

Market Lab 856 Ship Notice/Manifest

X12/V5010/856: 856 Ship Notice/Manifest

Author:	SPS Commerce
Company:	Market Lab

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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
0100	ST	Transaction Set Header	M	1			Must use
0200	BSN	Beginning Segment for Ship Notice	M	1			Must use

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
<u>LOOP ID - HL</u>					<u>1</u>	<u>C2/0100L</u>	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
1100	TD1	Carrier Details (Quantity and Weight)	O	3			Used
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
<u>LOOP ID - N1</u>					<u>2</u>		
2200	N1	Party Identification	M	1			Must use
2400	N3	Party Location	O	2			Used
2500	N4	Geographic Location	O	1			Used
<u>LOOP ID - HL</u>					<u>200000</u>	<u>C2/0100L</u>	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0500	PRF	Purchase Order Reference	M	1			Must use
1500	REF	Reference Information	M	1			Must use
<u>LOOP ID - HL</u>					<u>200000</u>	<u>C2/0100L</u>	
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
0700	PID	Product/Item Description	M	5			Must use
1500	REF	Reference Information	O	1			Dependent

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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:

As confirmation of shipment content for visibility and receiving automation, suppliers will be required to provide the ASN/Ship Notice details for all orders. Market Lab will use this information as confirmation and details of the shipment in advance of the receipt of the orders.

Market Lab will support the SOI (Shipment/Order/Item) structure. Each ASN will represent a single shipment (Ship-To location). Trading Partners are expected to include all PO's 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:

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

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ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
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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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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: 2)

Code Name

00	Original
06	Confirmation

BSN02	396	Shipment Identification	M	AN	2/30	Must use
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Description: A unique control number assigned by the original shipper to identify a specific shipment

User Note 1: *Unique Shipment ID Number*

BSN03	373	Date	M	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

User Note 1: *ASN create date*

BSN04	337	Time	M	TM	4/8	Must use
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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.

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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	M	1		Must use
1100	TD1	Carrier Details (Quantity and Weight)	O	3		Used
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
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Description: Code defining the characteristic of a level in a hierarchical structure

CodeList Summary (Total Codes: 250, 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: 1100	Max: 3
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

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

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>
TD101	103	Packaging Code	X	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

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

TD102	80	Lading Quantity	M	N0	1/7	Must use
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Description: Number of units (pieces) of the lading commodity

TD106	187	Weight Qualifier	M	ID	1/2	Must use
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Description: Code defining the type of weight

CodeList Summary (Total Codes: 52, Included: 1)

Code Name

- G Gross Weight

TD107	81	Weight	M	R	1/10	Must use
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Description: Numeric value of weight

TD108	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
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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: 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.

User Note 1:

A repetition of the TD1 segment should be sent for each type of packing medium (TD101). Therefore, if both pallets and cartons are shipped, there should be a repetition of the TD1 segment for each in order to indicate the pallet lading quantity of the shipment as well as the carton lading quantity of the shipment.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 1200	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 2

User Option (Usage): Must use

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

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>
TD505	387	Routing	M	AN	1/35	Must use

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

User Note 1: *Carrier Routing / Name*

TD512	284	Service Level Code	O	ID	2/2	Used
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Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier

CodeList Summary (Total Codes: 71, Included: 17)

Code Name

- 3D Three Day Service
- CG Ground
- CX Express Service
- DC Delivery Confirmation
- ET Proof of Delivery (POD) with Signature
- FC First Class
- G2 Standard Service
- IE Expedited Service - Worldwide
- IX Express Service - Worldwide
- ND Next Day Air
- ON Overnight
- PB Priority Mail
- PI Priority Mail Insured
- SA Same Day
- SC Second Day Air
- SE Second Day
- SG Standard Ground

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 Information

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

User Option (Usage): Must use

Purpose: To specify identifying information

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>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1731, Included: 3)

Code Name

- 2I Tracking Number
- BM Bill of Lading Number
- CN Carrier's Reference Number (PRO/Invoice)

REF02	127	Reference Identification	M	AN	1/50	Must use
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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

Pos: 1510	Max: 1
Detail - Optional	
Loop: HL	Elements: 6

User Option (Usage): Used

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

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>
PER01	366	Contact Function Code	M	ID	2/2	Must use
<p>Description: Code identifying the major duty or responsibility of the person or group named</p> <p>CodeList Summary (Total Codes: 238, Included: 1)</p> <p><u>Code</u> <u>Name</u></p> <p>IC Information Contact</p>						
PER02	93	Name	O	AN	1/60	Used
<p>Description: Free-form name</p>						
PER03	365	Communication Number Qualifier	O	ID	2/2	Used
<p>Description: Code identifying the type of communication number</p> <p>CodeList Summary (Total Codes: 42, Included: 2)</p> <p><u>Code</u> <u>Name</u></p> <p>EM Electronic Mail</p> <p>TE Telephone</p>						
PER04	364	Communication Number	O	AN	1/256	Used
<p>Description: Complete communications number including country or area code when applicable</p>						
PER05	365	Communication Number Qualifier	O	ID	2/2	Used
<p>Description: Code identifying the type of communication number</p> <p>CodeList Summary (Total Codes: 42, Included: 2)</p> <p><u>Code</u> <u>Name</u></p> <p>EM Electronic Mail</p> <p>TE Telephone</p>						
PER06	364	Communication Number	O	AN	1/256	Used
<p>Description: Complete communications number including country or area code when applicable</p>						

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:

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

Recommended

DTM02	373	Date	M	DT	8/8	Must use
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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:

One iteration of the DTM segment is required for the Shipped Date (DTM02, when DTM01=011).

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:

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

N102	93	Name	C	AN	1/60	Used
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Description: Free-form name

N103	66	Identification Code Qualifier	O	ID	1/2	Used
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Description: Code designating the system/method of code structure used for Identification Code (67)

CodeList Summary (Total Codes: 241, Included: 1)

Code Name

92 Assigned by Buyer or Buyer's Agent

N104	67	Identification Code	C	AN	2/80	Used
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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.

User Note 1:

Two iterations of the N1 loop are required for the Ship To and Ship From addresses.

N3 Party Location

Pos: 2400	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify the location of the named party

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>
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				

User Note 1:

N3 loop is required for ship to addresses when BSN01 = 06.

N4 Geographic Location

Pos: 2500	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

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>
N401	19	City Name	M	AN	2/30	Must use
		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	M	ID	3/15	Must use
		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. 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:

N4 loop is required for ship to addresses when BSN01 = 06.

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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	M	1		Must use
0500	PRF	Purchase Order Reference	M	1		Must use
1500	REF	Reference 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:

<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						
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)						
<u>Code</u> <u>Name</u>						
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:

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

Pos: 1500	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 2

User Option (Usage): Must use

Purpose: To specify identifying information

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>
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

CO Customer Order Number

User Note 1:

Required if present on the Purchase Order.

IA Internal Vendor Number

User Note 1:

Market Lab assigned Vendor ID - Mandatory

REF02	127	Reference Identification	M	AN	1/50	Must use
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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 - 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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
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		Dependent

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:

<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						
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)						
<u>Code</u> <u>Name</u>						
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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN01	350	Assigned Identification	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
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: 1)				
		Code Name				
		VN Vendor's (Seller's) Item Number				
LIN03	234	Product/Service ID	M	AN	1/48	Must use
		Description: Identifying number for a product or service				
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: 2)				
		Code Name				
		SK Stock Keeping Unit (SKU)				
		User Note 1:				
		<i>Market Lab assigned SKU</i>				
		UP UCC - 12				
LIN05	234	Product/Service ID	O	AN	1/48	Used
		Description: Identifying number for a product or service				
LIN06	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: 2)				
		Code Name				
		SK Stock Keeping Unit (SKU)				
		User Note 1:				
		<i>Market Lab assigned SKU</i>				
		UP UCC				
LIN07	234	Product/Service ID	O	AN	1/48	Used
		Description: Identifying number for a product or service				

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

User Note 1:

If an item has multiple Batch (lot) numbers associated to it, a unique LIN segment must be sent for each batch number, with the quantity of the item associated to the batch number sent in REF02.

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:

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

EA	Each
PH	Pack (PAK)

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.

PID Product/Item Description

Pos: 0700	Max: 5
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

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>
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

PID02	750	Product/Process Characteristic Code	M	ID	2/3	Must use
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Description: Code identifying the general class of a product or process characteristic

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

Code Name

08 Product

PID05	352	Description	M	AN	1/80	Must use
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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.

REF Reference Information

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

User Option (Usage): Dependent

Purpose: To specify identifying information

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>
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

LT Lot Number

SE Serial Number

REF02	127	Reference Identification	X	AN	1/50	Must use
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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:

When applicable a new LIN segment should be sent for each unique lot number of an item, so the quantity associated to that lot number can be sent in the SN102 element.

For items that are serialized, a new REF segment should be sent for each serial number. The number of REF segments should match the quantity in the SN1 segment.

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:

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

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

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:

- SE is the last segment of each transaction set.