856 Ship Notice/Manifest

Status: Final

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Publication: 06/14/2013

Notes:

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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
010	ST	Transaction Set Header	M	1			Must use
020	BSN	Beginning Segment for Ship Notice	M	1			Must use

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
150	REF	Reference Identification	O	>1			Used
200	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					**200**		
220	N1	Name	O	1			Used
230	N2	Additional Name Information	O	2			Used
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use
050	PRF	Purchase Order Reference	O	1			Used
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
150	REF	Reference Identification	O	>1			Used
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use
150	REF	Reference Identification	O	>1			Used
190	MAN	Marks and Numbers	O	>1			Used
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use

Notes:

3/010   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:

2/010L   The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

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ST Transaction Set Header

Pos: 010	**Max: 1**
Heading - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

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	Must use

        Description: Code uniquely identifying a Transaction Set

        All valid standard codes are used. (Total Codes: 298)

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

        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).

User Note 1:

This 856 transaction contains data on the scanned content of each box filled and shipped.

BSN Beginning Segment for Ship Notice

User Option (Usage): Must use

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	Must use

Description: Code identifying purpose of transaction set

CodeList Summary (Total Codes: 65, Included: 1)

Code	Name
00	Original

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

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

User Note 1: *This number is generated by the IEI shipping system when the shipment is processed.*

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

Description: Date expressed as CCYYMMDD

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

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

CodeList Summary (Total Codes: 61, Included: 1)

Code	Name
0001	Shipment, Order, Packaging, Item

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

<table>
<tr><td>Pos: 010</td><td>Repeat:
200000</td></tr>
<tr><td colspan="2" align="center">Mandatory</td></tr>
<tr><td>Loop: HL</td><td>Elements: N/A</td></tr>
</table>

User Option (Usage): Must use

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
010	HL	Hierarchical Level	M	1		Must use
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
150	REF	Reference Identification	O	>1		Used
200	DTM	Date/Time Reference	O	10		Used
220		Loop N1	O		200	Used

HL   Hierarchical Level

<table>
<tr><td>Pos: 010</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Mandatory</td></tr>
<tr><td>Loop: HL</td><td>Elements: 2</td></tr>
</table>

User Option (Usage): Must use

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	Must use

        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
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use

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

        CodeList Summary (Total Codes: 170, Included: 1)

Code	Name
S	Shipment

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

TD1 Carrier Details (Quantity and Weight)

Pos: 110   **Max: 20**
Detail - Optional
Loop: HL   **Elements: 5**

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; if the Data Element is used, then Part 1 is always required

CodeList Summary (Total Codes: 148, Included: 3)

Code	Name
BOX	Box
CTN	Carton
PKG	Package

CodeList Summary (Total Codes: 55, Included: 1)

Code	Name
25	Corrugated or Solid

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

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

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

CodeList Summary (Total Codes: 51, Included: 1)

Code	Name
G	Gross Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD107	81	**Weight**	X	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**	X	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

CodeList Summary (Total Codes: 794, Included: 1)

Code	Name
LB	Pound

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)

<table>
<tr><td>Pos: 120</td><td>Max: 12</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 5</td></tr>
</table>

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

CodeList Summary (Total Codes: 23, Included: 1)

Code	Name
O	Origin Carrier (Air, Motor, or Ocean)

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

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

CodeList Summary (Total Codes: 215, Included: 1)

Code	Name
2	Standard Carrier Alpha Code (SCAC)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD503	67	**Identification Code**	X	AN	2/80	Used

Description: Code identifying a party or other code

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

Description: Code specifying the method or type of transportation for the shipment
All valid standard codes are used. (Total Codes: 71)

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

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

Syntax Rules:

1. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. C0203 - If TD502 is present, then TD503 is required.
3. C0708 - If TD507 is present, then TD508 is required.
4. C1011 - If TD510 is present, then TD511 is required.
5. C1312 - If TD513 is present, then TD512 is required.
6. C1413 - If TD514 is present, then TD513 is required.
7. C1512 - If TD515 is present, then TD512 is required.

Semantics:

1. TD515 is the country where the service is to be performed.

Comments:

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier

within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

REF   Reference Identification

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	Must use

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 3)

Code	Name
BM	Bill of Lading Number
CN	Carrier's Reference Number (PRO/Invoice)
IA	Internal Vendor Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	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.

DTM Date/Time Reference

Pos: 200	**Max: 10**
Detail - Optional	
Loop: HL	**Elements: 4**

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	Must use

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

CodeList Summary (Total Codes: 1112, Included: 2)

Code Name
011   Shipped
017   Estimated Delivery

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

Description: Date expressed as CCYYMMDD

User Note 1:
If DTM01 = '011' this is the IEI ship date
If DTM01 = '017' this is the estimated delivery date, based on the carrier
*   used for the shipment and the location of the delivery address*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM03	337	**Time**	X	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

CodeList Summary (Total Codes: 51, Included: 1)

Code Name
CT   Central Time

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

Loop Name

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
220	N1	Name	O	1		Used
230	N2	Additional Name Information	O	2		Used
240	N3	Address Information	O	2		Used
250	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	2/3	Must use

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

CodeList Summary (Total Codes: 1312, Included: 2)

Code	Name
SF	Ship From
ST	Ship To

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	X	AN	1/60	Used

Description: Free-form name

User Note 1:
If N101 = 'ST' then N102 will contain the customer ship to name
If N101 = 'SF' then N102 will contain the Ingram Entertainment warehouse name

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

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

CodeList Summary (Total Codes: 215, Included: 1)

Code	Name
91	Assigned by Seller or Seller's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	X	AN	2/80	Used

Description: Code identifying a party or other code

User Note 1: *If N101 = 'SF' then N104 will contain the 2-digit Ingram shipping branch identifier:*
07 Dallas
09 Chicago
11 Portland
18 Memphis
19 Baltimore
24 Orange

If N101 = 'ST' then N104 may contain the customer store number or IEI
*   account number, if required.*

Syntax Rules:

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

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To

obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2. N105 and N106 further define the type of entity in N101.

N2 Additional Name Information

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	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 240   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	1/55	Must use
		Description: Address information				
N302	166	**Address Information**	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

Pos: 250   **Max: 1**
Detail - Optional
Loop: N1   **Elements: 4**

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				

Syntax Rules:

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

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

Loop Hierarchical Level

<table>
<tr><td>Pos: 010</td><td>Repeat: 200000</td></tr>
<tr><td colspan="2">Mandatory</td></tr>
<tr><td>Loop: HL</td><td>Elements: N/A</td></tr>
</table>

User Option (Usage): Must use

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
010	HL	Hierarchical Level	M	1		Must use
050	PRF	Purchase Order Reference	O	1		Used
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
150	REF	Reference Identification	O	>1		Used

HL   Hierarchical Level

User Option (Usage): Must use

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	Must use

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	Must use

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

CodeList Summary (Total Codes: 170, Included: 1)

Code	Name
O	Order

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

PRF Purchase Order Reference

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	Must use

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PRF04	373	**Date**	O	DT	8/8	Used

Description: Date expressed as CCYYMMDD

User Note 1: *Customer PO date*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PRF07	92	**Purchase Order Type Code**	O	ID	2/2	Used

Description: Code specifying the type of Purchase Order

All valid standard codes are used. (Total Codes: 69)

Semantics:

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

TD1 Carrier Details (Quantity and Weight)

<table>
<tr><td>Pos: 110</td><td>Max: 20</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 5</td></tr>
</table>

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; if the Data Element is used, then Part 1 is always required

CodeList Summary (Total Codes: 148, Included: 3)

Code	Name
BOX	Box
CTN	Carton
PKG	Package

CodeList Summary (Total Codes: 55, Included: 1)

Code	Name
25	Corrugated or Solid

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

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

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

CodeList Summary (Total Codes: 51, Included: 1)

Code	Name
G	Gross Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD107	81	**Weight**	X	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**	X	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

CodeList Summary (Total Codes: 794, Included: 1)

Code	Name
LB	Pound

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.

REF Reference Identification

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	Must use

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 1)

Code	Name
IK	Invoice Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	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

Pos: 010	**Repeat: 200000**
Mandatory	
Loop: HL	**Elements: N/A**

User Option (Usage): Must use

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
010	HL	Hierarchical Level	M	1		Must use
150	REF	Reference Identification	O	>1		Used
190	MAN	Marks and Numbers	O	>1		Used

HL   Hierarchical Level

<table>
<tr><td>Pos: 010</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Mandatory</td></tr>
<tr><td>Loop: HL</td><td>Elements: 3</td></tr>
</table>

User Option (Usage): Must use

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	Must use

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	Must use

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

CodeList Summary (Total Codes: 170, Included: 1)

Code	Name
P	Pack

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

REF Reference Identification

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	Must use

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 1)

Code	Name
CN	Carrier's Reference Number (PRO/Invoice)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	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.

MAN   Marks and Numbers

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	Must use

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

CodeList Summary (Total Codes: 20, Included: 2)

Code	Name
CP	Carrier-Assigned Package ID Number
GM	SSCC-18 and Application Identifier

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

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

Syntax Rules:

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

Comments:

1. When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
2. MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
3. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

Loop Hierarchical Level

Pos: 010	**Repeat: 200000**
Mandatory	
Loop: HL	**Elements: N/A**

User Option (Usage): Must use

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
010	HL	Hierarchical Level	M	1		Must use
020	LIN	Item Identification	O	1		Used
030	SN1	Item Detail (Shipment)	O	1		Used

HL Hierarchical Level

Pos: 010 **Max: 1**
Detail - Mandatory
Loop: HL **Elements: 3**

User Option (Usage): Must use

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	Must use

  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	Must use

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

  CodeList Summary (Total Codes: 170, Included: 1)

Code	Name
I	Item

Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.

2. The HL segment defines a top-down/left-right ordered structure.

3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.

4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.

5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

LIN   Item Identification

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

User Note 1: *This field may contain a sequential number, or the customer line sequence number from the 850 PO.*

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

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

CodeList Summary (Total Codes: 477, Included: 1)

Code	Name
VN	Vendor's (Seller's) Item Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN03	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service

User Note 1: *Ingram item number*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN04	235	**Product/Service ID Qualifier**	X	ID	2/2	Used

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

CodeList Summary (Total Codes: 477, Included: 2)

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN05	234	**Product/Service ID**	X	AN	1/48	Used

Description: Identifying number for a product or service

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN06	235	**Product/Service ID Qualifier**	X	ID	2/2	Used

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

CodeList Summary (Total Codes: 477, Included: 1)

Code	Name
CB	Buyer's Catalog Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN07	234	**Product/Service ID**	X	AN	1/48	Used

Description: Identifying number for a product or service

User Note 1: *The customer item number is only available if the customer purchase order line item referenced was received in an 850 Purchase Order. Manually entered line items will not contain this information.*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN08	235	**Product/Service ID Qualifier**	X	ID	2/2	Used

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

CodeList Summary (Total Codes: 477, Included: 1)

Code **Name**

PO   Purchase Order Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN09	234	**Product/Service ID**	X	AN	1/48	Used

Description: Identifying number for a product or service

User Note 1: *Customer PO reference number*

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

Comments:

1. See the Data Dictionary for a complete list of IDs.
2. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

SN1 Item Detail (Shipment)

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	Must use

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	Must use

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

CodeList Summary (Total Codes: 794, Included: 1)

Code	Name
EA	Each

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.

Comments:

1. SN103 defines the unit of measurement for both SN102 and SN104.

CTT   Transaction Totals

User Option (Usage): Used

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	Must use

Description: Total number of line items in the transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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.

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

User Option (Usage): Must use

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	Must use

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	Must use

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.