Genius Central
856 Ship Notice/Manifest

X12/V5010/856: 856 Ship Notice

Author: **Genius Central**
Company: **Sprouts Farmers Market**
Modified: **8/22/2018**

856   Ship Notice/Manifest

Functional Group=SH

Purpose: This X12 Transaction Set 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			Must use
0200	BSN	Beginning Segment for Ship Notice	M	1			Must use

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL					**1**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
1100	TD1	Carrier Details (Quantity and Weight)	M	3			Must use
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	M	1			Must use
1500	REF	Reference Information	M	2			Must use
1510	PER	Administrative Communications Contact	O	1			Used
2000	DTM	Date/Time Reference	M	2			Must use
LOOP ID - N1					**2**		
2200	N1	Party Identification	M	1			Must use
2400	N3	Party Location	C	2			Used
2500	N4	Geographic Location	C	1			Used
LOOP ID - HL					**200000**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0500	PRF	Purchase Order Reference	M	1			Must use
LOOP ID - HL					**200000**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
1900	MAN	Marks and Numbers Information	M	>1			Must use
LOOP ID - HL					**200000**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0200	LIN	Item Identification	M	1			Must use
0300	SN1	Item Detail (Shipment)	M	1			Must use

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0700	PID	Product/Item Description	M	5			Must use
1500	REF	Reference Information	O	1			Used
2000	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					**200**		
2200	N1	Party Identification	O	1			Used
2500	N4	Geographic Location	O	1			Used

Summary:

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

Notes:

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.

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General Usage:

Advance Ship Notices– As confirmation of shipment content the ASN/Ship Notice will be required to be sent by the suppliers for all electronically created orders. Stores will use this information as confirmation and content details of the shipment in advance of the receipt of the orders.

GeniusCentral will support the Pick and Pack ASN Structure and each ASN will represent a single shipment (ship-to location). Suppliers will be expected to include all Purchase Orders physically in a single Shipment/Trailer/Container within a single ASN data feed.

ST Transaction Set Header

Pos: 0100	**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

CodeList Summary (Total Codes: 318, Included: 1)

Code	Name
856	Ship Notice/Manifest

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

2. The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition. When used, this implementation convention reference takes precedence over the implementation reference specified in the GS08.

BSN Beginning Segment for Ship Notice

Pos: 0200	**Max: 1**
Heading - Mandatory	
Loop: N/A	**Elements: 4**

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: 66, 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: *Unique Shipment ID Number*

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

Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

User Note 1: *ASN create date*

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)

User Note 1: *ASN create time*

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: 1**
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
0100	HL	Hierarchical Level	M	1		Must use
1100	TD1	Carrier Details (Quantity and Weight)	M	3		Must use
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	M	1		Must use
1500	REF	Reference Information	M	2		Must use
1510	PER	Administrative Communications Contact	O	1		Used
2000	DTM	Date/Time Reference	M	2		Must use
2200		Loop N1	M		2	Must use
0100		Loop HL	M		200000	Must use

HL   Hierarchical Level

Pos: 0100	**Max: 1**
Detail - Mandatory	
Loop: HL	**Elements: 2**

User Option (Usage): Must use

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

Element Summary:

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

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: 250, Included: 1)
>
> <u>Code</u> <u>Name</u>
> 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

User Option (Usage): Must use

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**	M	AN	3/5	Must use

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

User Note 1: *Valid codes are:*
CTN (Carton)
CTN25 (Corrugated Carton)
PLT (Pallet)
PLT94 (Wood Pallet)

CodeList Summary (Total Codes: 155, Included: 2)

Code	Name
CTN	Carton
PLT	Pallet

CodeList Summary (Total Codes: 57, Included: 2)

Code	Name
25	Corrugated or Solid
94	Wood

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD102	80	**Lading Quantity**	M	N0	1/7	Must use

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: 52, Included: 1)

Code	Name
G	Gross Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD107	81	**Weight**	O	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**	O	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: 844, Included: 2)

Code	Name
KG	Kilogram
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.

User Note 1:

If more than one packing medium is included, the TD1 group should be repeated with a lading quantity (TD102) for each packing medium.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 1200	**Max: 1**
Detail - Mandatory	
Loop: HL	**Elements: 3**

User Option (Usage): Must use

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
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: 241, Included: 1)
>
> **Code Name**
>
> 2   Standard Carrier Alpha Code (SCAC)

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

> **Description:** Code identifying a party or other code
>
> **User Note 1:** *SCAC*
> *Min/ Max = 2/4*

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

> **Description:** Free-form description of the routing or requested routing for shipment, or the originating carrier's identity
>
> **User Note 1:** *Carrier Routing / Name*

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.

User Note 1:

One of either SCAC (TD503) or Carrier Routing (TD505) must be present.

REF Reference Information

Pos: 1500	**Max: 2**
Detail - Mandatory	
Loop: HL	**Elements: 2**

User Option (Usage): Must use

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: 1731, Included: 4)

Code	Name
2I	Tracking Number
BM	Bill of Lading Number
CN	Carrier's Reference Number (PRO/Invoice)
06	System Number

> **User Note 1:**
>
> *Genius Central OrderID - Mandatory*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	M	AN	1/50	Must use

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.

> **User Note 1:**
>
> *Bill of lading (BM) or Carrier Pro numbers (CN) are required for Truck Load and Less than Truck Load Shipments (Common Carrier moves).*
>
> *For Parcel carrier Shipments, the Pick up number or Carrier Assigned Package number (2I) is required. Do not send both. (If there is no pick up number use one of the Carton carrier assigned numbers for this field).*

PER Administrative Communications Contact

User Option (Usage): Used

Purpose: To identify a person or office to whom administrative communications should be directed

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER01	366	**Contact Function Code**	M	ID	2/2	Must use

Description: Code identifying the major duty or responsibility of the person or group named

CodeList Summary (Total Codes: 238, Included: 1)

Code Name

IC   Information Contact

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER02	93	**Name**	O	AN	1/60	Used

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER03	365	**Communication Number Qualifier**	X	ID	2/2	Used

Description: Code identifying the type of communication number

CodeList Summary (Total Codes: 42, Included: 2)

Code Name

EM   Electronic Mail
TE   Telephone

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER04	364	**Communication Number**	X	AN	1/256	Used

Description: Complete communications number including country or area code when applicable

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER05	365	**Communication Number Qualifier**	X	ID	2/2	Used

Description: Code identifying the type of communication number

CodeList Summary (Total Codes: 42, Included: 2)

Code Name

EM   Electronic Mail
TE   Telephone

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER06	364	**Communication Number**	X	AN	1/256	Used

Description: Complete communications number including country or area code when applicable

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.
3. P0708 - If either PER07 or PER08 is present, then the other is required.

DTM Date/Time Reference

Pos: 2000	Max: 2
Detail - Mandatory	
Loop: HL	**Elements: 2**

User Option (Usage): Must use

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: 1280, Included: 2)

Code	Name
011	Shipped

> **User Note 1:**
>
> *Mandatory*

017	Estimated Delivery

> **User Note 1:**
>
> *Mandatory*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

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.

> **User Note 1:**
>
> *Two iterations of the DTM segment are required for the Shipped Date (DTM02, when DTM01=011) and Estimated Delivery Date (DTM02, when DTM01 = 017).*

Loop Party Identification

Pos: 2200	Repeat: 2
Mandatory	
Loop: N1	**Elements: N/A**

User Option (Usage): Must use

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
2200	N1	Party Identification	M	1		Must use
2400	N3	Party Location	C	2		Used
2500	N4	Geographic Location	C	1		Used

N1 Party Identification

Pos: 2200	Max: 1
Detail - Mandatory	
Loop: N1	**Elements: 4**

User Option (Usage): Must use

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: 1500, Included: 2)

Code Name

SF   Ship From

> **User Note 1:**
> *Mandatory*

ST   Ship To

> **User Note 1:**
> *Mandatory*

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

Description: Free-form 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: 241, Included: 2)

Code Name

9   D-U-N-S+4, D-U-N-S Number with Four Character Suffix
92   Assigned by Buyer or Buyer's Agent

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

Description: Code identifying a party or other code

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.

N3 Party Location

<table>
<tr><td>Pos: 2400</td><td>Max: 2</td></tr>
<tr><td colspan="2">Detail - Conditional</td></tr>
<tr><td>Loop: N1</td><td>Elements: 2</td></tr>
</table>

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: 2500   Max: 1
Detail - Conditional
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**	M	AN	2/30	Must use

Description: Free-form text for city name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N402	156	**State or Province Code**	O	ID	2/2	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N403	116	**Postal Code**	M	ID	3/15	Must use

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N404	26	**Country Code**	O	ID	2/3	Used

Description: Code identifying the country

Syntax Rules:

1. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 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 - ORDER

Pos: 0100	**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
0100	HL	Hierarchical Level	M	1		Must use
0500	PRF	Purchase Order Reference	M	1		Must use
1500	REF	Reference Information	M	2		Must use
0100		Loop HL	M		200000	Must use

HL Hierarchical Level

<div style="float:right; border:1px solid black; padding:4px;">
Pos: 0100   Max: 1
Detail - Mandatory
Loop: HL   Elements: 3
</div>

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**	M	AN	1/12	Must use

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: 250, 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

Pos: 0500   Max: 1
Detail - Mandatory
Loop: HL   Elements: 2

User Option (Usage): Must use

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

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

Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

Semantics:

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

REF   Reference Information

User Option (Usage): Must use
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: 1731, Included: 2)

Code	Name
11	Account Number

> **User Note 1:**
> *Vendor assigned account number*

| IA | Internal Vendor Number |

> **User Note 1:**
> *Store assigned Vendor ID - Mandatory*

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	M	AN	1/50	Must use

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 - PACK

Pos: 0100	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
0100	HL	Hierarchical Level	M	1		Must use
1900	MAN	Marks and Numbers Information	M	>1		Must use
0100		Loop HL	M		200000	Must use

HL Hierarchical Level

Pos: 0100	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

HL02	734	**Hierarchical Parent ID Number**	M	AN	1/12	Must use

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

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: 250, Included: 2)
>
> **Code Name**
> P   Pack
> T   Shipping Tare

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.

MAN Marks and Numbers Information

Pos: 1900   Max: >1
Detail - Mandatory
Loop: HL   Elements: 2

User Option (Usage): Must use
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: 21, Included: 1)

Code	Name
GM	EAN.UCC Serial Shipping Container Code (SSCC) 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
User Note 1: *When MAN01 = GM, MAN02 Min/Max - 20/20*

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 - ITEM

Pos: 0100	**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
0100	HL	Hierarchical Level	M	1		Must use
0200	LIN	Item Identification	M	1		Must use
0300	SN1	Item Detail (Shipment)	M	1		Must use
0700	PID	Product/Item Description	M	5		Must use
1500	REF	Reference Information	O	1		Used
2000	DTM	Date/Time Reference	O	10		Used
2200		Loop N1	O		200	Used

HL Hierarchical Level

| Pos: 0100   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

HL02	734	**Hierarchical Parent ID Number**	M	AN	1/12	Must use

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

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: 250, 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

Pos: 0200	**Max: 1**
Detail - Mandatory	
Loop: HL	**Elements: 7**

User Option (Usage): Must use

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	Must use

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

CodeList Summary (Total Codes: 519, Included: 3)

Code Name
UK　　GTIN 14-digit Data Structure
UP　　UCC - 12
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

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

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

CodeList Summary (Total Codes: 519, Included: 3)

Code Name
UK　　GTIN 14-digit Data Structure
UP　　UCC - 12
VN　　Vendor's (Seller's) Item Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN05	234	**Product/Service ID**	O	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: 519, Included: 3)

Code Name
UK　　GTIN 14-digit Data Structure
UP　　UCC
VN　　Vendor's (Seller's) Item 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

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)

Pos: 0300   Max: 1
Detail - Mandatory
Loop: HL   Elements: 2

User Option (Usage): Must use

Purpose: To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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: 844, Included: 3)

Code	Name
CA	Case
EA	Each
LB	Pound

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.
2. SN105 is quantity ordered.

Comments:

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

PO4 Item Physical Details

User Option (Usage): Must use

Purpose: To specify the physical qualities, packaging, weights, and dimensions relating to the item.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO401	356	**Pack**	O	N0	1/6	Used

Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO414	810	**Inner Pack**	M	N0	1/6	Must use

Description: The number of eaches per inner container

Syntax Rules:

1. P0203 - If either PO402 or PO403 is present, then the other is required.
2. C0506 - If PO405 is present, then PO406 is required.
3. P0607 - If either PO406 or PO407 is present, then the other is required.
4. P0809 - If either PO408 or PO409 is present, then the other is required.
5. C1013 - If PO410 is present, then PO413 is required.
6. C1113 - If PO411 is present, then PO413 is required.
7. C1213 - If PO412 is present, then PO413 is required.
8. L13101112 - If PO413 is present, then at least one of PO410, PO411 or PO412 is required.
9. C1716 - If PO417 is present, then PO416 is required.
10. C1804 - If PO418 is present, then PO404 is required.

Semantics:

1. PO415 is used to indicate the relative layer of this package or range of packages within the layers of packaging. Relative Position 1 (value R1) is the innermost package.
2. PO416 is the package identifier or the beginning package identifier in a range of identifiers.
3. PO417 is the ending package identifier in a range of identifiers. 4. PO418 is the number of packages in this layer.

Comments:

1. PO403 - The "Unit or Basis for Measure Code" in this segment position is for purposes of defining the unit of measure of the "Size" identified in the PO402. For example: If the carton contains 24 12-Ounce packages, it would be described as follows: Data element 356 = "24"; Data element 357 = "12"; Data element 355 = "OZ".

2. PO413 defines the unit of measure for PO410, PO411, and PO412.

PID   **Product/Item Description**

User Option (Usage): Must use

Purpose: To describe a product or process in coded or free-form format

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	**Item Description Type**	M	ID	1/1	Must use

Description: Code indicating the format of a description

CodeList Summary (Total Codes: 3, Included: 1)

Code Name

F   Free-form

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID02	750	**Product/Process Characteristic Code**	M	ID	2/3	Must use

Description: Code identifying the general class of a product or process characteristic

CodeList Summary (Total Codes: 238, Included: 1)

Code Name

08   Product

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID05	352	**Description**	M	AN	1/80	Must use

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

Syntax Rules:

1. C0403 - If PID04 is present, then PID03 is required.
2. R0405 - At least one of PID04 or PID05 is required.
3. C0703 - If PID07 is present, then PID03 is required.
4. C0804 - If PID08 is present, then PID04 is required.
5. C0905 - If PID09 is present, then PID05 is required.

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

REF   Reference Information

Pos: 1500	Max: 1
Detail - Optional	
Loop: HL	**Elements: 2**

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: 1731, Included: 1)

Code Name

LT   Lot Number

REF02	127	**Reference Identification**	M	AN	1/50	Must use

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.

User Note 1:

This segment is required for products produced that have Lot/batch Numbers associated to them

DTM Date/Time Reference

<table>
<tr><td>Pos: 2000</td><td>Max: 10</td></tr>
<tr><td colspan="2" align="center">Detail - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 2</td></tr>
</table>

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: 1280, Included: 3)

Code	Name
036	Expiration
405	Production
511	Shelf Life Expiration

> **User Note 1:**
> *Best When Used By Date*

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

Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

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.

> **User Note 1:**
>
> *This segment is required for products produced that have expiration dates, production dates or best used by dates, associated to them*

Loop Party Identification

Pos: 2200	**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
2200	N1	Party Identification	O	1		Used
2500	N4	Geographic Location	O	1		Used

N1 Party Identification

<table>
<tr><td>Pos: 2200</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: N1</td><td>Elements: 2</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	2/3	Must use

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

CodeList Summary (Total Codes: 1500, Included: 1)

Code Name

CT   Country of Origin

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

Description: Free-form name

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.

N4   Geographic Location

Pos: 2500	**Max: 1**
Detail - Optional	
Loop: N1	**Elements: 1**

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

> **Description:** Code identifying the country

Syntax Rules:

1. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 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.

User Note 1:

This segment is required for products who have a country of origin associted with them.

CTT Transaction Totals

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

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

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:

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

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.