell titles and data identifiers as shown in the 2D Barcode Global Guidelines are to be followed.



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

- **8.1)** Supplier Lear defined supplier code 2D Code and Human Readable
- **8.1)** Part Number Lear defined part number 2D Code and Human Readable
- **8.2)** Supplier Part Number Supplier part number if used 2D Code and Human Readable
- **8.3) Description** Lear defined part description 2D Code and Human Readable
- 8.4) Total Part Pallet Quantity Quantity of material contained within the Pallet 2D Code and Human Readable
- **8.5) Unit of Measure (UOM)** Unit of Measure as it appears in the Lear Purchase Order Human Readable
- **8.6)** License Plate Number A unique number or alpha numeric identifier, identifying a pallet, that never repeats 2D Code and Human Readable
- **8.7)** Location Lear Plant defined storage location; can appear in electronic communications such as schedule releases 2D Code and Human Readable
- **8.8)** Pallet Container Count The number of the containers on the pallet with the same part number 2D Code
- **8.9)** Container Serial Numbers All container label serial numbers contained on the pallet for the same part number 2D Code
- **8.10)** Ship From Suppliers address for the supplier shipping location 2D Code and Human Readable
- **8.11)** Ship To Lear Plant address that the shipment is destined; can appear in an electronically transmitted schedule 2D Code and Human Readable
- **8.12)** Free Form Any additional data that the supplier or Lear plant deems necessary to help identify the material Human Readable

9.0) Mixed Load Label:

Mixed Load label is a label that identifies pallets that contain more than one part number. For some data elements within the Mixed Load Label, there are unique Data Identifiers used. The data identifiers are to define the difference between data on the Mixed Load Label and similar data contained on a Container Label that is on the pallet. A maximum of 1,310 characters can be contained in the 2D Code of a Master Label. The reason for this restriction is because Image Readers are not reading the 2D Code with more than 1,310 characters. The following data elements are contained within the 2D Code and or the label itself, as Human Readable Characters. All data cell titles and data identifiers as shown in the 2D Barcode Global Guidelines are to be followed.



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

- **9.1)** Supplier Lear defined supplier code 2D Code and Human Readable
- **9.2)** Part Number Lear defined part number 2D Code and Human Readable
- **9.3)** Part Total Pallet Quantity Quantity of material contained within the pallet for a part number 2D Code and Human Readable
- **9.4)** License Plate Number A unique number or alpha numeric identifier, identifying a pallet, that never repeats 2D Code and Human Readable
- **9.5)** Pallet Container Count The number of the containers on the pallet 2D Code
- **9.6)** Container Serial Numbers All container label serial numbers contained on the pallet for the same part number 2D Code
- **9.7) Ship From** Suppliers address for the supplier shipping location 2D Code and Human Readable
- **9.8) Ship To** Lear Plant address that the shipment is destined; can appear in an electronically transmitted schedule 2D Code and Human Readable
- **9.9)** Free Form Any additional data that the supplier or Lear plant deems necessary to help identify the material Human Readable

10.0) Additional Information:

- 10.1) Label Size AIAG or Odette label dimensions are acceptable for the Container, Bundle, Master and Mixed Load labels, but, must be similar to label dimensions in the Lear 2D Label Global Guidelines. Pizza Box and Hide label dimensions, must be followed as detailed in the Lear 2D Label Global Guidelines
- **10.2) 2D Code Data** Only the data listed in the Lear 2D Label Global Guidelines is to be contained in the 2D Code
- **10.3) 2D Code Data Sequence** Data is to appear in the 2D Code as listed in the Lear 2D Label Global Guidelines
- **10.4)** Data Placeholders Data Identifier placeholders are to be used within the 2D Code; if there is no data for a data element, the Data Identifier for that data element appears in the 2D Code by itself
- 10.5) Control Characters Control Characters are not visible when viewing a readout of the scan
- **10.6) Data Separator** The Data Separator/Group Separator, contained within the 2D Code is <GS> and is a control character
- 10.7) Header The Header is a combination of Characters and Control Characters and appears as [)><RS>06<GS> with <RS> being the Record Separator control character along with <GS> being the Data Separator/Group Separator
- **10.8) Trailer** The Trailer consists of two Control Characters <RS><EOT> with <RS> being the Record Separator and <EOT> being End Of Transmission



Revision Date: 01/11/19 Effective Date: 01/11/19 Initial Publish: 02/02/18

- **10.9)** Data Identifiers Data Identifiers listed in the 2D Barcode Global Guidelines is to be used
- 10.10) Language Language used on the labels is controlled by the Lear facility; any translations must represent what is listed in English and must be approved by the Lear facility receiving the shipments
- 10.11) Maximized Labels If Master or Mixed Load label data maximizes the 2D Code maximum, (1,310 Characters) a second label is to be used; all data are directed at what is contained in the 2D Code for the Master or Mixed Load label and may not equal total quantities physically on the pallet
- 10.12) More Than One Master or Mixed Load Label on a Pallet If the need arises and there is more material on the pallet than can fit into one Master or Mixed Load label, then an additional label(s) are used to capture what physically is contained on the pallet
- 10.13) Non-Standard Container Quantity on a Mixed Load Pallet If there is a non-standard quantity container of material on a pallet for a part number with other standard quantity containers, then on the human readable characters it must have its own cell to show the non-standard quantity; the serial number for the container, must appear at the end of the data string for that part number within the 2D Code