

UNFI Specialty Distribution Services

856 Ship Notice/Manifest

X12/V4010/856: 856 Ship Notice/Manifest

Version: 1.1 Final

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856 Ship Notice/Manifest

Functional Group=SH

Purpose: This format 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.

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>
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>
LOOP ID - HL					<u>1</u>	<u>C2/0100L</u>	
0200	HL	Shipment Level	M	1			Must use
0300	TD1	Carrier Details (Quantity and Weight)	O	20			Used
0400	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
0500	TD3	Carrier Details (Equipment)	O	12			Used
0600	REF	Reference Identification	M	>1			Must use
0700	DTM	Date/Time Reference	M	10			Must use
0800	FOB	F.O.B. Related Instructions	M	1			Must use
LOOP ID - N1					<u>200</u>		
1000	N1	Name	M	1			Must use
1200	N3	Address Information	M	2			Must use
1300	N4	Geographic Location	M	1			Must use
LOOP ID - HL					<u>1</u>	<u>C2/1400L</u>	
1500	HL	Order Level	M	1			Must use
1600	PRF	Purchase Order Reference	M	1			Must use
LOOP ID - HL					<u>200000</u>		
LOOP ID - HL					<u>1</u>		
1900	HL	Tare Level	M	1			Must use
2000	MAN	Marks and Numbers	M	>1			Must use
LOOP ID - HL					<u>200000</u>		
2200	HL	Item Level	M	1			Must use
2300	LIN	Item Identification	M	1			Must use
2400	SN1	Item Detail (Shipment)	M	1			Must use
2500	PO4	Item Physical Details	O	1			Used
2600	PID	Product/Item Description	O	200			Used

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	M	1		N3/0100	Must use

<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>
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 There can only be one Shipment level per document.

2/1400L There can only be one Order level per document.

BSN Beginning Segment for Ship Notice

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 5

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						
Code Name						
14 Advance Notification						
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						
BSN03	373	Date	M	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						
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)						
BSN05	1005	Hierarchical Structure Code	O	ID	4/4	Must use
Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set						
Code Name						
0001 Shipment, Order, Packaging, Item						

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 Shipment Level

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>
0200	HL	Shipment Level	M	1		Must use
0300	TD1	Carrier Details (Quantity and Weight)	O	20		Used
0400	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
0500	TD3	Carrier Details (Equipment)	O	12		Used
0600	REF	Reference Identification	M	>1		Must use
0700	DTM	Date/Time Reference	M	10		Must use
0800	FOB	F.O.B. Related Instructions	M	1		Must use
0900		Loop N1	M		200	Must use

HL Shipment Level

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

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	O	AN	1/12	Used
		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				
		<u>Code</u>	<u>Name</u>			
		S	Shipment			
HL04	736	Hierarchical Child Code	O	ID	1/1	Used
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described				
		All valid standard codes are used.				

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: 0300	Max: 20
Detail - Optional	
Loop: HL	Elements: 7

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	O	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				
		Code Name				
		CTN Carton				
		Code Name				
		25 Corrugated or Solid				
TD102	80	Lading Quantity	X	NO	1/7	Must use
		Description: Number of units (pieces) of the lading commodity				
TD106	187	Weight Qualifier	O	ID	1/2	Must use
		Description: Code defining the type of weight				
		Code Name				
		G Gross Weight				
		N Actual Net Weight				
TD107	81	Weight	X	R	1/10	Must use
		Description: Numeric value of weight				
TD108	355	Unit or Basis for Measurement Code	X	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				
		Code Name				
		LB Pound				
TD109	183	Volume	X	R	1/8	Used
		Description: Value of volumetric measure				
TD110	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				
		Code Name				
		CF Cubic Feet				

Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.

3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.
5. P0910 - If either TD109 or TD110 is present, then the other is required.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 0400	Max: 12
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

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>
TD502	66	Identification Code Qualifier	X	ID	1/2	Used
<p>Description: Code designating the system/method of code structure used for Identification Code (67)</p> <p>Code Name</p> <p>2 Standard Carrier Alpha Code (SCAC)</p>						
TD503	67	Identification Code	X	AN	2/80	Used
<p>Description: Code identifying a party or other code</p>						
TD504	91	Transportation Method/Type Code	X	ID	1/2	Used
<p>Description: Code specifying the method or type of transportation for the shipment</p> <p>Code Name</p> <p>M Motor (Common Carrier)</p>						
TD505	387	Routing	X	AN	1/35	Used
<p>Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity</p>						
TD506	368	Shipment/Order Status Code	X	ID	2/2	Used
<p>Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction</p> <p>Code Name</p> <p>CL Complete</p> <p>CM Shipment Complete with Additional Quantity</p> <p>CS Shipment Complete with Substitution</p> <p>PR Partial Shipment</p>						

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.

TD3 Carrier Details (Equipment)

Pos: 0500	Max: 12
Detail - Optional	
Loop: HL	Elements: 7

User Option (Usage): Used

Purpose: To specify transportation details relating to the equipment used by the carrier

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>
TD301	40	Equipment Description Code	X	ID	2/2	Must use
Description: Code identifying type of equipment used for shipment						
Code Name						
BK Container, Bulk						
TV Truck, Van						
TW Trailer, Refrigerated						
TD302	206	Equipment Initial	O	AN	1/4	Used
Description: Prefix or alphabetic part of an equipment unit's identifying number						
TD303	207	Equipment Number	X	AN	1/10	Must use
Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)						
TD304	187	Weight Qualifier	O	ID	1/2	Used
Description: Code defining the type of weight						
TD305	81	Weight	X	R	1/10	Used
Description: Numeric value of weight						
TD306	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						
TD310	24	Equipment Type	X	ID	4/4	Used
Description: Code identifying equipment type						

Syntax Rules:

1. E0110 - Only one of TD301 or TD310 may be present.
2. C0203 - If TD302 is present, then TD303 is required.
3. C0405 - If TD304 is present, then TD305 is required.
4. P0506 - If either TD305 or TD306 is present, then the other is required.

REF Reference Identification

Pos: 0600	Max: >1
Detail - Mandatory	
Loop: HL	Elements: 3

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

Code Name

- BM Bill of Lading Number
- CN Carrier's Reference Number (PRO/Invoice)
- VR Vendor ID Number
- ZZ Mutually Defined

REF02	127	Reference Identification	X	AN	1/30	Must use
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Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

REF03	352	Description	X	AN	1/80	Used
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Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

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

Comments:

1. The Bill of Lading Number is required.
2. The Vendor Name is required. The ZZ qualifier is for the Vendor name.
3. The Vendor Number is required. The Vendor number is passed on the purchase order in the BEG_06 Data Element

DTM Date/Time Reference

Pos: 0700	Max: 10
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						
Code Name						
011 Shipped						
067 Current Schedule Delivery						
DTM02	373	Date	X	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						

Comments:

1. The date shipped is mandatory.

FOB F.O.B. Related Instructions

Pos: 0800	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

Purpose: To specify transportation instructions relating 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>
FOB01	146	Shipment Method of Payment	M	ID	2/2	Must use

Description: Code identifying payment terms for transportation charges

Code Name

CC	Collect
PB	Customer Pick-up/Backhaul
PP	Prepaid (by Seller)

FOB02	309	Location Qualifier	X	ID	1/2	Used
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Description: Code identifying type of location

Code Name

DE	Destination (Shipping)
OR	Origin (Shipping Point)

FOB03	352	Description	O	AN	1/80	Used
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Description: A free-form description to clarify the related data elements and their content

Syntax Rules:

1. C0302 - If FOB03 is present, then FOB02 is required.

Semantics:

1. FOB01 indicates which party will pay the carrier.
2. FOB02 is the code specifying transportation responsibility location.
3. FOB06 is the code specifying the title passage location.
4. FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and FOB06/FOB07.

Loop Name

Pos: 0900	Repeat: 200
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>
1000	N1	Name	M	1		Must use
1200	N3	Address Information	M	2		Must use
1300	N4	Geographic Location	M	1		Must use

N1 Name

Pos: 1000	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		Code Name				
		SF		Ship From		
		ST		Ship To		
N102	93	Name	M	AN	1/60	Must use
		Description: Free-form name				
N103	66	Identification Code Qualifier	M	ID	1/2	Must use
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		Code Name				
		9		D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
N104	67	Identification Code	M	AN	2/80	Must use
		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. Ship To and Ship From must both be present
2. N1_04 must be DUNS + 4. If +4 does not exist use 0000.

N3 Address Information

Pos: 1200	Max: 2
Detail - Mandatory	
Loop: N1	Elements: 2

User Option (Usage): Must use

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				

N4 Geographic Location

Pos: 1300	Max: 1
Detail - Mandatory	
Loop: N1	Elements: 4

User Option (Usage): Must use

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. 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 Order Level

Pos: 1400	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>
1500	HL	Order Level	M	1		Must use
1600	PRF	Purchase Order Reference	M	1		Must use

HL Order Level

Pos: 1500	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

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				
		Code Name				
		O		Order		
HL04	736	Hierarchical Child Code	O	ID	1/1	Used
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described				
		All valid standard codes are used.				

PRF Purchase Order Reference

Pos: 1600	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

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	Must use
		Description: PO Date expressed as CCYYMMDD				
PRF07	92	Purchase Order Type Code	O	ID	2/2	Used
		Description: Code specifying the type of Purchase Order				
		<u>Code</u>	<u>Name</u>			
		SA	Stand-alone Order			

Semantics:

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

Loop Hierarchical Level Detail Loop

Pos: 1700	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>
1800		Loop HL	M		1	Must use
2100		Loop HL	M		200000	Must use

Loop Tare Level

Pos: 1800	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>
1900	HL	Tare Level	M	1		Must use
2000	MAN	Marks and Numbers	M	>1		Must use

HL Tare Level

Pos: 1900	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

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				
		Code Name				
		T		Shipping Tare		
HL04	736	Hierarchical Child Code	O	ID	1/1	Used
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described				
		All valid standard codes are used.				

MAN Marks and Numbers

Pos: 2000	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Must use
Description: Code specifying the application or source of Marks and Numbers (87)						
Code Name						
AI UCC/EAN-128 Application Identifier (AI) and Data						
ZZ Mutually Defined						
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 Item Level

Pos: 2100	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>
2200	HL	Item Level	M	1		Must use
2300	LIN	Item Identification	M	1		Must use
2400	SN1	Item Detail (Shipment)	M	1		Must use
2500	PO4	Item Physical Details	O	1		Used
2600	PID	Product/Item Description	O	200		Used

HL Item Level

Pos: 2200	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

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				
		Code Name				
		I		Item		
HL04	736	Hierarchical Child Code	O	ID	1/1	Must use
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described				
		All valid standard codes are used.				

LIN Item Identification

Pos: 2300	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	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code Name				
		UA	U.P.C./EAN Case Code (2-5-5)			
		UI	U.P.C. Consumer Package Code (1-5-5)			
LIN03	234	Product/Service ID	M	AN	1/48	Used
		Description: Identifying number for a product or service				
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)				
		Code Name				
		PI	Purchaser's Item Code			
		UI	U.P.C. Consumer Package Code (1-5-5)			
LIN05	234	Product/Service ID	X	AN	1/48	Used
		Description: Identifying number for a product or service				
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)				
		Code Name				
		MF	Manufacturer			
		PI	Purchaser's Item Code			
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.

Semantics:

1. LIN01 is the line item identification

Comments:

1. Either the Item or Case UPC must be present.
2. The Item qualifer is UI with an 11 digit format of U.P.C. Consumer Package Code (1-5-5)
3. The Case qualifer is UA with a 12 digit format of U.P.C./EAN Case Code (2-5-5)

SN1 Item Detail (Shipment)

Pos: 2400	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

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
Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken						
		<u>Code</u> <u>Name</u>				
		CA Case				
		DZ Dozen				
		EA Each				
SN105	330	Quantity Ordered	M	R	1/15	Must use
Description: Quantity ordered						
SN106	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						
		<u>Code</u> <u>Name</u>				
		CA Case				
		DZ Dozen				
		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.

PO4 Item Physical Details

Pos: 2500	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

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>
PO401	356	Pack	M	N0	1/6	Must use
		Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container				
PO414	810	Inner Pack	O	N0	1/6	Used
		Description: The number of eaches per inner container				

PID Product/Item Description

Pos: 2600	Max: 200
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Code Name

F Free-form

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. R0405 - At least one of PID04 or PID05 is required.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used.

CTT Transaction Totals

Pos: 0100	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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				
CTT02	347	Hash Total	O	R	1/10	Used
		Description: Total number of units shipped.				

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:

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