

KeHE Distributors 856 Ship Notice/Manifest

X12/V5010/856 : 856 Ship Notice/Manifest

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Notes:	

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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.

Change History:

January 2025:

- Added 06 as an allowed BSN01 code
- Added N101=BY as conditional - required when BSN01=06
- Updated N103/N104 conditional requirements
- Added VR as an allowed order-level REF01 code
- Updated item-level PO4 segment to optional

August 2025:

- Updated Estimated Delivery Date (DTM02, when DTM01=017) to be Conditional
- Added ZZ as an allowed N103 code

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)	O	2			Used
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	M	1			Must use
LOOP ID - TD3					1		
1300	TD3	Carrier Details (Equipment)	O	1			Used
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
2100	FOB	F.O.B. Related Instructions	O	1			Used
LOOP ID - N1					4		
2200	N1	Party Identification	M	1			Must use
2400	N3	Party Location	M	1			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>
2500	N4	Geographic Location	M	1			Must use
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
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1			Used
1500	REF	Reference Information	M	2			Must use
LOOP ID - HL					200000	C2/0100L	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0600	PO4	Item Physical Details	O	1			Used
1500	REF	Reference Information	O	>1			Used
1900	MAN	Marks and Numbers Information	M	>1			Must use
2000	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					200		
2200	N1	Party Identification	M	1			Must use
2500	N4	Geographic Location	C	1			Used
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
0600	PO4	Item Physical Details	O	1			Used
0700	PID	Product/Item Description	M	1			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	M	1			Must use
2500	N4	Geographic Location	C	1			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	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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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: 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

CodeList Summary (Total Codes: 66, Included: 2)

Code Name

00 Original

User Note 1:

Ship to DC (Bulk)

06 Confirmation

User Note 1:

Ship to Customer (Drop Ship/BTST)

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*

BSN05	1005	Hierarchical Structure Code	O	ID	4/4	Used
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Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set

CodeList Summary (Total Codes: 81, Included: 1)

Code Name

0001 Shipment, Order, Packaging, Item

Syntax Rules:

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

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.
3. BSN06 is limited to shipment related codes.

Comments:

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

Loop Hierarchical Level - 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>
0100	HL	Hierarchical Level	M	1		Must use
1100	TD1	Carrier Details (Quantity and Weight)	O	2		Used
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	M	1		Must use
1300		Loop TD3	O		1	Used
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
2100	FOB	F.O.B. Related Instructions	O	1		Used
2200		Loop N1	M		4	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: 2
Detail - Optional	
Loop: HL	Elements: 7

User Option (Usage): Used

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

User Note 1:

TD1 segment should be provided if able.

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	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: *If more than 1 Packing Medium (TD101) is included in the shipment, the Quantity and Weight (TD1) group should be sent for each type.*

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

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

<u>Code</u>	<u>Name</u>
CTN	Carton
PLT	Pallet

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

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

User Note 1: *Total number of Pallets/Cartons on this shipment.*

TD106	187	Weight Qualifier	X	ID	1/2	Used
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Description: Code defining the type of weight

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

<u>Code</u>	<u>Name</u>
G	Gross Weight

TD107	81	Weight	X	R	1/10	Used
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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

<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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CodeList Summary (Total Codes: 844, Included: 1)

Code Name

LB Pound

TD109	183	Volume	X	R	1/8	Used
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Description: Value of volumetric measure

TD110	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

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: 1200	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

User Option (Usage): Must use

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

User Note 1:

One of either SCAC (TD503 with TD502=2) or Carrier Routing (TD505) must be sent.

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	C	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)

TD503	67	Identification Code	C	AN	2/80	Used
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Description: Code identifying a party or other code

User Note 1: SCAC - Min/Max = 2/4

TD504	91	Transportation Method/Type Code	M	ID	1/2	Must use
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Description: Code specifying the method or type of transportation for the shipment

CodeList Summary (Total Codes: 80, Included: 2)

Code Name

H Customer Pickup
M Motor (Common Carrier)

TD505	387	Routing	C	AN	1/35	Used
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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.

Loop Carrier Details (Equipment)

Pos: 1300	Repeat: 1
Optional	
Loop: TD3	Elements: N/A

User Option (Usage): Used

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

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>
1300	TD3	Carrier Details (Equipment)	O	1		Used

TD3 Carrier Details (Equipment)

Pos: 1300	Max: 1
Detail - Optional	
Loop: TD3	Elements: 3

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	O	ID	2/2	Used

Description: Code identifying type of equipment used for shipment

CodeList Summary (Total Codes: 139, Included: 1)

Code Name

TL Trailer (not otherwise specified)

TD302	206	Equipment Initial	X	AN	1/4	Used
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Description: Prefix or alphabetic part of an equipment unit's identifying number

TD303	207	Equipment Number	X	AN	1/15	Used
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Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)

User Note 1: *Trailer Number*

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 Information

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

User Option (Usage): Must use

Purpose: To specify identifying information

User Note 1:

At least one of the Bill of Lading Number (BM), Carrier Pro Number (CN) or Small Package Tracking # (2I) is required.

- . Bill of Lading number (BM) or Carrier Pro number (CN) is required for Truck Load and Less than Truck Load Shipments (Common Carrier moves).
- . For Parcel Carrier Shipments, the Carrier Assigned Package number (2I) is required. Do not send both.

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.

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
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						
PER02	93	Name	O	AN	1/60	Used
Description: Free-form name						
PER03	365	Communication Number Qualifier	X	ID	2/2	Used
Description: Code identifying the type of communication number						
CodeList Summary (Total Codes: 42, Included: 1)						
Code Name						
TE Telephone						
PER04	364	Communication Number	X	AN	1/256	Used
Description: Complete communications number including country or area code when applicable						
PER05	365	Communication Number Qualifier	X	ID	2/2	Used
Description: Code identifying the type of communication number						
CodeList Summary (Total Codes: 42, Included: 1)						
Code Name						
EM Electronic Mail						
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: 3

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

User Note 1:

Two iterations of the DTM segment are required for the Shipped Date and Time (DTM02 and DTM03, when DTM01=011) and Estimated Delivery Date (DTM02, when DTM01 = 017) for delivered shipments (TD504=M). Estimated Delivery Date is optional for pickup shipments (TD504=H).

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:

Conditional - Mandatory when TD504=M

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

DTM03	337	Time	C	TM	4/8	Used
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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: Mandatory when DTM01=011 (Ship Time)

Syntax Rules:

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

FOB F.O.B. Related Instructions

Pos: 2100	Max: 1
Detail - Optional	
Loop: HL	Elements: 1

User Option (Usage): Used

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

CodeList Summary (Total Codes: 31, Included: 2)

Code Name

CC	Collect
PP	Prepaid (by Seller)

Syntax Rules:

1. C0302 - If FOB03 is present, then FOB02 is required.
2. C0405 - If FOB04 is present, then FOB05 is required.
3. C0706 - If FOB07 is present, then FOB06 is required.
4. C0809 - If FOB08 is present, then FOB09 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 Party Identification

Pos: 2200	Repeat: 4
Mandatory	
Loop: N1	Elements: N/A

User Option (Usage): Must use

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

User Note 1:

Three iterations of the N1 loop must be sent, for the Ship From, Ship To, and Vendor addresses. Buying Party address must also be sent for drop ship (BTST) orders.

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	M	1		Must use
2500	N4	Geographic Location	M	1		Must use

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: 4)

Code Name

BY Buying Party (Purchaser)

User Note 1:
Conditional - Mandatory when BSN01=06

SF Ship From

User Note 1:
Mandatory

ST Ship To

User Note 1:
Mandatory

VN Vendor

User Note 1:
Mandatory

N102	93	Name	M	AN	1/60	Must use
------	----	------	---	----	------	----------

Description: Free-form name

N103	66	Identification Code Qualifier	C	ID	1/2	Used
------	----	-------------------------------	---	----	-----	------

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

User Note 1: Required if present on the PO or PO Change.
Mandatory when BSN01=00 and N101=ST
Mandatory when BSN01=06 and N101=BY
Mandatory when N101=SF - only for FSMA 204 track and trace requirements.

CodeList Summary (Total Codes: 241, Included: 3)

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

ZZ Mutually Defined

N104	67	Identification Code	C	AN	2/80	Used
------	----	---------------------	---	----	------	------

Description: Code identifying a party or other code

User Note 1: Required if present on the PO or PO Change.

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
						<i>Mandatory when BSN01=00 and N101=ST. When N101=ST, min/max = 13/13</i>
						<i>Mandatory when BSN01=06 and N101=BY</i>
						<i>Mandatory when N101=SF - only for FSMA 204 track and trace requirements.</i>

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

Pos: 2400	Max: 1
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: 2500	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	M	ID	2/2	Must use
		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.

Loop Hierarchical Level - Order Level

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

User Note 1:

KeHE allows for multiple POs on a single shipment.

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
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	1		Used
1500	REF	Reference Information	M	2		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
-------	-----	------	---	----	-----	------

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

User Note 1: *Purchase Order Date*

Semantics:

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

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 1200	Max: 1
Detail - Optional	
Loop: HL	Elements: 1

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>
TD506	368	Shipment/Order Status Code	M	ID	2/2	Must use

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

CodeList Summary (Total Codes: 102, Included: 2)

Code Name

CC	Shipment Complete on (Date)
PR	Partial Shipment

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: 2)

Code Name

IA Internal Vendor Number

User Note 1:

Mandatory - KeHE Distributors assigned supplier ID (KeHE ESN)

VR Vendor ID Number

User Note 1:

Optional - KeHE Distributors DC supplier ID

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 - Pack Level

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
0600	PO4	Item Physical Details	O	1		Used
1500	REF	Reference Information	O	>1		Used
1900	MAN	Marks and Numbers Information	M	>1		Must use
2000	DTM	Date/Time Reference	O	10		Used
2200		Loop N1	O		200	Used
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: 2)

Code Name

P Pack

User Note 1:

Carton

T Shipping Tare

User Note 1:

Pallet

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.

PO4 Item Physical Details

Pos: 0600	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

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

User Note 1:

PO4 segment should be provided if able - pack level weight/volume

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO405	187	Weight Qualifier	X	ID	1/2	Used

Description: Code defining the type of weight

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

Code Name

G Gross Weight

PO406	384	Gross Weight per Pack	X	R	1/9	Used
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Description: Numeric value of gross weight per pack

PO407	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
-------	-----	------------------------------------	---	----	-----	------

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

CodeList Summary (Total Codes: 844, Included: 1)

Code Name

LB Pound

PO408	385	Gross Volume per Pack	X	R	1/9	Used
-------	-----	-----------------------	---	---	-----	------

Description: Numeric value of gross volume per pack

PO409	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
-------	-----	------------------------------------	---	----	-----	------

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

CodeList Summary (Total Codes: 844, Included: 1)

Code Name

CF Cubic Feet

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.

REF Reference Information

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

User Option (Usage): Used

Purpose: To specify identifying information

User Note 1:

Required for items with lot/batch numbers associated to them - must be sent at either the pack or item level

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: 1)						
<u>Code</u> <u>Name</u>						
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.

MAN Marks and Numbers Information

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

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)

CodeList Summary (Total Codes: 21, Included: 2)

Code Name

CP Carrier-Assigned Package ID Number

User Note 1:

Required for the Carton Tracking Number. Must be used for all small package shipments.

Repeating MAN segments should be used for every Carrier Assigned Tracking Number.

GM EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier

User Note 1:

Required for the GS1-128 20 digit barcode number.

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*

MAN04	88	Marks and Numbers Qualifier	O	ID	1/2	Used
-------	----	-----------------------------	---	----	-----	------

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

CodeList Summary (Total Codes: 21, Included: 1)

Code Name

CP Carrier-Assigned Package ID Number

User Note 1:

Carton Tracking Number. Used if both GS1-128 value and Tracking Number are present.

MAN05	87	Marks and Numbers	O	AN	1/48	Used
-------	----	-------------------	---	----	------	------

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

User Note 1: *When there is both the GS1-128 # and small package tracking number available, use MAN01/02 for the GS1-128 # (GM) and MAN04/05 for the small package tracking # (CP).*

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.

DTM Date/Time Reference

Pos: 2000	Max: 10
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

Purpose: To specify pertinent dates and times

User Note 1:

Required for items with expiration/manufacture dates associated to them - must be sent at either the pack or item level

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

036	Expiration
405	Production

User Note 1:

Manufacture Date

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.

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

User Note 1:

Required for items with country of origin associated to them and/or items needing to meet FSMA 204 track and trace requirements - must be sent at either the pack or item level

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
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:

<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

CodeList Summary (Total Codes: 1500, Included: 2)

Code Name

CT	Country of Origin
MF	Manufacturer of Goods

User Note 1:

Manufacturer / Plant

N102	93	Name	X	AN	1/60	Used
------	----	------	---	----	------	------

Description: Free-form name

N103	66	Identification Code Qualifier	C	ID	1/2	Used
------	----	-------------------------------	---	----	-----	------

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

User Note 1: *Required when N101=MF*

CodeList Summary (Total Codes: 241, Included: 3)

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
UL	Global Location Number (GLN)

N104	67	Identification Code	C	AN	2/80	Used
------	----	---------------------	---	----	------	------

Description: Code identifying a party or other code

User Note 1: *Required when N101=MF - Location Identifier of Traceability Lot Code Generator*

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 - Conditional	
Loop: N1	Elements: 1

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>
N404	26	Country Code	C	ID	2/3	Used

Description: Code identifying the country

User Note 1: Required when N101=CT - Country of Origin

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 - Item Level

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
0600	PO4	Item Physical Details	O	1		Used
0700	PID	Product/Item Description	M	1		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:

<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: 11

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
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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

UP UCC - 12

User Note 1:

KeHE requires the item UPC as the primary item identification code. This is a required field and should match the UPC sent on the Purchase Order 850 or Purchase Order Change 860.

LIN03	234	Product/Service ID	M	AN	1/48	Must use
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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: 4)

Code Name

EN EAN/UCC - 13

IN Buyer's Item Number

User Note 1:

KeHE Item Number - 8 digits with leading zeros (can be different by DC)

UK GTIN 14-digit Data Structure

VN Vendor's (Seller's) Item Number

User Note 1:

Vendor SKU

LIN05	234	Product/Service ID	O	AN	1/48	Used
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Description: Identifying number for a product or service

LIN06	235	Product/Service ID Qualifier	O	ID	2/2	Used
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Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

CodeList Summary (Total Codes: 519, Included: 4)

Code Name

EN EAN/UCC - 13
 IN Buyer's Item Number

User Note 1:
KeHE Item Number - 8 digits with leading zeros (can be different by DC)

UK GTIN 14-digit Data Structure
 VN Vendor's (Seller's) Item Number

User Note 1:
Vendor SKU

LIN07 234 **Product/Service ID** O AN 1/48 Used

Description: Identifying number for a product or service

LIN08 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: 4)

Code Name

EN EAN/UCC - 13
 IN Buyer's Item Number

User Note 1:
KeHE Item Number - 8 digits with leading zeros (can be different by DC)

UK GTIN 14-digit Data Structure
 VN Vendor's (Seller's) Item Number

User Note 1:
Vendor SKU

LIN09 234 **Product/Service ID** O AN 1/48 Used

Description: Identifying number for a product or service

LIN10 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: 4)

Code Name

EN EAN/UCC - 13
 IN Buyer's Item Number

User Note 1:
KeHE Item Number - 8 digits with leading zeros (can be different by DC)

UK GTIN 14-digit Data Structure
 VN Vendor's (Seller's) Item Number

User Note 1:
Vendor SKU

LIN11 234 **Product/Service ID** O 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:

<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: 1)

Code Name

CA Case

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

Pos: 0600	Max: 1
Detail - Optional	
Loop: HL	Elements: 6

User Option (Usage): Used

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

User Note 1:

PO4 segment should be provided if able/applicable.

For random weight/catch weight items, PO405-PO407 should reflect the actual weight of the item that will be invoiced.

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	O	N0	1/6	Used
Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container						
User Note 1: <i>Outer Pack</i>						
PO405	187	Weight Qualifier	M	ID	1/2	Must use
Description: Code defining the type of weight						
CodeList Summary (Total Codes: 52, Included: 2)						
<u>Code</u> <u>Name</u>						
G Gross Weight						
N Actual Net Weight						
PO406	384	Gross Weight per Pack	M	R	1/9	Must use
Description: Numeric value of gross weight per pack						
PO407	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: 1)						
<u>Code</u> <u>Name</u>						
LB Pound						
PO408	385	Gross Volume per Pack	M	R	1/9	Must use
Description: Numeric value of gross volume per pack						
PO409	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: 1)						
<u>Code</u> <u>Name</u>						
CF Cubic Feet						

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

Pos: 0700	Max: 1
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.

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

User Note 1:

Required for items with lot/batch numbers associated to them - must be sent at either the pack or item level

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: 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.

DTM Date/Time Reference

Pos: 2000	Max: 10
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

Purpose: To specify pertinent dates and times

User Note 1:

Required for items with expiration/manufacture dates associated to them - must be sent at either the pack or item level

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)

<u>Code</u>	<u>Name</u>
036	Expiration
405	Production

User Note 1:

Manufacture Date

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.

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

User Note 1:

Required for items with country of origin associated to them and/or items needing to meet FSMA 204 track and trace requirements - must be sent at either the pack or item level

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
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

CT	Country of Origin
MF	Manufacturer of Goods

User Note 1:

Manufacturer / Plant

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

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

User Note 1: *Required when N101=MF*

CodeList Summary (Total Codes: 241, Included: 3)

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
UL	Global Location Number (GLN)

N104	67	Identification Code	C	AN	2/80	Used
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Description: Code identifying a party or other code

User Note 1: *Required when N101=MF - Location Identifier of Traceability Lot Code Generator*

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 - Conditional	
Loop: N1	Elements: 1

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>
N404	26	Country Code	C	ID	2/3	Used

Description: Code identifying the country

User Note 1: Required when N101=CT - Country of Origin

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.

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.