



856 FS Ship Notice/Manifest

Foodservice EDI

Version: 4010-2012 Final

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Publication:	2012-07-01
Notes:	For Implementation December2012

Table of Contents

856	FS Ship Notice/Manifest Foodservice	1
ST	Transaction Set Header	4
BSN	Beginning Segment for Ship Notice	5
HL	Loop Hierarchical Level - Shipment	7
HL	Hierarchical Level - Shipment	8
TD1	Carrier Details (Quantity and Weight)	9
TD5	Carrier Details (Routing Sequence/Transit Time)	12
TD3	Carrier Details (Equipment)	14
TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	15
REF	Reference Identification	16
PER	Administrative Communications Contact	17
DTM	Date/Time Reference	19
N1	Loop Name	20
N1	Name	21
N2	Additional Name Information	23
N3	Address Information	24
N4	Geographic Location	25
HL	Loop Hierarchical Level - Unit or Lot	26
HL	Hierarchical Level - Unit or Lot	27
TD3	Carrier Details (Equipment)	29
MAN	Marks and Numbers	30
HL	Loop Hierarchical Level - Order	31
HL	Hierarchical Level - Order	32
PRF	Purchase Order Reference	33
TD1	Carrier Details (Quantity and Weight)	34
REF	Reference Identification	36
N1	Loop Name	38
N1	Name	39
N2	Additional Name Information	41
N3	Address Information	42
N4	Geographic Location	43
HL	Loop Hierarchical Level - Shipping Tare	44
HL	Hierarchical Level - Shipping Tare	45
MAN	Marks and Numbers	46
PAL	Pallet Information	47
HL	Loop Hierarchical Level - Pack	49
HL	Hierarchical Level - Pack	50
LIN	Item Identification	51
SN1	Item Detail (Shipment)	53
MAN	Marks and Numbers	54

HL	Loop Hierarchical Level - Item	56
HL	Hierarchical Level - Item	57
LIN	Item Identification	58
SN1	Item Detail (Shipment)	60
PO4	Item Physical Details	61
PID	Product/Item Description	63
REF	Reference Identification	65
DTM	Date/Time Reference	66
CTT	Transaction Totals	67
SE	Transaction Set Trailer	68

856 FS Ship Notice/Manifest Foodservice

Functional Group=SH

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Heading:

<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>
010	ST	Transaction Set Header	M	1			Must use
020	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					200000	C2/010L	
010	HL	Hierarchical Level - Shipment	M	1		C2/010	Must use
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
130	TD3	Carrier Details (Equipment)	O	12			Used
140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5			Used
150	REF	Reference Identification	O	>1			Used
151	PER	Administrative Communications Contact	O	3			Used
200	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					200		
220	N1	Name	O	1			Used
230	N2	Additional Name Information	O	2			Used
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
LOOP ID - HL					200000	C2/010L	
010	HL	Hierarchical Level - Unit or Lot	M	1		C2/010	Must use
130	TD3	Carrier Details (Equipment)	O	12			Used
190	MAN	Marks and Numbers	O	>1			Used
LOOP ID - HL					200000	C2/010L	
010	HL	Hierarchical Level - Order	M	1		C2/010	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>
050	PRF	Purchase Order Reference	O	1			Used
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
150	REF	Reference Identification	O	>1			Used
<u>LOOP ID - N1</u>					<u>200</u>		
220	N1	Name	O	1			Used
230	N2	Additional Name Information	O	2			Used
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
<u>LOOP ID - HL</u>					<u>200000</u>	<u>C2/010L</u>	
010	HL	Hierarchical Level - Shipping Tare	M	1		C2/010	Must use
190	MAN	Marks and Numbers	O	>1			Used
215	PAL	Pallet Information	O	1			Used
<u>LOOP ID - HL</u>					<u>200000</u>	<u>C2/010L</u>	
010	HL	Hierarchical Level - Pack	M	1		C2/010	Must use
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used
190	MAN	Marks and Numbers	O	>1			Used
<u>LOOP ID - HL</u>					<u>200000</u>	<u>C2/010L</u>	
010	HL	Hierarchical Level - Item	M	1		C2/010	Must use
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used
060	PO4	Item Physical Details	O	1			Used
070	PID	Product/Item Description	O	200			Used
150	REF	Reference Identification	O	>1			Used
200	DTM	Date/Time Reference	O	10			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>
010	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use

Notes:

3/010 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Comments:

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

ST Transaction Set Header

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

User Option (Usage): Must use

Purpose: To indicate the start of a transaction set and to assign a control number

Element Summary:

<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

Code List Summary (Total Codes: 298, Included: 1)

Code Name

856 Ship Notice/Manifest

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

User Note 1: *The number is sequentially assigned by the sender, starting with one within each functional group. For each functional group, the first transaction set control number will be 0001 and incremented by one for each additional transaction set within the group.*

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

BSN Beginning Segment for Ship Notice

Pos: 020	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 List Summary (Total Codes: 65, Included: 2)

Code Name

00 Original
07 Duplicate

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

BSN03	373	Date	M	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

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)

BSN05	1005	Hierarchical Structure Code	O	ID	4/4	Must use
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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

Code List Summary (Total Codes: 61, Included: 1)

Code Name

0001 Shipment, Order, Packaging, Item

User Note 1:

Pick and Pack Structure

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.

User Note 1:

In some implementations, it may be appropriate to omit the unit load level and packaging levels, i.e., tare and pack, from the transaction set. Depending on the retailer's receiving systems, carton identification may not be required. Code 0004 in BSN05 indicates the use of a hierarchical structure that does not include a unit load level or any packaging levels.

Loop Hierarchical Level - Shipment

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

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level - Shipment	M	1		Must use
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
130	TD3	Carrier Details (Equipment)	O	12		Used
140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		Used
150	REF	Reference Identification	O	>1		Used
151	PER	Administrative Communications Contact	O	3		Used
200	DTM	Date/Time Reference	O	10		Used
220		Loop N1	O		200	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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

HL Hierarchical Level - Shipment

Pos: 010	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

User Note 1: *The value for this level (shipment) is 1.*

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

Code List Summary (Total Codes: 170, Included: 1)

<u>Code</u>	<u>Name</u>
S	Shipment

Comments:

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

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

TD1 Carrier Details (Quantity and Weight)

Pos: 110	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	Used

Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

Code List Summary - Part 1/2 (Total Codes: 148, Included: 6)

Code Name

BAG Bag
CTN Carton
MIX Mixed Container Types

Description: *More than one type of container is included in a shipment (shipment could consist of 3 pieces that include 1 box, 1 crate, and 1 basket)*

User Note 1:

Can be used only with code 71 in Part 2

PLT Pallet
SLP Slip Sheet

Description: *Shipping containers utilizing slip sheets, which are cardboard platforms used to hold product for storage or transportation*

SRW Shrink Wrap

Description: *In packaging, a method of securing a unit load by placing a large "bag" of plastic film over the components and applying heat to induce shrinkage and cause the bag to tighten around the contents*

Code List Summary - Part 2/2 (Total Codes: 55, Included: 9)

Code Name

01 Aluminum
25 Corrugated or Solid
31 Fibre
58 Metal
71 Not Otherwise Specified
76 Paper
79 Plastic
91 Stainless Steel
94 Wood

TD102	80	Lading Quantity	C	N0	1/7	Used
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Description: Number of units (pieces) of the lading commodity

User Note 1: *The number of packages in the shipment as described in TD101*

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD106	187	Weight Qualifier	O	ID	1/2	Used
		Description: Code defining the type of weight				
		Code List Summary (Total Codes: 51, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		G		Gross Weight		
TD107	81	Weight	C	R	1/10	Used
		Description: Numeric value of weight				
TD108	355	Unit or Basis for Measurement Code	C	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 List Summary (Total Codes: 794, Included: 2)				
		<u>Code</u>		<u>Name</u>		
		KG		Kilogram		
		LB		Pound		
TD109	183	Volume	C	R	1/8	Used
		Description: Value of volumetric measure				
		User Note 1: <i>Gross volume</i>				
TD110	355	Unit or Basis for Measurement Code	C	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 List Summary (Total Codes: 794, Included: 10)				
		<u>Code</u>		<u>Name</u>		
		CC		Cubic Centimeter		
		CF		Cubic Feet		
		CI		Cubic Inches		
		CR		Cubic Meter		
		GA		Gallon		
		GI		Imperial Gallons		
		LT		Liter		
		ML		Milliliter		
		PT		Pint		
		PX		Pint, Imperial		

Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.

5. P0910 - If either TD109 or TD110 is present, then the other is required.

User Note 1:

This segment, at the shipment level, is used to specify total containers and gross weight of the shipment.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 120	Max: 12
Detail - Optional	
Loop: HL	Elements: 6

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>
TD501	133	Routing Sequence Code	O	ID	1/2	Used

Description: Code describing the relationship of a carrier to a specific shipment movement

Code List Summary (Total Codes: 23, Included: 13)

Code Name

- 1 1st Carrier after Origin Carrier
- 2 2nd Carrier after Origin Carrier
- 3 3rd Carrier after Origin Carrier
- 4 4th Carrier after Origin Carrier
- 5 5th Carrier after Origin Carrier
- 6 6th Carrier after Origin Carrier
- 7 7th Carrier after Origin Carrier
- 8 8th Carrier after Origin Carrier
- 9 9th Carrier after Origin Carrier
- A Origin Carrier, Agent's Routing (Rail)
- B Origin/Delivery Carrier (Any Mode)
- O Origin Carrier (Air, Motor, or Ocean)
- S Origin Carrier, Shipper's Routing (Rail)

TD502	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)

Code List Summary (Total Codes: 215, 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

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

Code List Summary (Total Codes: 71, Included: 3)

Code Name

- H Customer Pickup

Code Name

M Motor (Common Carrier)
R Rail

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

TD506	368	Shipment/Order Status Code	C	ID	2/2	Used
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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

Code List Summary (Total Codes: 102, Included: 1)

Code Name

CC Shipment Complete on (Date)

Syntax Rules:

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

Semantics:

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

Comments:

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

User Note 1:

This segment is used to specify every carrier in the routing sequence or a specific routing sequence that has been previously identified (usually from a routing guide). The segment can also be used to indicate estimated transit time in days. Only use TD501 if needed for clarity; this is not a requirement in most retail applications. When referring to a pre-established routing guide, use code 91 or 92 in TD502 and identify the routing sequence, from the routing guide, in TD503. To identify a specific private parcel service, TD502 will contain code 2 and TD503 will contain the corresponding SCAC. TD510 and TD511 are used to specify transit time.

When using a small package service provider as the carrier, TD502 will contain code 2, TD503 will contain the carrier's SCAC, and TD504 will contain code U to inform the receiver of a small package service shipment.

TD3 Carrier Details (Equipment)

Pos: 130	Max: 12
Detail - Optional	
Loop: HL	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	C	ID	2/2	Must use										
<p>Description: Code identifying type of equipment used for shipment</p> <p>Code List Summary (Total Codes: 134, Included: 4)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>CV</td> <td>Closed Van</td> </tr> <tr> <td>FT</td> <td>Flat Bed Trailer</td> </tr> <tr> <td>RT</td> <td>Controlled Temperature Trailer (Reefer)</td> </tr> <tr> <td>TL</td> <td>Trailer (not otherwise specified)</td> </tr> </tbody> </table>							<u>Code</u>	<u>Name</u>	CV	Closed Van	FT	Flat Bed Trailer	RT	Controlled Temperature Trailer (Reefer)	TL	Trailer (not otherwise specified)
<u>Code</u>	<u>Name</u>															
CV	Closed Van															
FT	Flat Bed Trailer															
RT	Controlled Temperature Trailer (Reefer)															
TL	Trailer (not otherwise specified)															
TD302	206	Equipment Initial	O	AN	1/4	Used										
<p>Description: Prefix or alphabetic part of an equipment unit's identifying number</p>																
TD303	207	Equipment Number	C	AN	1/10	Used										
<p>Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)</p>																

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.

User Note 1:

This segment is used to specify the trailer number for a truckload shipment.

TD4 Carrier Details (Special Handling, or Hazardous Materials, or Both)

Pos: 140	Max: 5
Detail - Optional	
Loop: HL	Elements: 1

User Option (Usage): Used

Purpose: To specify transportation special handling requirements, or hazardous materials information, or 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>
TD401	152	Special Handling Code	C	ID	2/3	Must use

Description: Code specifying special transportation handling instructions

Code List Summary (Total Codes: 526, Included: 6)

Code Name

CC Container, Consolidator Load

Description: *Full container*

CF Container, Factory Load

Description: *Full container, not to be opened for consolidation*

LN Less Than Container, Consolidator Load

LR Less Than Container, Factory Load

TC Trailer, Consolidator Load

Description: *Full trailer*

TF Trailer, Factory Load

Description: *Full trailer, not to be opened for consolidation*

Syntax Rules:

1. R010204 - At least one of TD401, TD402 or TD404 is required.
2. C0203 - If TD402 is present, then TD403 is required.

Semantics:

1. TD405 identifies if a Material Safety Data Sheet (MSDS) exists for this product. A "Y" indicates an MSDS exists for this product; an "N" indicates an MSDS does not exist for this product.

REF Reference Identification

Pos: 150	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Code Name

BM Bill of Lading Number
CN Carrier's Reference Number (PRO/Invoice)
MB Master Bill of Lading

REF02	127	Reference Identification	C	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

Syntax Rules:

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

Semantics:

1. REF04 contains data relating to the value cited in REF02.

User Note 1:

In some cases, individual shipments with bill of lading may be grouped under a Master Bill of Lading. Under this circumstance, specifying both the bill of lading and the associated Master Bill of Lading Number will facilitate tracking.

PER Administrative Communications Contact

Pos: 151	Max: 3
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				
		Code List Summary (Total Codes: 230, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		DI		Delivery Instructions Contact		
PER02	93	Name	O	AN	1/60	Used
		Description: Free-form name				
PER03	365	Communication Number Qualifier	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code List Summary (Total Codes: 40, Included: 2)				
		<u>Code</u>		<u>Name</u>		
		EM		Electronic Mail		
		TE		Telephone		
PER04	364	Communication Number	C	AN	1/80	Used
		Description: Complete communications number including country or area code when applicable				
PER05	365	Communication Number Qualifier	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code List Summary (Total Codes: 40, Included: 2)				
		<u>Code</u>		<u>Name</u>		
		EM		Electronic Mail		
		TE		Telephone		
PER06	364	Communication Number	C	AN	1/80	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: 200	Max: 10
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

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 List Summary (Total Codes: 1112, Included: 6)

Code Name

- 011 Shipped
- 017 Estimated Delivery
- 067 Current Schedule Delivery
- 068 Current Schedule Ship
- AA1 Estimated Point of Arrival
- AA2 Estimated Point of Discharge

DTM02	373	Date	C	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

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)

Syntax Rules:

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

Loop Name

Pos: 220	Repeat: 200
Optional	
Loop: N1	Elements: N/A

User Option (Usage): Used

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
220	N1	Name	O	1		Used
230	N2	Additional Name Information	O	2		Used
240	N3	Address Information	O	2		Used
250	N4	Geographic Location	O	1		Used

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

User Note 1:

N103 and N104 are required except when N101 contains code MA or OB.

When the ship to is the end consumer (customer of retailer), N103 and N104 are not required.

In some EDI implementations, it may be necessary to identify the sender and/or receiver of the transaction set within each transaction set. To identify the sender of the transaction set, N101 will contain code FR, N103 will contain code 93, and N104 will contain the actual identification number. To identify the receiver of the transaction set, N101 will contain code TO, N103 will contain code 94, and N104 will contain the actual identification number. These four codes may be used only in the combination listed above and may be used only to identify the sender and/or receiver of the transaction set.

N1 Name

Pos: 220	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

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

Code Name

SF Ship From
ST Ship To

N102	93	Name	C	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)

Code List Summary (Total Codes: 215, Included: 2)

Code Name

9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix
UL UCC/EAN Location Code

Description: *Global Location Number (GLN) (Revised name)*
A globally unique 13 digit code used for the identification of any physical or legal location that needs to be uniquely identified for use in the supply chain. A GS1 identification key SEE CODE SOURCE 583

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

Syntax Rules:

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

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

User Note 1:

N103 and N104 are required except when N101 contains code MA or OB.

When the ship to is the end consumer (customer of retailer), N103 and N104 are not required.

In some EDI implementations, it may be necessary to identify the sender and/or receiver of the transaction set within each transaction set. To identify the sender of the transaction set, N101 will contain code FR, N103 will contain code 93, and N104 will contain the actual identification number. To identify the receiver of the transaction set, N101 will contain code TO, N103 will contain code 94, and N104 will contain the actual identification number. These four codes may be used only in the combination listed above and may be used only to identify the sender and/or receiver of the transaction set.

N2 Additional Name Information

Pos: 230	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify additional names or those longer than 35 characters in length

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>
N201	93	Name	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	Name	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 240	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

<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: 250	Max: 1
Detail - Optional	
Loop: N1	Elements: 6

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	State or Province Code	O	ID	2/2	Used
		Description: Code (Standard State/Province) as defined by appropriate government agency				
N403	116	Postal Code	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	Country Code	O	ID	2/3	Used
		Description: Code identifying the country				
N405	309	Location Qualifier	C	ID	1/2	Used
		Description: Code identifying type of location				
		Code List Summary (Total Codes: 172, Included: 4)				
		<u>Code</u>		<u>Name</u>		
		D		Census Schedule D		
		K		Census Schedule K		
		W		Worldwide Geographic Location Code		
		IA		International Air Transport Association (IATA) Location Qualifier		
N406	310	Location Identifier	O	AN	1/30	Used
		Description: Code which identifies a specific location				

Syntax Rules:

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

Comments:

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

Loop Hierarchical Level - Unit or Lot

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

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level - Unit or Lot	M	1		Must use
130	TD3	Carrier Details (Equipment)	O	12		Used
190	MAN	Marks and Numbers	O	>1		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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

HL Hierarchical Level - Unit or Lot

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

User Option (Usage): Must use

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

Element Summary:

<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	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 List Summary (Total Codes: 170, Included: 1)

Code Name

UT Unit or Lot

User Note 1:

Unit load

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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the

series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

TD3 Carrier Details (Equipment)

Pos: 130	Max: 12
Detail - Optional	
Loop: HL	Elements: 1

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	C	ID	2/2	Must use

Description: Code identifying type of equipment used for shipment

Code List Summary (Total Codes: 134, Included: 6)

<u>Code</u>	<u>Name</u>
20	20 ft. IL Container (Open Top)
2B	20 ft. IL Container (Closed Top)
40	40 ft. IL Container (Open Top)
4B	40 ft. IL Container (Closed Top)
CN	Container
CZ	Refrigerated Container

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.

MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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 List Summary (Total Codes: 20, Included: 1)

Code Name

GM SSCC-18 and Application Identifier

User Note 1:

This is a twenty-character UCC/EAN-128 Serial Shipping Container Code (SSCC-18) that includes the two digit application identifier. The symbology code and the modulo 103 check digit are not included.

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
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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.

User Note 1:

This segment, at the unit load level, is used to specify the identification number for the unit load.

Loop Hierarchical Level - Order

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

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level - Order	M	1		Must use
050	PRF	Purchase Order Reference	O	1		Used
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
150	REF	Reference Identification	O	>1		Used
220		Loop N1	O		200	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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

HL Hierarchical Level - Order

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

User Option (Usage): Must use

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

Element Summary:

<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	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 List Summary (Total Codes: 170, Included: 1)						
Code Name						
O Order						

Comments:

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

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

PRF Purchase Order Reference

Pos: 050	Max: 1
Detail - Optional	
Loop: HL	Elements: 1

User Option (Usage): Used

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

Semantics:

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

TD1 Carrier Details (Quantity and Weight)

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

User Option (Usage): Used

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

Element Summary:

<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	Used

Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

Code List Summary - Part 1/2 (Total Codes: 148, Included: 3)

Code Name

BAG Bag
CTN Carton
PLT Pallet

Code List Summary - Part 2/2 (Total Codes: 55, Included: 6)

Code Name

01 Aluminum
25 Corrugated or Solid
31 Fibre
76 Paper
79 Plastic
94 Wood

TD102	80	Lading Quantity	C	N0	1/7	Used
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Description: Number of units (pieces) of the lading commodity

TD106	187	Weight Qualifier	O	ID	1/2	Used
-------	-----	-------------------------	---	----	-----	------

Description: Code defining the type of weight

Code List Summary (Total Codes: 51, Included: 1)

Code Name

G Gross Weight

TD107	81	Weight	C	R	1/10	Used
-------	----	---------------	---	---	------	------

Description: Numeric value of weight

TD108	355	Unit or Basis for Measurement Code	C	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 List Summary (Total Codes: 794, Included: 2)

<u>Code</u>	<u>Name</u>
GR	Gram
KG	Kilogram

Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.
5. P0910 - If either TD109 or TD110 is present, then the other is required.

User Note 1:

This segment, at the order level, is used to specify the number and type of shipping containers in the order.

REF Reference Identification

Pos: 150	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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 List Summary (Total Codes: 1503, Included: 15)

Code Name

6B U.S. Customs Service (USCS) Entry Number

User Note 1:

Customs entry number

BM Bill of Lading Number

BT Batch Number

CH Customer catalog number

CO Customer Order Number

User Note 1:

Customer of retailer

DP Department Number

HB Bill & Hold Invoice Number

IA Internal Vendor Number

User Note 1:

Identification number assigned to the vendor, by the retailer, for use within the retailer's system

IT Internal Customer Number

User Note 1:

Identification number assigned to the retailer, by the vendor, for use within the vendor's system

IV Seller's Invoice Number

MR Merchandise Type Code

PD Promotion/Deal Number

QC Product Specification Document Number

Description: *Model designation of replacement component*

User Note 1:

Schematic reference number

SB Sales Region Number

VN Vendor Order Number

REF02	127	Reference Identification	C	AN	1/30	Must use
-------	-----	--------------------------	---	----	------	----------

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

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

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

Semantics:

1. REF04 contains data relating to the value cited in REF02.

Loop Name

Pos: 220	Repeat: 200
Optional	
Loop: N1	Elements: N/A

User Option (Usage): Used

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
220	N1	Name	O	1		Used
230	N2	Additional Name Information	O	2		Used
240	N3	Address Information	O	2		Used
250	N4	Geographic Location	O	1		Used

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

User Note 1:

There will be at least one occurrence, of this segment, to identify the buying party by using code BY in N101.

N103 and N104 are required except when N101 contains code CT, MA or OB.

N1 Name

Pos: 220	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

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 List Summary (Total Codes: 1312, Included: 1)

Code Name

BY Buying Party (Purchaser)

N102	93	Name	C	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)

Code List Summary (Total Codes: 215, Included: 2)

Code Name

9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix

UL UCC/EAN Location Code

Description: *Global Location Number (GLN) (Revised name)*
A globally unique 13 digit code used for the identification of any physical or legal location that needs to be uniquely identified for use in the supply chain. A GS1 identification key SEE CODE SOURCE 583

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

Description: Code identifying a party or other code

User Note 1: *This is the location code as defined by N103. The location code may be a formal number, e.g., DUNS, or it may be assigned by either the buyer or seller. The location refers to a store, warehouse, distribution center, plant, etc. Location codes are used to alleviate the need to send complete names and addresses.*

Syntax Rules:

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

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

User Note 1:

There will be at least one occurrence, of this segment, to identify the buying party by using code BY in N101.

N103 and N104 are required except when N101 contains code CT, MA or OB.

N2 Additional Name Information

Pos: 230	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify additional names or those longer than 35 characters in length

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>
N201	93	Name	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	Name	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 240	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

<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: 250	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

<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	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	State or Province Code	O	ID	2/2	Used
		Description: Code (Standard State/Province) as defined by appropriate government agency				
N403	116	Postal Code	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	Country Code	O	ID	2/3	Used
		Description: Code identifying the country				

Syntax Rules:

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

Comments:

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

Loop Hierarchical Level - Shipping Tare

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

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level - Shipping Tare	M	1		Must use
190	MAN	Marks and Numbers	O	>1		Used
215	PAL	Pallet Information	O	1		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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

HL Hierarchical Level - Shipping Tare

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

User Option (Usage): Must use

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

Element Summary:

<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	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 List Summary (Total Codes: 170, Included: 1)

<u>Code</u>	<u>Name</u>
T	Shipping Tare

Comments:

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

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

Purpose: To indicate identifying marks and numbers for shipping containers

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Must use

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

Code List Summary (Total Codes: 20, Included: 1)

Code Name

GM SSCC-18 and Application Identifier

User Note 1:

*EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier
SEE CODE SOURCE 98*

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
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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.

User Note 1:

This segment, at the tare level, is used to specify the identification numbers for the pallet.;

PAL Pallet Information

Pos: 215	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

Purpose: To identify the type and physical attributes of the pallet, and, gross weight, gross volume, and height of the load and the pallet

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>
PAL01	883	Pallet Type Code	O	ID	1/2	Used

Description: Code indicating the type of pallet

Code List Summary (Total Codes: 7, Included: 7)

Code Name

- 1 Aluminum
- 2 As Specified by the Department of Transportation (DOT)
- 3 Metal
- 4 Standard
- 5 Steel
- 6 Wood
- 7 Slip sheet

Description: *Typically cardboard or plastic sheets used to hold product for storage or transportation*

PAL02	884	Pallet Tiers	O	N0	1/3	Used
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Description: The number of layers per pallet

PAL03	885	Pallet Blocks	O	N0	1/3	Used
-------	-----	----------------------	---	----	-----	------

Description: The number of pieces (cartons) per layer on the pallet

PAL04	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

PAL15	399	Pallet Exchange Code	O	ID	1/1	Used
-------	-----	-----------------------------	---	----	-----	------

Description: Code specifying pallet exchange instructions

Code List Summary (Total Codes: 5, Included: 5)

Code Name

- 1 No Exchange/No Return
- 2 Exchange Pallets
- 3 Return Pallets
- 4 Pallets to be Purchased by Customer
- 5 Third-Party Pallet Exchange

Syntax Rules:

1. P0506 - If either PAL05 or PAL06 is present, then the other is required.
2. C0710 - If PAL07 is present, then PAL10 is required.
3. C0810 - If PAL08 is present, then PAL10 is required.
4. C0910 - If PAL09 is present, then PAL10 is required.
5. L10070809 - If PAL10 is present, then at least one of PAL07, PAL08 or PAL09 is required.
6. P1112 - If either PAL11 or PAL12 is present, then the other is required.
7. P1314 - If either PAL13 or PAL14 is present, then the other is required.

Semantics:

1. PAL04 (Pack) is the number of pieces on the pallet.
2. PAL05 (Unit Weight) is the weight of the pallet alone, before loading.
3. PAL07 and PAL08 (Length and Width) are the dimensions of the pallet before loading.
4. PAL09 (Height) is the height of the pallet and load.
5. PAL11 and PAL13 (Gross Weight and Gross Volume) are measured after loading and includes the pallet.

Loop Hierarchical Level - Pack

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

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level - Pack	M	1		Must use
020	LIN	Item Identification	O	1		Used
030	SN1	Item Detail (Shipment)	O	1		Used
190	MAN	Marks and Numbers	O	>1		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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

HL Hierarchical Level - Pack

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

User Option (Usage): Must use

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

Element Summary:

<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	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 List Summary (Total Codes: 170, Included: 1)						
Code Name						
P		Pack				

Comments:

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

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

LIN Item Identification

Pos: 020	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used

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>
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use

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

Code List Summary (Total Codes: 477, Included: 2)

Code Name

LT Lot Number

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

Description: *GTIN-14*

*A 14-digit GS1 Identification Key composed of an Indicator Digit, GS1 Company Prefix, Item Reference and Check Digit used to identify trade items
SEE CODE SOURCE 41*

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	C	ID	2/2	Used
-------	-----	-------------------------------------	---	----	-----	------

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

Code List Summary (Total Codes: 476, Included: 2)

Code Name

LT Lot Number

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

Description:

GTIN-14

*A 14-digit GS1 Identification Key composed of an Indicator Digit, GS1 Company Prefix, Item Reference and Check Digit used to identify trade items
SEE CODE SOURCE 41*

LIN05	234	Product/Service ID	C	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.

User Note 1:

This segment, at the pack level, is used to specify the GTIN-14 Shipping Container Code, and production information. The SN1 segment that follows is used to specify the number of cases identified in the LIN segment. The LIN segment, at the item level, is used to indicate the individual consumer units for the case code.

The codes listed for LIN02 apply to every occurrence of Data Element 235 in the LIN segment.

SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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
<p>Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set</p>						

SN103	355	Unit or Basis for Measurement Code	M	ID	2/2	Must use
<p>Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken</p>						

Code List Summary (Total Codes: 794, Included: 12)

<u>Code</u>	<u>Name</u>
BG	Bag
BR	Barrel
CA	Case
DR	Drum
EA	Each
GA	Gallon
KG	Kilogram
LB	Pound
LT	Liter
PA	Pail
PL	Pallet/Unit Load
TE	Tote

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.

User Note 1:

This segment, at the pack level, is used only to specify the number of cases identified by the GTIN-14 Shipping Container Code in the previous LIN segment. The LIN segment in the item level is used to indicate the individual consumer units for the case code.

MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used

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

Code Name

GM SSCC-18 and Application Identifier

User Note 1:

*EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier
SEE CODE SOURCE 98*

UP U.P.C. Consumer Package Code (1-5-5-1)

User Note 1:

*GTIN-12
A 12-digit GS1 Identification Key composed of a GS1 Company Prefix, Item Reference, and Check Digit used to identify trade items*

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
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Description: Marks and numbers used to identify a shipment or parts of a shipment

MAN04	88	Marks and Numbers Qualifier	C	ID	1/2	Used
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Description: Code specifying the application or source of Marks and Numbers (87)

Code List Summary (Total Codes: 20, Included: 2)

Code Name

GM SSCC-18 and Application Identifier

User Note 1:

*EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier
SEE CODE SOURCE 98*

UP U.P.C. Consumer Package Code (1-5-5-1)

User Note 1:

*GTIN-12
A 12-digit GS1 Identification Key composed of a GS1 Company Prefix, Item Reference, and Check Digit used to identify trade items*

MAN05	87	Marks and Numbers	C	AN	1/48	Used
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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.

User Note 1:

When the shipping container is the same as the consumer unit, the GTIN may be the only unique identification code on the container. In many applications, it is necessary to positively identify what identification code is to be scanned and matched at point of receipt. Since the GTIN is not a unique serial shipping container code, only one pack level for each item is required when using the pick and pack structure. The total number of shipping units for this item is the same as the quantity for the item in the SN1 segment at the item level.

Loop Hierarchical Level - Item

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

User Option (Usage): Must use

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level - Item	M	1		Must use
020	LIN	Item Identification	O	1		Used
030	SN1	Item Detail (Shipment)	O	1		Used
060	PO4	Item Physical Details	O	1		Used
070	PID	Product/Item Description	O	200		Used
150	REF	Reference Identification	O	>1		Used
200	DTM	Date/Time Reference	O	10		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.

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

HL Hierarchical Level - Item

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

User Option (Usage): Must use

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

Element Summary:

<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	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 List Summary (Total Codes: 170, Included: 1)						
Code Name						
		I				Item

Comments:

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

User Note 1:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

LIN Item Identification

Pos: 020	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

Purpose: To specify basic item identification data

Element Summary:

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

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

Code List Summary (Total Codes: 477, Included: 1)

Code Name

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

Description:

GTIN-14

A 14-digit GS1 Identification Key composed of an Indicator Digit, GS1 Company Prefix, Item Reference and Check Digit used to identify trade items

SEE CODE SOURCE 41

LIN03	234	Product/Service ID	M	AN	1/48	Must use
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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.

User Note 1:

The codes listed for LIN02 apply to every occurrence of Data Element 235 in the LIN segment.

SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Code List Summary (Total Codes: 794, Included: 12)

<u>Code</u>	<u>Name</u>
BG	Bag
BR	Barrel
CA	Case
DR	Drum
EA	Each
GA	Gallon
KG	Kilogram
LB	Pound
LT	Liter
PA	Pail
PL	Pallet/Unit Load
TE	Tote

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.

User Note 1:

This segment is used to specify the quantities associated with the item identified in the LIN at the item level.

When specifying an item, which is comprised of two or more components that are in unique shipping containers, SN103 will contain code-ST for set and the quantity specified in SN102 is the number of sets as identified in the LIN segment. Each different component is identified in one pack level. See the VICS Note, on the SLN segment, at the pack level.

PO4 Item Physical Details

Pos: 060	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	O	N0	1/6	Used
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						

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 pack (PO401) /size (PO402) measure which indicates the quantity in the inner pack unit. 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.

User Note 1:

This segment is used to specify the packaging of the item in the case or carton. There may be two levels of packaging specified. The first level is always specified by using PO401 (Pack). The first level may be actual items, e.g., consumer units, or it may be the number of smaller containers within the case. The second level, specified using PO414 (Inner Pack), is the number of eaches in each inner container when PO401 is the number of smaller containers within the case.

This segment can be used also to specify the weight and/or volume (cube) for the item by using PO406 and PO407, and/or PO408 and PO409.

PID Product/Item Description

Pos: 070	Max: 200
Detail - Optional	
Loop: HL	Elements: 3

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

Code Name

F Free-form

User Note 1:

The description will be found in PID05.

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

Code List Summary (Total Codes: 217, Included: 1)

Code Name

08 Product

PID05	352	Description	C	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. 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 Identification

Pos: 150	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Code Name

CO Customer Order Number

User Note 1:

Final Customer Order Number

LT Lot Number

SE Serial Number

REF02	127	Reference Identification	C	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

Syntax Rules:

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

Semantics:

1. REF04 contains data relating to the value cited in REF02.

DTM Date/Time Reference

Pos: 200	Max: 10
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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 List Summary (Total Codes: 1112, Included: 1)

Code Name

036 Expiration

Description: *Date coverage expires*

DTM02	373	Date	C	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

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.

CTT Transaction Totals

Pos: 010	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

User Note 1: *The number of HL segments present 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: 020	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				
		User Note 1: <i>This must be the same number as is in the ST segment (ST02) for the transaction set.</i>				

Comments:

- SE is the last segment of each transaction set.