856 Ship Notice/Manifest

Version: X12-4010

Author: BISAC SCEDI committee

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856 Ship Notice/Manifest

Functional Group=SH

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information.

The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	ST	Transaction Set Header	M	1			Required
0200	BSN	Beginning Segment for Ship Notice	M	1			Required

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL - S					**200000**	**CN2/0100 L**	
0200	HL	Hierarchical Level - SHIPMENT	M	1		CN2/0200	Required
1200	TD1	Carrier Details (Quantity and Weight)	O	20			Used
1300	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
1600	REF	Reference Identification	O	>1			Used
3400	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					**200**		
3800	N1	Name	O	1			Used
3900	N2	Additional Name Information	O	2			Used
4000	N3	Address Information	O	2			Used
4100	N4	Geographic Location	O	1			Used
LOOP ID - HL - O					**200000**		
4300	HL	Hierarchical Level - ORDER	M	1			Required
4400	PRF	Purchase Order Reference	O	1			Used
LOOP ID - CLD					**200**		
4600	CLD	Load Detail	O	1			Used
4700	REF	Reference Identification	O	200			Used

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL - T					**>1**	**N1/0100L**	
0200	HL	Hierarchical Level - TARE	M	1		N1/0200	Used
LOOP ID - BS3					**1**	**N1/3600L**	
3700	PAL	Pallet Information	O	1		N1/3700	Used
3800	MAN	Marks and Numbers	O	10			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL - P					**200000**		
0200	HL	Hierarchical Level - PACK	M	1			Required
0300	MEA	Measurements	O	40			Used
0400	MAN	Marks and Numbers	O	>1			Used
LOOP ID - N1					**200**		
3800	N1	Name	O	1			Used
3900	N2	Additional Name Information	O	2			Used
4000	N3	Address Information	O	2			Used
4100	N4	Geographic Location	O	1			Used
LOOP ID - HL - I					**200000**		
0600	HL	Hierarchical Level - ITEM	M	1			Required
0700	LIN	Item Identification	O	1			Used
0800	SN1	Item Detail (Shipment)	O	1			Used
0900	SLN	Subline Item Detail	O	1000			Used
1000	MEA	Measurements	O	40			Used
1100	CUR	Currency	O	1			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	CTT	Transaction Totals	O	1		N3/0100	Required
0200	SE	Transaction Set Trailer	M	1			Required

Notes:

2/0100L   Table 2 has 4 different HL Loop formats to define the Shipment, Order, Pack and Item Hierarchical Levels. The loop ID has been changed to reflect the HL03 Hierarchical Level Code to use with the format defined in that HL loop.
(S-shipment, O-order, P-pack, I-item)

2/0200   Table 2 has 4 different HL Loop formats to define the Shipment, Order, Pack and Item Hierarchical Levels. The loop ID has been changed to reflect the HL03 Hierarchical Level Code to use with the format defined in that HL loop.
(S-shipment, O-order, P-pack, I-item)

1/0100L   HL01 (Hierarchical ID Number) will be assigned sequentially within the hierarchy starting with one and incremented by one for each HL segment.
HL02 (Hierarchical Parent ID) will have the value of 0 when used at the Shipment Level.
HL03 (Hierarchical Level Code) may only contain the codes: S (Shipment Level), O (Order Level), T (Tare Level), P (Pack Level), Q (Subpack Level), and I (Item Level).

1/0200   HL01 (Hierarchical ID Number) will be assigned sequentially within the hierarchy starting with one and incremented by one for each HL segment.
HL02 (Hierarchical Parent ID) will have the value of 0 when used at the Shipment Level.
HL03 (Hierarchical Level Code) may only contain the codes: S (Shipment Level), O (Order Level), T (Tare Level), P (Pack Level), Q (Subpack Level), and I (Item Level).

1/3600L   The BS3 loop may only be used at the Tare (pallet) Level.

1/3700   The BS3 loop may only be used at the Tare (pallet) Level.

3/0100   Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total
           (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Comments:

2/0100L   The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no
           meaning.

2/0200   The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no
           meaning.

ST Transaction Set Header

<table>
<tr><td>Pos: 0100</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 2</td></tr>
</table>

User Option (Usage): Required

Purpose: To indicate the start of a transaction set and to assign a control number

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Required

Description: Code uniquely identifying a Transaction Set

Code	Name
856	X12.10 Ship Notice/Manifest

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Required

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

BSN Beginning Segment for Ship Notice

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 7

User Option (Usage): Required

Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN01	353	**Transaction Set Purpose Code**	M	ID	2/2	Required

Description: Code identifying purpose of transaction set

Code	Name
00	Original
05	Replace
07	Duplicate

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN02	396	**Shipment Identification**	M	AN	2/30	Required

Description: A unique control number assigned by the original shipper to identify a specific shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN03	373	**Date**	M	DT	8/8	Required

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN04	337	**Time**	M	TM	4/8	Required

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN05	1005	**Hierarchical Structure Code**	O	ID	4/4	Used

Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set

Code	Name
0001	Shipment, Order, Packaging, Item
0002	Shipment, Order, Item, Packaging

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* BSN06	640	**Transaction Type Code**	C	ID	2/2	Not Used

Description: Code specifying the type of transaction

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* BSN07	641	**Status Reason Code**	O	ID	3/3	Not Used

Description: Code indicating the status reason

Syntax Rules:

1. C0706 - If BSN07 is present, then BSN06 is required.

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.

3. BSN06 is limited to shipment related codes.

Comments:

1. BSN06 and BSN07 differentiate the functionality of use for the transaction set.

Loop Hierarchical Level - SHIPMENT

Pos: 0100	**Repeat: 200000**
Mandatory	
Loop: HL - S	**Elements: N/A**

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0200	HL	Hierarchical Level - SHIPMENT	M	1		Required
1200	TD1	Carrier Details (Quantity and Weight)	O	20		Used
1300	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
1600	REF	Reference Identification	O	>1		Used
3400	DTM	Date/Time Reference	O	10		Used
3700		Loop N1	O		200	Used

HL   Hierarchical Level - SHIPMENT

Pos: 0200	**Max: 1**
Detail - Mandatory	
Loop: HL - S	**Elements: 4**

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Required

Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Required

Description: Code defining the characteristic of a level in a hierarchical structure

Code	Name
I	Item
O	Order
P	Pack
S	Shipment
T	Shipping Tare

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used

Description: Code indicating if there are hierarchical child data segments subordinate to the level being described

Code	Name
1	Additional Subordinate HL Data Segment in This Hierarchical Structure.

TD1 Carrier Details (Quantity and Weight)

Pos: 1200	**Max: 20**
Detail - Optional	
Loop: HL - S	**Elements: 10**

User Option (Usage): Used

Purpose: To specify the transportation details relative to commodity, weight, and quantity

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD101	103	**Packaging Code**	O	AN	3/5	Used

Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material

User: *The Book Industry uses the following code values:*

Code	Name
CNT	Container

Description: *(Gaylord)*

CTN25	Carton, corrugated or solid
PLT94	Pallet, wood
UNT76	Unit, paper

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD102	80	**Lading Quantity**	C	N0	1/7	Used

Description: Number of units (pieces) of the lading commodity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD103	23	**Commodity Code Qualifier**	O	ID	1/1	Used

Description: Code identifying the commodity coding system used for Commodity Code

Code	Name
Z	Mutually defined.

Description: *The Book Industry uses this value for insurance comodity codes.*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD104	22	**Commodity Code**	C	AN	1/30	Used

Description: Code describing a commodity or group of commodities

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD105	79	**Lading Description**	O	AN	1/50	Used

Description: Description of an item as required for rating and billing purposes

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD106	187	**Weight Qualifier**	O	ID	1/2	Used

Description: Code defining the type of weight

Code	Name
G	Gross Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD107	81	**Weight**	C	R	1/10	Used

Description: Numeric value of weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD108	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

		Code **Name**					
		KG	Kilogram				
		LB	Pound				
*	TD109	183	**Volume**	C	R	1/8	Not Used

Description: Value of volumetric measure

*	TD110	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.
5. P0910 - If either TD109 or TD110 is present, then the other is required.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 1300	Max: 12
Detail - Optional	
Loop: HL - S	Elements: 14

User Option (Usage): Used

Purpose: To specify the carrier and sequence of routing and provide transit time information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD501	133	**Routing Sequence Code**	O	ID	1/2	Used

Description: Code describing the relationship of a carrier to a specific shipment movement

Code	Name
B	Origin/Delivery Carrier (Any Mode)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD502	66	**Identification Code Qualifier**	C	ID	1/2	Used

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
2	Standard Carrier Alpha Code (SCAC)
91	Assigned by Seller or Seller's Agent
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD503	67	**Identification Code**	C	AN	2/20	Used

Description: Code identifying a party or other code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD504	91	**Transportation Method/Type Code**	C	ID	1/2	Used

Description: Code specifying the method or type of transportation for the shipment

Code	Name
A	Air
C	Consolidation
D	Parcel Post
H	Customer Pickup
L	Contract Carrier
M	Motor (Common Carrier)
P	Private Carrier
T	Best Way (Shippers Option)
U	Private Parcel Service
AE	Air Express

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD505	387	**Routing**	C	AN	1/35	Used

Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD506	368	**Shipment/Order Status Code**	C	ID	2/2	Used

Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction

| | | | | Code | Name |

Code **Name**
CC   Shipment Complete on (Date)
CP   Partial Shipment on (Date),Considered No Backorder
SS   Split Shipment

* TD507	309	**Location Qualifier**	O	ID	1/2	Not Used

Description: Code identifying type of location

| * TD508 | 310 | **Location Identifier** | C | AN | 1/30 | Not Used |

Description: Code which identifies a specific location

| * TD509 | 731 | **Transit Direction Code** | O | ID | 2/2 | Not Used |

Description: The point of origin and point of direction

| TD510 | 732 | **Transit Time Direction Qualifier** | O | ID | 2/2 | Used |

Description: Code specifying the value of time used to measure the transit time

Code **Name**
CD   Calendar Days (Includes weekends and Holidays)
WD   Working Days (Excludes weekends and holidays)

| TD511 | 733 | **Transit Time** | C | R | 1/4 | Used |

Description: The numeric amount of transit time

| * TD512 | 284 | **Service Level Code** | C | ID | 2/2 | Not Used |

Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier

| * TD513 | 284 | **Service Level Code** | C | ID | 2/2 | Not Used |

Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier

| * TD514 | 284 | **Service Level Code** | O | ID | 2/2 | Not Used |

Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier

Syntax Rules:

1. C0203 - If TD502 is present, then TD503 is required.
2. C0708 - If TD507 is present, then TD508 is required.
3. C1011 - If TD510 is present, then TD511 is required.
4. C1312 - If TD513 is present, then TD512 is required.
5. C1413 - If TD514 is present, then TD513 is required.
6. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.

REF   Reference Identification

Pos: 1600	Max: >1
Detail - Optional	
Loop: HL - S	Elements: 4

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Required

Description: Code Qualifying the Reference Identification

Code	Name
BC	Buyer's Contract Number
BM	Bill of Lading Number
CN	Carrier's Reference Number (PRO/Invoice)
CO	Customer Order Number

Description: *This is the order number from the ultimate consumer.*

DP	Department Number
MA	Ship Notice/Manifest Number
MB	Master Bill of Lading
PK	Packing List Number
PO	Purchase Order Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	C	AN	1/30	Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF03	352	**Description**	C	AN	1/80	Used

Description: A free-form description to clarify the related data elements and their content

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* REF04	C040	**Reference Identifier**	O	Comp		Not Used

Description: To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier

*	128	**Reference Identification Qualifier**	M	ID	2/3	Not Used

Description: Code Qualifying the Reference Identification

*	127	**Reference Identification**	M	AN	1/30	Not Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

*	128	**Reference Identification Qualifier**	C	ID	2/3	Not Used

Description: Code Qualifying the Reference Identification

*	127	**Reference Identification**	C	AN	1/30	Not Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

*	128	**Reference Identification Qualifier**	C	ID	2/3	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Code Qualifying the Reference Identification				
*	127	**Reference Identification**	C	AN	1/30	Not Used

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

DTM Date/Time Reference

Pos: 3400	Max: 10
Detail - Optional	
Loop: HL - S	**Elements: 7**

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Required

Description: Code specifying type of date or time, or both date and time

Code	Name
011	Shipped
037	Ship Not Before
038	Ship No Later
039	Ship Week of
063	Do Not Deliver After
064	Do Not Deliver Before
067	Current Schedule Delivery
068	Current Schedule Ship
073	Scheduled for Delivery (Prior to and Including)
095	Bill of Lading
178	Hold (as of)
182	Will Advise (as of)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	C	DT	8/8	Required

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM03	337	**Time**	C	TM	4/8	Used

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM04	623	**Time Code**	O	ID	2/2	Used

Description: Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

Code	Name
CD	Central Daylight Time
CS	Central Standard Time
CT	Central Time
ED	Eastern Daylight Time
ES	Eastern Standard Time
ET	Eastern Time
LT	Local Time
MD	Mountain Daylight Time

			Code	**Name**				
			MS	Mountain Standard Time				
			MT	Mountain Time				
			PD	Pacific Daylight Time				
			PS	Pacific Standard Time				
			PT	Pacific Time				

DTM05	624	**Century**	O	N0	2/2	Required

Description: The first two characters in the designation of the year (CCYY)

* DTM06	1250	**Date Time Period Format Qualifier**	C	ID	2/3	Not Used

Description: Code indicating the date format, time format, or date and time format

* DTM07	1251	**Date Time Period**	C	AN	1/35	Not Used

Description: Expression of a date, a time, or range of dates, times or dates and times

Syntax Rules:

1. P0607 - If either DTM06 or DTM07 is present, then the other is required.
2. R020306 - At least one of DTM02, DTM03 or DTM06 is required.

Loop Name

Pos: 3700	**Repeat: 200**
	Optional
Loop: N1	**Elements: N/A**

User Option (Usage): Used

Purpose: To identify a party by type of organization, name, and code

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
3800	N1	Name	O	1		Used
3900	N2	Additional Name Information	O	2		Used
4000	N3	Address Information	O	2		Used
4100	N4	Geographic Location	O	1		Used

N1 **Name**

<table>
<tr><td>**Pos: 3800**</td><td>**Max: 1**</td></tr>
<tr><td colspan="2">**Detail - Optional**</td></tr>
<tr><td>**Loop: N1**</td><td>**Elements: 6**</td></tr>
</table>

User Option (Usage): Used

Purpose: To identify a party by type of organization, name, and code

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/2	Required

Description: Code identifying an organizational entity, a physical location, or an individual

Code	Name
BT	Bill-to-Party
FS	Final Scheduled Destination

Description: *Customs duties, excise taxes, and use of bonded fuels are dependent on whether an aircraft flight originated or is destined for an international location, these codes would be used to note those occurences*

Code	Name
SF	Ship From
ST	Ship To
VN	Vendor

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	C	AN	1/35	Used

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	C	ID	1/2	Used

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
1	D-U-N-S Number,Dun & Bradstreet
9	D-U-N-S+4,D-U-N-S Number with Four Character Suffix
15	Standard Address Number (SAN)
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	C	AN	2/20	Used

Description: Code identifying a party or other code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* N105	706	**Entity Relationship Code**	O	ID	2/2	Not Used

Description: Code describing entity relationship

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* N106	98	**Entity Identifier Code**	O	ID	2/2	Not Used

Description: Code identifying an organizational entity, a physical location, or an individual

Syntax Rules:

1. P0304 - If either N103 or N104 is present, then the other is required.
2. R0203 - At least one of N102 or N103 is required.

N2   Additional Name Information

Pos: 3900	Max: 2
Detail - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

Purpose: To specify additional names or those longer than 35 characters in length

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/35	Required
		Description: Free-form name				
N202	93	**Name**	O	AN	1/35	Used
		Description: Free-form name				

N3 Address Information

Pos: 4000	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/35	Required
		Description: Address information				
N302	166	**Address Information**	O	AN	1/35	Used
		Description: Address information				

N4 Geographic Location

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used

Description: Free-form text for city name

N402	156	**State or Province Code**	O	ID	2/2	Used

Description: Code (Standard State/Province) as defined by appropriate government agency

N403	116	**Postal Code**	O	ID	3/15	Used

Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)

N404	26	**Country Code**	O	ID	2/3	Used

Description: Code identifying the country

* N405	309	**Location Qualifier**	C	ID	1/2	Not Used

Description: Code identifying type of location

* N406	310	**Location Identifier**	O	AN	1/30	Not Used

Description: Code which identifies a specific location

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Loop Hierarchical Level - ORDER

Pos: 4200	Repeat: 200000
Mandatory	
Loop: HL - O	Elements: N/A

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
4300	HL	Hierarchical Level - ORDER	M	1		Required
4400	PRF	Purchase Order Reference	O	1		Used
4500		Loop CLD	O		200	Used

HL Hierarchical Level - ORDER

Pos: 4300	Max: 1
Detail - Mandatory	
Loop: HL - O	Elements: 4

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Required

Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Required

Description: Code defining the characteristic of a level in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used

Description: Code indicating if there are hierarchical child data segments subordinate to the level being described

PRF Purchase Order Reference

Pos: 4400	Max: 1
Detail - Optional	
Loop: HL - O	Elements: 7

User Option (Usage): Used

Purpose: To provide reference to a specific purchase order

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PRF01	324	**Purchase Order Number**	M	AN	1/22	Required

Description: Identifying number for Purchase Order assigned by the orderer/purchaser

PRF02	328	**Release Number**	O	AN	1/30	Used

Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction

PRF03	327	**Change Order Sequence Number**	O	AN	1/8	Used

Description: Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set

PRF04	373	**Date**	O	DT	8/8	Used

Description: Date expressed as CCYYMMDD

PRF05	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

PRF06	367	**Contract Number**	O	AN	1/30	Used

Description: Contract number

PRF07	92	**Purchase Order Type Code**	O	ID	2/2	Used

Description: Code specifying the type of Purchase Order

Semantics:

1. PRF04 is the date assigned by the purchaser to purchase order.

Loop Load Detail

Pos: 4500	Repeat: 200
Optional	
Loop: CLD	Elements: N/A

User Option (Usage): Used

Purpose: To specify the number of material loads shipped

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
4600	CLD	Load Detail	O	1		Used
4700	REF	Reference Identification	O	200		Used

CLD Load Detail

<table>
<tr><td>Pos: 4600</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: CLD</td><td>Elements: 5</td></tr>
</table>

User Option (Usage): Used

Purpose: To specify the number of material loads shipped

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD01	622	**Number of Loads**	M	N0	1/5	Required

     Description: Number of customer-defined loads shipped by the supplier

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD02	382	**Number of Units Shipped**	M	R	1/10	Required

     Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD03	103	**Packaging Code**	O	AN	3/5	Used

     Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material

     Code   **Name**

     CNT   Container

             Description: *(Gaylord)*

     CTN25 Cartons, corrugated or solid

     PLT94 Pallet, wood

     UNT76 Unit, paper

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* CLD04	357	**Size**	O	R	1/8	Not Used

     Description: Size of supplier units in pack

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* CLD05	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

     Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Semantics:

1. CLD05 is used to dimension the value given in CLD04.

REF Reference Identification

Pos: 4700	Max: 200
Detail - Optional	
Loop: CLD	**Elements: 4**

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Required

Description: Code Qualifying the Reference Identification

| REF02 | 127 | **Reference Identification** | C | AN | 1/30 | Used |

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

| REF03 | 352 | **Description** | C | AN | 1/80 | Used |

Description: A free-form description to clarify the related data elements and their content

| REF04 | C040 | **Reference Identifier** | O | Comp | | Used |

Description: To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier

| | 128 | **Reference Identification Qualifier** | M | ID | 2/3 | Required |

Description: Code Qualifying the Reference Identification

| | 127 | **Reference Identification** | M | AN | 1/30 | Required |

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

| | 128 | **Reference Identification Qualifier** | C | ID | 2/3 | Used |

Description: Code Qualifying the Reference Identification

| | 127 | **Reference Identification** | C | AN | 1/30 | Used |

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

| | 128 | **Reference Identification Qualifier** | C | ID | 2/3 | Used |

Description: Code Qualifying the Reference Identification

| | 127 | **Reference Identification** | C | AN | 1/30 | Used |

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

Semantics:

1. REF04 contains data relating to the value cited in REF02.

Loop Hierarchical Level - TARE

Pos: 0100	Repeat: >1
Mandatory	
Loop: HL - T	Elements: N/A

User Option (Usage): Used

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0200	HL	Hierarchical Level - TARE	M	1		Used
3600		Loop BS3	O		1	Used

HL　Hierarchical Level - TARE

| Pos: 0200　　　　　　Max: 1 |
| Heading - Mandatory |
| Loop: HL -　　　Elements: 4 |
| T |

User Option (Usage): Used

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Required

   Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

   Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Required

   Description: Code defining the characteristic of a level in a hierarchical structure

Code	Name
T	Shipping Tare

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used

   Description: Code indicating if there are hierarchical child data segments subordinate to the level being described
   All valid standard codes are used.

Loop Pallet Information

Pos: 3600	Repeat: 1
Optional	
Loop: BS3	Elements: N/A

User Option (Usage): Used

Purpose: To identify the type and physical attributes of the pallet, and, gross weight, gross volume, and height of the load and the pallet

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
3700	PAL	Pallet Information	O	1		Used
3800	MAN	Marks and Numbers	O	10		Used

PAL   Pallet Information

Pos: 3700	Max: 1
Heading - Optional	
Loop: BS3	**Elements: 15**

User Option (Usage): Used

Purpose: To identify the type and physical attributes of the pallet, and, gross weight, gross volume, and height of the load and the pallet

Element Summary:

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
	PAL01	883	**Pallet Type Code**	O	ID	1/2	Used

Description: Code indicating the type of pallet

Code	Name
4	Standard
6	Wood

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	PAL02	884	**Pallet Tiers**	O	N0	1/3	Not Used

Description: The number of layers per pallet

| * | PAL03 | 885 | **Pallet Blocks** | O | N0 | 1/3 | Not Used |

Description: The number of pieces (cartons) per layer on the pallet

| * | PAL04 | 356 | **Pack** | O | N0 | 1/6 | Not Used |

Description: Number of inner pack units per outer pack unit

| * | PAL05 | 395 | **Unit Weight** | C | R | 1/8 | Not Used |

Description: Numeric value of weight per unit

| * | PAL06 | 355 | **Unit or Basis for Measurement Code** | C | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | PAL07 | 82 | **Length** | C | R | 1/8 | Not Used |

Description: Largest horizontal dimension of an object measured when the object is in the upright position

| * | PAL08 | 189 | **Width** | C | R | 1/8 | Not Used |

Description: Shorter measurement of the two horizontal dimensions measured with the object in the upright position

| * | PAL09 | 65 | **Height** | C | R | 1/8 | Not Used |

Description: Vertical dimension of an object measured when the object is in the upright position

| * | PAL10 | 355 | **Unit or Basis for Measurement Code** | C | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | PAL11 | 384 | **Gross Weight per Pack** | C | R | 1/9 | Not Used |

Description: Numeric value of gross weight per pack

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	PAL12	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	PAL13	385	**Gross Volume per Pack**	C	R	1/9	Not Used

Description: Numeric value of gross volume per pack

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	PAL14	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	PAL15	399	**Pallet Exchange Code**	O	ID	1/1	Not Used

Description: Code specifying pallet exchange instructions

Syntax Rules:

1. C0710 - If PAL07 is present, then PAL10 is required.
2. C0810 - If PAL08 is present, then PAL10 is required.
3. C0910 - If PAL09 is present, then PAL10 is required.
4. L10070809 - If PAL10 is present, then at least one of PAL07, PAL08 or PAL09 is required.
5. P0506 - If either PAL05 or PAL06 is present, then the other is required.
6. P1112 - If either PAL11 or PAL12 is present, then the other is required.
7. P1314 - If either PAL13 or PAL14 is present, then the other is required.

Semantics:

1. PAL04 (Pack) is the number of pieces on the pallet.
2. PAL05 (Unit Weight) is the weight of the pallet alone, before loading.
3. PAL07 and PAL08 (Length and Width) are the dimensions of the pallet before loading.
4. PAL09 (Height) is the height of the pallet and load.
5. PAL11 and PAL13 (Gross Weight and Gross Volume) are measured after loading and includes the pallet.

MAN Marks and Numbers

Pos: 3800	Max: 10
Heading - Optional	
Loop: BS3	**Elements: 6**

User Option (Usage): Used

Purpose: To indicate identifying marks and numbers for shipping containers

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN01	88	**Marks and Numbers Qualifier**	M	ID	1/2	Required

    Description: Code specifying the application or source of Marks and Numbers (87)

Code	Name
GM	SSCC-18 and Application Identifier
MC	Master Carton Number

    Description: *The identification number of the outermost (external) container in a shipment leaving the supplier's dock*

SM	Shipper Assigned
SS	Shipper Assigned Skid Number
UC	U.P.C. Shipping Container Code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN02	87	**Marks and Numbers**	M	AN	1/48	Required

    Description: Marks and numbers used to identify a shipment or parts of a shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN03	87	**Marks and Numbers**	O	AN	1/48	Not Used

    Description: Marks and numbers used to identify a shipment or parts of a shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN04	88	**Marks and Numbers Qualifier**	C	ID	1/2	Not Used

    Description: Code specifying the application or source of Marks and Numbers (87)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN05	87	**Marks and Numbers**	C	AN	1/48	Not Used

    Description: Marks and numbers used to identify a shipment or parts of a shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN06	87	**Marks and Numbers**	O	AN	1/48	Not Used

    Description: Marks and numbers used to identify a shipment or parts of a shipment

Syntax Rules:

1. C0605 - If MAN06 is present, then MAN05 is required.
2. P0405 - If either MAN04 or MAN05 is present, then the other is required.

Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
2. When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
3. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.

Loop Hierarchical Level - PACK

Pos: 0100	Repeat: 200000
Mandatory	
Loop: HL - P	**Elements: N/A**

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0200	HL	Hierarchical Level - PACK	M	1		Required
0300	MEA	Measurements	O	40		Used
0400	MAN	Marks and Numbers	O	>1		Used
3700		Loop N1	O		200	Used

HL   Hierarchical Level - PACK

Pos: 0200	Max: 1
Detail - Mandatory	
Loop: HL - P	Elements: 4

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Required

   Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

   Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Required

   Description: Code defining the characteristic of a level in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used

   Description: Code indicating if there are hierarchical child data segments subordinate to the level being described

MEA Measurements

Pos: 0300	**Max: 40**
Detail - Optional	
Loop: HL - P	**Elements: 10**

User Option (Usage): Used

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA01	737	**Measurement Reference ID Code**	O	ID	2/2	Used

Description: Code identifying the broad category to which a measurement applies

Code	Name
PA	Pallet Dimensions
PD	Physical Dimensions
PK	Package Dimensions

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Used

Description: Code identifying a specific product or process characteristic to which a measurement applies

Code	Name
HT	Height
LN	Length
SZ	Skid Height
WD	Width
WT	Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA03	739	**Measurement Value**	C	R	1/20	Used

Description: The value of the measurement

User: *For all code values with the exception of the SZ qualifier, the measurement is a real decimal number. For the SZ qualifier use the integer portion of the skid height in inches.*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA04	C001	**Composite Unit of Measure**	C	Comp		Used

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Required

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code	Name
CM	Centimeter
E5	Inches,Fraction--Actual
E8	Inches,Decimal--Actual
KG	Kilogram
LB	Pound
OZ	Ounce - Av

<ins>Ref</ins>	<ins>Id</ins>	<ins>Element Name</ins>	<ins>Req</ins>	<ins>Type</ins>	<ins>Min/Max</ins>	<ins>Usage</ins>
*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

| * | 649 | **Multiplier** | O | R | 1/10 | Not Used |

Description: Value to be used as a multiplier to obtain a new value

| * | 355 | **Unit or Basis for Measurement Code** | O | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | 1018 | **Exponent** | O | R | 1/15 | Not Used |

Description: Power to which a unit is raised

| * | 649 | **Multiplier** | O | R | 1/10 | Not Used |

Description: Value to be used as a multiplier to obtain a new value

| * | 355 | **Unit or Basis for Measurement Code** | O | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | 1018 | **Exponent** | O | R | 1/15 | Not Used |

Description: Power to which a unit is raised

| * | 649 | **Multiplier** | O | R | 1/10 | Not Used |

Description: Value to be used as a multiplier to obtain a new value

| * | 355 | **Unit or Basis for Measurement Code** | O | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | 1018 | **Exponent** | O | R | 1/15 | Not Used |

Description: Power to which a unit is raised

| * | 649 | **Multiplier** | O | R | 1/10 | Not Used |

Description: Value to be used as a multiplier to obtain a new value

| * | 355 | **Unit or Basis for Measurement Code** | O | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | 1018 | **Exponent** | O | R | 1/15 | Not Used |

Description: Power to which a unit is raised

| * | 649 | **Multiplier** | O | R | 1/10 | Not Used |

Description: Value to be used as a multiplier to obtain a new value

| * MEA05 | 740 | **Range Minimum** | C | R | 1/20 | Not Used |

Description: The value specifying the minimum of the measurement range

| * MEA06 | 741 | **Range Maximum** | C | R | 1/20 | Not Used |

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: The value specifying the maximum of the measurement range				
* MEA07	935	**Measurement Significance Code**	O	ID	2/2	Not Used
		Description: Code used to benchmark, qualify or further define a measurement value				
* MEA08	936	**Measurement Attribute Code**	C	ID	2/2	Not Used
		Description: Code used to express an attribute response when a numeric measurement value cannot be determined				
* MEA09	752	**Surface/Layer/Position Code**	O	ID	2/2	Not Used
		Description: Code indicating the product surface, layer or position that is being described				
* MEA10	1373	**Measurement Method or Device**	O	ID	2/4	Not Used
		Description: The method or device used to record the measurement				

Syntax Rules:

1. C0504 - If MEA05 is present, then MEA04 is required.
2. C0604 - If MEA06 is present, then MEA04 is required.
3. E0803 - Only one of MEA08 or MEA03 may be present.
4. L07030506 - If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. R03050608 - At least one of MEA03, MEA05, MEA06 or MEA08 is required.

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

MAN   Marks and Numbers

Pos: 0400   Max: >1
Detail - Optional
Loop: HL -   Elements: 6 P

User Option (Usage): Used

Purpose: To indicate identifying marks and numbers for shipping containers

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN01	88	**Marks and Numbers Qualifier**	M	ID	1/2	Required

Description: Code specifying the application or source of Marks and Numbers (87)

Code	Name
CA	Shipper-Assigned Case Number

Description: *Number identifying unit shipped*

GM	UCC/EAN-128 Serial Shipping Container Code Format
MC	Master Carton Number

Description: *The identification number of the outermost (external) container in a shipment leaving the supplier's dock*

SM	Shipper Assigned
SS	Shipper Assigned Skid Number
UC	U.P.C. Shipping Container Code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN02	87	**Marks and Numbers**	M	AN	1/48	Required

Description: Marks and numbers used to identify a shipment or parts of a shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN03	87	**Marks and Numbers**	O	AN	1/48	Used

Description: Marks and numbers used to identify a shipment or parts of a shipment

User: *Use the Book Industry Guidelines for Shipping Container Codes and Symbols.*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN04	88	**Marks and Numbers Qualifier**	C	ID	1/2	Not Used

Description: Code specifying the application or source of Marks and Numbers (87)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN05	87	**Marks and Numbers**	C	AN	1/48	Not Used

Description: Marks and numbers used to identify a shipment or parts of a shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* MAN06	87	**Marks and Numbers**	O	AN	1/48	Not Used

Description: Marks and numbers used to identify a shipment or parts of a shipment

Syntax Rules:

1. C0605 - If MAN06 is present, then MAN05 is required.
2. P0405 - If either MAN04 or MAN05 is present, then the other is required.

Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
2. When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.

3. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.

Loop Name

Pos: 3700	**Repeat: 200**
Optional	
Loop: N1	**Elements: N/A**

User Option (Usage): Used

Purpose: To identify a party by type of organization, name, and code

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
3800	N1	Name	O	1		Used
3900	N2	Additional Name Information	O	2		Used
4000	N3	Address Information	O	2		Used
4100	N4	Geographic Location	O	1		Used

N1 Name

User Option (Usage): Used

Purpose: To identify a party by type of organization, name, and code

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/2	Required

Description: Code identifying an organizational entity, a physical location, or an individual

Code	Name
BT	Bill-to-Party
FS	Final Scheduled Destination

Description: *Customs duties, excise taxes, and use of bonded fuels are dependent on whether an aircraft flight originated or is destined for an international location, these codes would be used to note those occurences*

Code	Name
SF	Ship From
ST	Ship To
VN	Vendor

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	C	AN	1/35	Used

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	C	ID	1/2	Used

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
1	D-U-N-S Number,Dun & Bradstreet
9	D-U-N-S+4,D-U-N-S Number with Four Character Suffix
15	Standard Address Number (SAN)
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	C	AN	2/20	Used

Description: Code identifying a party or other code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* N105	706	**Entity Relationship Code**	O	ID	2/2	Not Used

Description: Code describing entity relationship

Ref	Id	Element Name	Req	Type	Min/Max	Usage
* N106	98	**Entity Identifier Code**	O	ID	2/2	Not Used

Description: Code identifying an organizational entity, a physical location, or an individual

Syntax Rules:

1. P0304 - If either N103 or N104 is present, then the other is required.
2. R0203 - At least one of N102 or N103 is required.

N2 Additional Name Information

Pos: 3900	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify additional names or those longer than 35 characters in length

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/35	Required
		Description: Free-form name				
N202	93	**Name**	O	AN	1/35	Used
		Description: Free-form name				

N3 Address Information

Pos: 4000	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/35	Required
		Description: Address information				
N302	166	**Address Information**	O	AN	1/35	Used
		Description: Address information				

N4 Geographic Location

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	O	ID	2/2	Used
		Description: Code (Standard State/Province) as defined by appropriate government agency				
N403	116	**Postal Code**	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	**Country Code**	O	ID	2/3	Used
		Description: Code identifying the country				
* N405	309	**Location Qualifier**	C	ID	1/2	Not Used
		Description: Code identifying type of location				
* N406	310	**Location Identifier**	O	AN	1/30	Not Used
		Description: Code which identifies a specific location				

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Loop Hierarchical Level - ITEM

Pos: 0500	Repeat: 200000
Mandatory	
Loop: HL - I	**Elements: N/A**

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0600	HL	Hierarchical Level - ITEM	M	1		Required
0700	LIN	Item Identification	O	1		Used
0800	SN1	Item Detail (Shipment)	O	1		Used
0900	SLN	Subline Item Detail	O	1000		Used
1000	MEA	Measurements	O	40		Used
1100	CUR	Currency	O	1		Used

HL Hierarchical Level - ITEM

Pos: 0600	Max: 1
Detail - Mandatory	
Loop: HL - I	**Elements: 4**

User Option (Usage): Required

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Required

    Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

    Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Required

    Description: Code defining the characteristic of a level in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used

    Description: Code indicating if there are hierarchical child data segments subordinate to the level being described

LIN Item Identification

<table>
<tr><td>Pos: 0700</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: HL - I</td><td>Elements: 31</td></tr>
</table>

User Option (Usage): Used

Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN01	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Required

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code	Name
B1	Volume Set
B2	Library of Congress Code
B3	Edition Code
B4	Binding Code
B5	Title Code
B6	Author Code
B7	Publisher Code
CB	Buyer's Catalog Number
CG	Commodity Grouping
EN	European Article Number (EAN) (2-5-5-1)

User:
 ISBN-13

GC	Grade Code

Description: *When using a qualifier value of GC then data element 234 should be one of the following values:*

00 General Condition New or Used

01 New Condition Only

02 Used, Good Condition Only

03 Used, Poor Condition

04 Used, Any Condition

05 No Marked Complimentary Copies

IB	International Standard Book Number (ISBN)

User:
 ISBN-10

RP	Replaced Part Number

Description: *This is used when a different ISBN or UPC is shipped. This is the ISBN or UPC from the original order.*

<u>Code</u> <u>Name</u>

RU   Run Number

Description: *This represents the print number for the title.*

SK   Stock Keeping Unit (SKU)

UK   U.P.C./EAN Shipping Container Code (1-2-5-5-1)

Description: *A 14-digit code that uniquely identifies the manufacturer's shipping unit, including the packaging indicator and check digit; the first digit is the packaging indicator, the next two digits are the number system characters, the next five digits are the manufacturer ID number, the second five digits are the item code, and the final digit is the check digit*

User:

  UCC/EAN-14

UP   U.P.C. Consumer Package Code (1-5-5-1)

LIN03	234	**Product/Service ID**	M	AN	1/40	Required

Description: Identifying number for a product or service

LIN04	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN05	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN06	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN07	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN08	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN09	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN10	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN11	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN12	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Product/Service ID (234)				

User: *Refer to code list specified in 'LIN02' for usage.*

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN13	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN14	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN15	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN16	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN17	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN18	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN19	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN20	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN21	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN22	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

LIN23	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

LIN24	235	**Product/Service ID Qualifier**	C	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN25	234	**Product/Service ID**	C	AN	1/40	Used

Description: Identifying number for a product or service

| LIN26 | 235 | **Product/Service ID Qualifier** | C | ID | 2/2 | Used |

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

| LIN27 | 234 | **Product/Service ID** | C | AN | 1/40 | Used |

Description: Identifying number for a product or service

| LIN28 | 235 | **Product/Service ID Qualifier** | C | ID | 2/2 | Used |

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

| LIN29 | 234 | **Product/Service ID** | C | AN | 1/40 | Used |

Description: Identifying number for a product or service

| LIN30 | 235 | **Product/Service ID Qualifier** | C | ID | 2/2 | Used |

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

User: *Refer to code list specified in 'LIN02' for usage.*

| LIN31 | 234 | **Product/Service ID** | C | AN | 1/40 | Used |

Description: Identifying number for a product or service

Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

Semantics:

1. LIN01 is the line item identification

SN1 Item Detail (Shipment)

Pos: 0800	Max: 1
Detail - Optional	
Loop: HL - I	Elements: 8

User Option (Usage): Used

Purpose: To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN101	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

SN102	382	**Number of Units Shipped**	M	R	1/10	Required

Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

SN103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Required

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code **Name**
CH   Container
CT   Carton
EA   Each
   Description: *For non-book items.*
PL   Pallet/Unit Load
ST   Set
UN   Unit

SN104	646	**Quantity Shipped to Date**	O	R	1/9	Used

Description: Number of units shipped to date

SN105	330	**Quantity Ordered**	C	R	1/9	Used

Description: Quantity ordered

SN106	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

User: *Refer to code list specified in 'SN103' for usage.*

* SN107	728	**Returnable Container Load Make-Up Code**	O	ID	1/2	Not Used

Description: Code identifying the load make-up of the returnable containers in the shipment

* SN108	668	**Line Item Status Code**	O	ID	2/2	Not Used

Description: Code specifying the action taken by the seller on a line item requested by the buyer

Syntax Rules:

1. P0506 - If either SN105 or SN106 is present, then the other is required.

Semantics:

1. SN101 is the ship notice line-item identification.

SLN   Subline Item Detail

<table>
<tr><td>Pos: 0900</td><td>Max: 1000</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: HL -
l</td><td>Elements: 28</td></tr>
</table>

User Option (Usage): Used

Purpose: To specify product subline detail item data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN01	350	**Assigned Identification**	M	AN	1/20	Required

Description: Alphanumeric characters assigned for differentiation within a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN02	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN03	662	**Relationship Code**	M	ID	1/1	Required

Description: Code indicating the relationship between entities

Code Name
I   Included

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN04	380	**Quantity**	M	R	1/15	Required

Description: Numeric value of quantity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN05	C001	**Composite Unit of Measure**	M	Comp		Required

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Required

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code Name
CH   Container
CT   Carton
EA   Each
PL   Pallet/Unit Load
ST   Set
UN   Unit

Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

SLN06	212	**Unit Price**	C	R	1/17	Used

Description: Price per unit of product, service, commodity, etc.

SLN07	639	**Basis of Unit Price Code**	O	ID	2/2	Used

Description: Code identifying the type of unit price for an item

* SLN08	662	**Relationship Code**	O	ID	1/1	Not Used

Description: Code indicating the relationship between entities

* SLN09	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

* SLN10	234	**Product/Service ID**	C	AN	1/40	Not Used

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: Identifying number for a product or service				
* SLN11	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN12	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN13	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN14	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN15	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN16	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN17	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN18	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN19	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN20	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN21	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN22	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN23	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN24	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN25	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN26	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				
* SLN27	235	**Product/Service ID Qualifier**	C	ID	2/2	Not Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
* SLN28	234	**Product/Service ID**	C	AN	1/40	Not Used
		Description: Identifying number for a product or service				

Syntax Rules:

1. C0706 - If SLN07 is present, then SLN06 is required.
2. C0806 - If SLN08 is present, then SLN06 is required.
3. P0910 - If either SLN09 or SLN10 is present, then the other is required.
4. P1112 - If either SLN11 or SLN12 is present, then the other is required.
5. P1314 - If either SLN13 or SLN14 is present, then the other is required.
6. P1516 - If either SLN15 or SLN16 is present, then the other is required.
7. P1718 - If either SLN17 or SLN18 is present, then the other is required.
8. P1920 - If either SLN19 or SLN20 is present, then the other is required.
9. P2122 - If either SLN21 or SLN22 is present, then the other is required.
10. P2324 - If either SLN23 or SLN24 is present, then the other is required.
11. P2526 - If either SLN25 or SLN26 is present, then the other is required.
12. P2728 - If either SLN27 or SLN28 is present, then the other is required.

Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

MEA   Measurements

<table>
<tr><td>Pos: 1000</td><td>Max: 40</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: HL -</td><td>Elements: 10</td></tr>
</table>

User Option (Usage): Used

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA01	737	**Measurement Reference ID Code**	O	ID	2/2	Used

Description: Code identifying the broad category to which a measurement applies

Code	Name
PA	Pallet Dimensions
PD	Physical Dimensions
PK	Package Dimensions

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Used

Description: Code identifying a specific product or process characteristic to which a measurement applies

Code	Name
HT	Height
LN	Length
SZ	Skid Height
WD	Width
WT	Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA03	739	**Measurement Value**	C	R	1/20	Used

Description: The value of the measurement

User: *For all code values with the exception of the SZ qualifier, the measurement is a real decimal number. For the SZ qualifier use the interger portion of the skid height in inches.*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA04	C001	**Composite Unit of Measure**	C	Comp		Used

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Required

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code	Name
CM	Centimeter
E5	Inches,Fraction--Actual
E8	Inches,Decimal--Actual
KG	Kilogram
LB	Pound
OZ	Ounce - Av

Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

*	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Not Used

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

*	1018	**Exponent**	O	R	1/15	Not Used

Description: Power to which a unit is raised

*	649	**Multiplier**	O	R	1/10	Not Used

Description: Value to be used as a multiplier to obtain a new value

MEA05	740	**Range Minimum**	C	R	1/20	Used

Description: The value specifying the minimum of the measurement range

MEA06	741	**Range Maximum**	C	R	1/20	Used

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: The value specifying the maximum of the measurement range				
* MEA07	935	**Measurement Significance Code**	O	ID	2/2	Not Used
		Description: Code used to benchmark, qualify or further define a measurement value				
* MEA08	936	**Measurement Attribute Code**	C	ID	2/2	Not Used
		Description: Code used to express an attribute response when a numeric measurement value cannot be determined				
* MEA09	752	**Surface/Layer/Position Code**	O	ID	2/2	Not Used
		Description: Code indicating the product surface, layer or position that is being described				
* MEA10	1373	**Measurement Method or Device**	O	ID	2/4	Not Used
		Description: The method or device used to record the measurement				

Syntax Rules:

1. C0504 - If MEA05 is present, then MEA04 is required.
2. C0604 - If MEA06 is present, then MEA04 is required.
3. E0803 - Only one of MEA08 or MEA03 may be present.
4. L07030506 - If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. R03050608 - At least one of MEA03, MEA05, MEA06 or MEA08 is required.

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

CUR Currency

Pos: 1100	**Max: 1**
Detail - Optional	
Loop: HL -	**Elements: 21**
l	

User Option (Usage): Used

Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Element Summary:

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
	CUR01	98	**Entity Identifier Code**	M	ID	2/2	Required

Description: Code identifying an organizational entity, a physical location, or an individual

Code	Name
BY	Buying Party (Purchaser)
SE	Selling Party

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
	CUR02	100	**Currency Code**	M	ID	3/3	Required

Description: Code (Standard ISO) for country in whose currency the charges are specified

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR03	280	**Exchange Rate**	O	R	4/10	Not Used

Description: Value to be used as a multiplier conversion factor to convert monetary value from one currency to another

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR04	98	**Entity Identifier Code**	O	ID	2/2	Not Used

Description: Code identifying an organizational entity, a physical location, or an individual

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR05	100	**Currency Code**	O	ID	3/3	Not Used

Description: Code (Standard ISO) for country in whose currency the charges are specified

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR06	669	**Currency Market/Exchange Code**	O	ID	3/3	Not Used

Description: Code identifying the market upon which the currency exchange rate is based

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR07	374	**Date/Time Qualifier**	C	ID	3/3	Not Used

Description: Code specifying type of date or time, or both date and time

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR08	373	**Date**	O	DT	6/6	Not Used

Description: Date (YYMMDD)

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR09	337	**Time**	O	TM	4/8	Not Used

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR10	374	**Date/Time Qualifier**	C	ID	3/3	Not Used

Description: Code specifying type of date or time, or both date and time

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR11	373	**Date**	C	DT	6/6	Not Used

Description: Date (YYMMDD)

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
*	CUR12	337	**Time**	C	TM	4/8	Not Used

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

| * CUR13 | 374 | **Date/Time Qualifier** | C | ID | 3/3 | Not Used |

Description: Code specifying type of date or time, or both date and time

| * CUR14 | 373 | **Date** | C | DT | 6/6 | Not Used |

Description: Date (YYMMDD)

| * CUR15 | 337 | **Time** | C | TM | 4/8 | Not Used |

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

| * CUR16 | 374 | **Date/Time Qualifier** | C | ID | 3/3 | Not Used |

Description: Code specifying type of date or time, or both date and time

| * CUR17 | 373 | **Date** | C | DT | 6/6 | Not Used |

Description: Date (YYMMDD)

| * CUR18 | 337 | **Time** | C | TM | 4/8 | Not Used |

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

| * CUR19 | 374 | **Date/Time Qualifier** | C | ID | 3/3 | Not Used |

Description: Code specifying type of date or time, or both date and time

| * CUR20 | 373 | **Date** | C | DT | 6/6 | Not Used |

Description: Date (YYMMDD)

| * CUR21 | 337 | **Time** | C | TM | 4/8 | Not Used |

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Syntax Rules:

1. C0807 - If CUR08 is present, then CUR07 is required.
2. C0907 - If CUR09 is present, then CUR07 is required.
3. C1110 - If CUR11 is present, then CUR10 is required.
4. C1210 - If CUR12 is present, then CUR10 is required.
5. C1413 - If CUR14 is present, then CUR13 is required.
6. C1513 - If CUR15 is present, then CUR13 is required.
7. C1716 - If CUR17 is present, then CUR16 is required.
8. C1816 - If CUR18 is present, then CUR16 is required.
9. C2019 - If CUR20 is present, then CUR19 is required.

10. C2119 - If CUR21 is present, then CUR19 is required.
11. L101112 - If CUR10 is present, then at least one of CUR11 or CUR12 is required.
12. L131415 - If CUR13 is present, then at least one of CUR14 or CUR15 is required.
13. L161718 - If CUR16 is present, then at least one of CUR17 or CUR18 is required.
14. L192021 - If CUR19 is present, then at least one of CUR20 or CUR21 is required.

CTT Transaction Totals

Pos: 0100	Max: 1
Summary - Optional	
Loop: N/A	Elements: 7

User Option (Usage): Required

Purpose: To transmit a hash total for a specific element in the transaction set

Element Summary:

	Ref	Id	Element Name	Req	Type	Min/Max	Usage
	CTT01	354	**Number of Line Items**	M	N0	1/6	Required

Description: Total number of line items in the transaction set

| | CTT02 | 347 | **Hash Total** | O | R | 1/10 | Used |

Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element

.Example:-.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.

| * | CTT03 | 81 | **Weight** | C | R | 1/10 | Not Used |

Description: Numeric value of weight

| * | CTT04 | 355 | **Unit or Basis for Measurement Code** | C | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | CTT05 | 183 | **Volume** | C | R | 1/8 | Not Used |

Description: Value of volumetric measure

| * | CTT06 | 355 | **Unit or Basis for Measurement Code** | C | ID | 2/2 | Not Used |

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

| * | CTT07 | 352 | **Description** | O | AN | 1/80 | Not Used |

Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

Pos: 0200   Max: 1
Summary - Mandatory
Loop: N/A   Elements: 2

User Option (Usage): Required

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Required

Description: Total number of segments included in a transaction set including ST and SE segments

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Required

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Comments:

1. SE is the last segment of each transaction set.

Appendix

All Included Elements in All Included Segments

<u>Id</u>	<u>Elements</u>	<u>Used in Segments</u>
C001	Composite Unit of Measure	MEA, SLN
C040	Reference Identifier	REF
19	City Name	N4
22	Commodity Code	TD1
23	Commodity Code Qualifier	TD1
26	Country Code	N4
66	Identification Code Qualifier	N1, TD5
67	Identification Code	N1, TD5
79	Lading Description	TD1
80	Lading Quantity	TD1
81	Weight	TD1
87	Marks and Numbers	MAN
88	Marks and Numbers Qualifier	MAN
91	Transportation Method/Type Code	TD5
92	Purchase Order Type Code	PRF
93	Name	N1, N2
96	Number of Included Segments	SE
98	Entity Identifier Code	CUR, N1
100	Currency Code	CUR
103	Packaging Code	CLD, TD1
116	Postal Code	N4
127	Reference Identification	REF
128	Reference Identification Qualifier	REF
133	Routing Sequence Code	TD5
143	Transaction Set Identifier Code	ST
156	State or Province Code	N4
166	Address Information	N3
187	Weight Qualifier	TD1
212	Unit Price	SLN
234	Product/Service ID	LIN
235	Product/Service ID Qualifier	LIN
324	Purchase Order Number	PRF
327	Change Order Sequence Number	PRF
328	Release Number	PRF
329	Transaction Set Control Number	SE, ST
330	Quantity Ordered	SN1
337	Time	BSN, DTM
347	Hash Total	CTT
350	Assigned Identification	LIN, PRF, SLN, SN1
352	Description	REF
353	Transaction Set Purpose Code	BSN

Id	Elements	Used in Segments
354	Number of Line Items	CTT
355	Unit or Basis for Measurement Code	MEA, SLN, SN1, TD1
367	Contract Number	PRF
368	Shipment/Order Status Code	TD5
373	Date	BSN, DTM, PRF
374	Date/Time Qualifier	DTM
380	Quantity	SLN
382	Number of Units Shipped	CLD, SN1
387	Routing	TD5
396	Shipment Identification	BSN
622	Number of Loads	CLD
623	Time Code	DTM
624	Century	DTM
628	Hierarchical ID Number	HL
639	Basis of Unit Price Code	SLN
646	Quantity Shipped to Date	SN1
662	Relationship Code	SLN
732	Transit Time Direction Qualifier	TD5
733	Transit Time	TD5
734	Hierarchical Parent ID Number	HL
735	Hierarchical Level Code	HL
736	Hierarchical Child Code	HL
737	Measurement Reference ID Code	MEA
738	Measurement Qualifier	MEA
739	Measurement Value	MEA
740	Range Minimum	MEA
741	Range Maximum	MEA
883	Pallet Type Code	PAL
1005	Hierarchical Structure Code	BSN