



LEAR Corporation Sweden

**Odette Transport Label Guideline
Vers. 1 Rev. 4**

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1. Introduction

In this guideline, you will find information and demands how to create a proper Odette Transport Label used by Lear Sweden. LEAR has taken in consideration all quality standards that follow with OTL handling within the Automotive Industry.

In the lean and effective goods receiving process at LEAR, a set up with a fully automatic process with no manual interference of the administrative information are applied. Re-using information in the Electronic Data Interchange (EDI) messages and having an automatic scanning of the Odette Transport Label (OTL) in the goods receiving area is therefore important.

Suppliers delivering parts to LEAR must therefore be able to implement the OTL according to the Lear demands specified in this guideline.

The Odette Transport Label is intended to be used on all transport packages between Lear (buyer) and the supplier. It is expected that in most cases the label will be used in conjunction with advance shipping information i.e. the Despatch Advice (AVIEXP) message which is transmitted between the parties electronically.

2. Paper, Size and Materials

The format of the OTL is A5 (210x148 mm).

The OTL paper must be white with black printing.

The label material has to have a weight of not less than 160-170 g/m². This is to assure the OTL information being readable in the complete supply chain.

An adhesive OTL must be used on Transport packages of Homogenous- and Mixed character, using Label holder and plastic- or carton boxes. The adhesive OTL material, exclusive the back-side paper, has to have a weight of not less than 80 g/m².

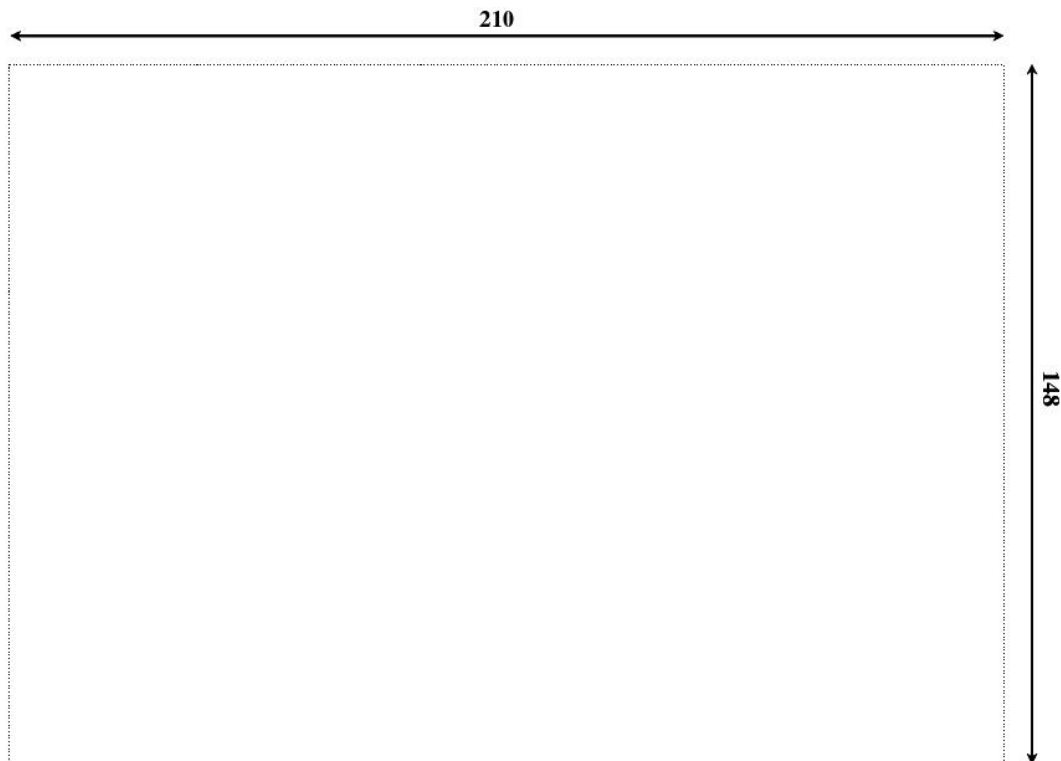
Adhesive labels may be pressure-sensitive or dry-gummed as long as the adherence to the package surface is assured and that the OTL is removable from the Transport package after usage. The adhesive should be of alkaline water-soluble kind to be approved in environmental aspects.

Recommendations of which OTL printer paper to be used, has to be requested by the OTL paper supplier. For Direct Thermo it is recommended to use minimum Semi Thermal paper.

The label must be durable enough to ensure readability at its destination, i.e. being water and sun resistant.

Illustration below describes the size of an OTL, figures in millimeter (mm).

The illustration below is not to actual size.



3. Printers and Software

To ensure readability of the bar codes, a very high print quality is demanded. Therefore LEAR recommends using either a **Direct Thermo** or **Thermo Transfer** printers as they are more suitable for industrial printing and are more robust for the environment its working in.

A Direct Thermo printer is considered to be less expensive, more environmental friendly and demands less maintenance. This is due to e.g. no use of foil. In most cases a Thermo Transfer printer can easily be transferred to a Direct Thermo printer.

If a **Laser** printer is used to print the OTL it must be, by the printer manufacturer, recommended for industrial use and printing.

This since a Laser printer is more sensitive to the environment it is working in. A configuration of the printing set up which allows edge compensation is NOT allowed as this will have a negative effect on the printed barcode. A Laser printer is considered to best suitable when only small series of OTL's are printed. This is due to high working expenses.

Matrix printers are NOT allowed in any supply chain to LEAR because of low print quality aspects.

4. Data Area Layout

Data Area

The size of each data area is defined to fit the content, considering font size, bar code heights and dimensions.

Outer border line (frame) should not be printed on the OTL. This is to provide the best reading possibilities of the bar code.

Each data area should be separated by thin lines.

Characters

Any readable character set can be used, but the Odette recommendations are the following:

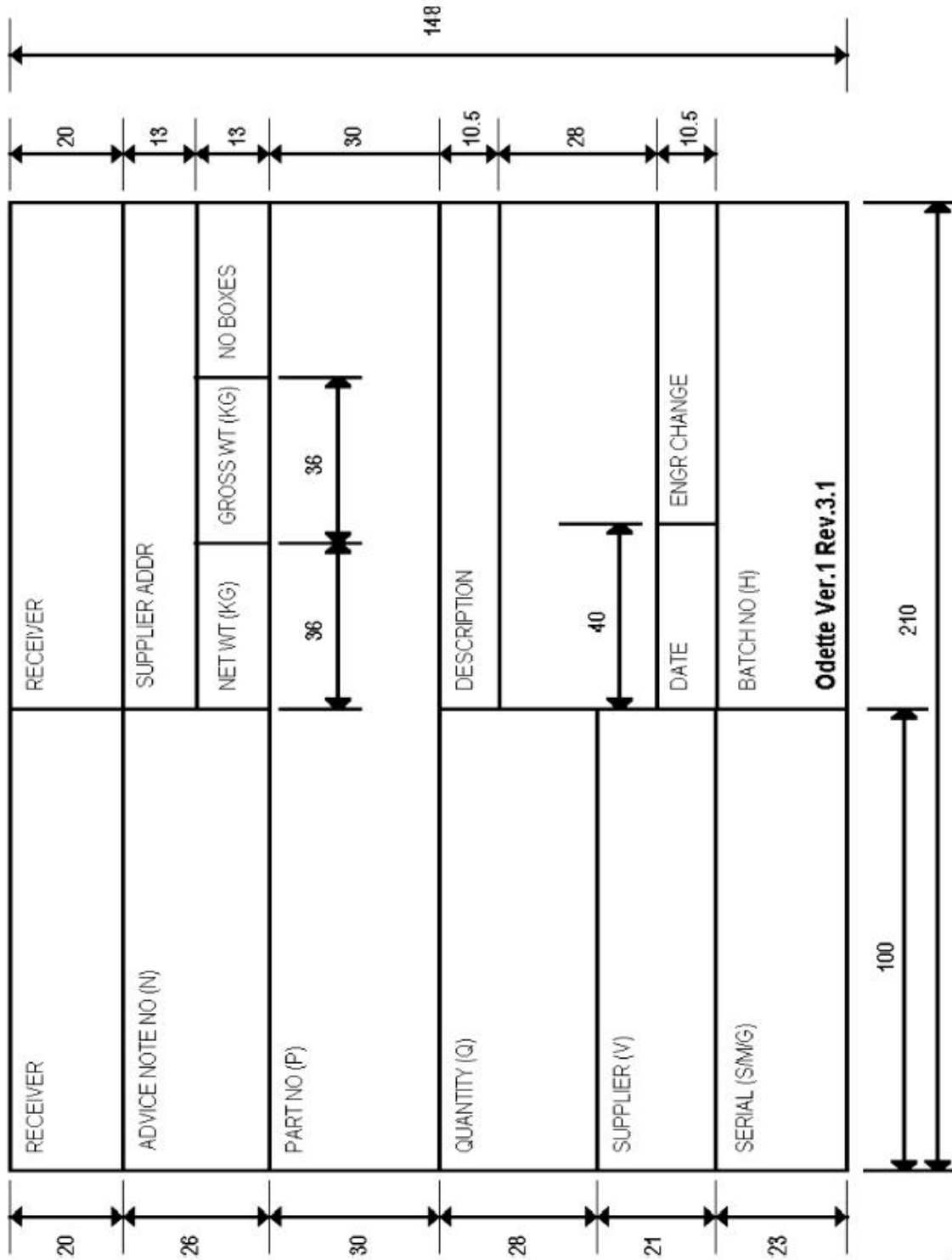
- Font: Helvetica bold e.g. OTL / 1234567890
- Character Set: ISO 3098-1

Titles and Identifier Codes

In the upper left corner of each data area, the Data Area titles shall be printed. This information is allowed to be printed in any language. Font size to be used is 1.5 mm. Data Identifiers shall be printed as a part of the Data area title, at the end of the title and within brackets, e.g. Serial Number (S). Further information regarding Data Identifiers is to be found in the Data Area Table in chapter 4.1, column Data Identifiers.

The illustration below shows the layout of the OTL, figures in millimeter (mm).

Notice! Not actual size.



4.1 Data Area Content

Data printed on the OTL must be consistent with the data collected from the Delivery Schedules (DELINS) and in conjunction with the ASN message (AVIEXP).

The data information in readable text must be printed above and in conjunction with the bar code, e.g. Advice note number.

Conditional Data Areas (Occasionally or Dependent information) which are not required by any agreement between LEAR and the respective supplier, must be left blank. See Data Area Table in chapter 4.1.

Non-significant (leading) zeros and blanks/spaces in the data string should be suppressed/deleted, when the bar code and/or human readable characters are printed.

The OTL is divided into two sections:

- Shipping section** – Receiver, Dock/Gate, Advice Note number, Supplier address, Net weight, Gross weight and Number of boxes.

- Parts Identification section** – Part number, Quantity, Supplier, Serial Number, Description, Logistic Reference Area, Date, Engineering change and Batch number.

The Data Areas are numbered from 1 to 16 and should be read together with information given in chapter 4.1, 4.2 and 4.3.

Notice! Not actual size.

Shipping section	Receiver (1)	Dock / Gate (2)		
	Advice Note No (N) (3)	Supplier address (4)		
		Net Weight (Kg) (5)	Gross weight (Kg) (6)	No. of boxes (7)
Parts Identification section	Part Number (P) (8)			
	Quantity (Q) (9)	Description (10)		
		Logistic Reference (11)		
	Supplier (V) (12)		Date (13)	Eng. Change (14)
	Serial Number (S) (15)	Batch no (H) (16)		

4.2 Data Area Table

	Data Area Content	User Attributes	Field Length <i>Excl. Data Identifiers</i>	Bar code Size height (mm)	Text Size height (mm)	Data Identifiers
SHIPPING SECTION						
1	Receiver <i>Lear's unloading location</i>	R	2 lines x an..20		7	
2	Dock/Gate <i>Lear's final delivery point</i>	R	1 line x an..12		13	
3	Advice Note Number <i>Supplier's advice note number.</i>	R	an..8	13	7	N
4	Supplier Address <i>Supplier's name and address, country of origin</i>	R	an..29		5	
5	Net Weight <i>Material weight within Transport unit.</i>	D	n..5		7	
6	Gross Weight <i>Total Transport unit weight.</i>	D	n..5		7	
7	No. of Boxes <i>Number of packages within one transport unit.</i>	D	n..5		7	
PARTS IDENTIFICATION SECTION						
8	Part Number <i>Lear's Part number.</i>	R	n..24	13	13	P
9	Quantity <i>Package or Transport unit quantity.</i>	R	n..10	13	13	Q
9	Unit Of Measurement <i>Default value: PCE</i>	D	an..3		7	
10	Description <i>Lear's part description.</i>	R	an..22		7	
11	Logistic Reference	N				
12	Supplier ID <i>Lear's Supplier number/ID.</i>	R	an5	13	5	V
13	Date <i>Material production date (P) or despatch date (D).</i>	D	an7		7	
14	Engineering Change <i>Buyer's engineering change number.</i>	D	an..14		7	
15	Serial Number <i>Supplier's Package or Transport unit identification number.</i>	D	n..9	13	5	S
15	Master Label Number <i>Supplier's Transport unit identification number.</i>	D	n..9	13	5	M or G
16	Batch Number <i>Supplier's identification of documentation items.</i>	D	n..9	13	5	H

LABEL INFORMATION**User Attributes:**

R = Required
D = Dependent
N = Not Used

Field Length:

an = alpha numeric value
a = alpha value
n = numeric value
..10 = 1-10 positions
10 = exact 10 positions

Data Identifiers

N = Advice Note Number
P = Part Number
Q = Quantity
V = Supplier ID
S = Simplified Handling Unit
M = Homogenous Handling Unit
G = Mixed Handling Unit
H = Batch Number

4.3 Data Area Sections

Shipping section

1. Receiver

Alphanumerical human readable text

Designated by LEAR

The destination name of LEAR's unloading location.

2. Dock/Gate

Alphanumerical human readable text

Designated by LEAR

This information must be flexible as it might be changed from one shipment to another due to changes in production. The information must be collected from the latest delivery schedule DELINS.

3. Advice note number (N)

Bar Code and Alphanumerical human readable text

Designated by Supplier

Within LEAR the Advice Note Number is used and matched to the information given in the Advance Ship Notice (AVIEXP).

The number may not be repeated within 12 months.

4. Supplier address

Alphanumerical human readable text

Designated by Supplier

Name and shipping address of the supplier and country of origin.

5. Net weight

Numeric Value

Designated by Supplier

Weight of goods in kilogram (kg) excluding transport packaging.

Unit of measurement must be printed in the title of the field in brackets.

6. Gross weight

Numeric Value

Designated by Supplier

Weight of goods in kilogram (kg) including transport packaging.

7. Number of boxes

Numeric Value

Designated by Supplier

Number of boxes on the transport unit.

Is mainly used on Small box shipments.

Parts Identification Section

8. Part number (P)

Bar Code and Numeric human readable text

Designated by LEAR

Part number is designated by LEAR for the product in the package.

9. Quantity (Q)

Bar Code and Numeric human readable text

Designated by Supplier

Quantity in the package shall be according to LEAR packing instruction and its unit load or a multiple of it.

Default the unit of measurement is pieces (PCE) and is not needed to be given. However, if it is kg, pairs, meters etc., the type code must be given in human readable form. When used, the unit of measurement must be printed directly to the right of the human readable quantity.

10. Description

Alphabetical human readable text

Designated by LEAR

Description of articles or products is according to what is given on the drawing.

11. Logistics reference

Supplier owned

Designated by Supplier

Information is given to improve the logistics between the supplier and LEAR.

This area is normally reserved for the Supplier's part number.

However, if agreed by the supplier, the area may be used to print alternative data as specified by LEAR.

Please find the possible alternative data in the Odette Transport Label Version 1 Revision 4 (to be found at www.odette.org under publications

12. Supplier ID (V)

Bar Codes and Alphanumerical human readable text

Designated by LEAR

The supplier code of the Manufacturing site.

13. Date

Alphanumerical human readable text

Designated by Supplier

Date of dispatch (stated at first hand) or date of production.

The date must be printed in the format YYMMDD (Y = year, M = month, D = day) preceded by the character "D" (Dispatch date) or "P" (Production date).

14. Engineering change

Alphanumerical human readable text

Designated by LEAR

To specify engineering changes.

15. Serial Master label number (S, M or G)

Bar Code and Numeric human readable text

Designated by Supplier

The serial number must be a unique number (not necessarily in sequential order) assigned by the supplier. The number may not be repeated within 12 months.

Identifiers S, M or G are assigned according to label usage.

16. Batch number (H)

*Bar Code and Characters
Designated by Supplier*

Version/Source Indicator

This line indicates the exact version and source of the OTL. To appear on one line, right just below the Batch number area, in the same font as the rest of the OTL, 18 characters in human readable text, 2,5 mm character size, exactly as follows:

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4.4 Cross Reference (EDI messages vs. OTL)

Odette AVIEXP – OTL

Shipping section

1. Receiver

DELINS – CSG 3036

2. Dock/Gate

AVIEXP – CSG 3923

DELINS – CSG 3923

3. Advice note number (N)

AVIEXP – MID 1004

DELINS – PDN 1128

Parts Identification Section

8. Part number (P)

AVIEXP – ARD 7304

DELINS – ARD 7304

9. Quantity (Q)

AVIEXP – ARD 6270*

AVIEXP – TCO 6853*

12. Supplier ID (V)

AVIEXP – CDT 3296**

AVIEXP – SDT 3296**

DELINS – SDT 3296

15. Serial Master label number (S, M or G)

AVIEXP – NCO 7102 (S)***

AVIEXP – NCO 7246 (M/G)***

16. Batch number (H)

AVIEXP – ADP 7338

* Depending on Transport Package structure

** Depending if the Manufacturing site and Shipping site has been allocated different Supplier ID.

*** Depending on Transport Package structure

5. Bar Code Symbols

Bar codes must be of the 3-of-9 (code 39) type with the following requirements:

Code Configuration

The format for each bar code-element is: Start character, Identifier (Data Identifier), Data characters and Stop character. All bar coded areas are printed left justified.

Inter-character gap

The space between two bars in code 39 should be as close to the average narrow element width as is practical.

Quiet zones

Bar codes require a quiet zone to the left and right of the bar/space pattern. Begin and end margins (quiet zones) must be at least 6.4 mm so that no line or similar (e.g. staples, straps or fixation stickers) makes the decoding of the bar code impossible.



Bar code heights

The height of the bar code must be 13 mm.

This to give the best possible scanning possibilities as the area allows.

Narrow element and Ratio

Narrow element is the smallest bar element in the bar code. Narrow element can also be named as Xdimension.

- Narrow element is allowed to be set between 0,33 - 0,43 mm.
- Recommends is that the modulation is to be set to 0,33 mm. (Some printers having minimum 200 dpi the recommendation is 0,375 mm.)

The Ratio is the proportion between narrow and wide element in the bar code.

Recommendations on the Ratio.

Narrow element	Maximum Ratio
0,33	3,0
0,36	2,8
0,40	2,4