HDPRO 856 Ship Notice/Manifest

X12/V4060/856

Version: 1.0 Final

Company:	**The Home Depot**
Modified:	**4/2/2019**

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856 Ship Notice/Manifest

Functional Group=SH

Purpose: This X12 Transaction Set contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use
0100	ST	Transaction Set Header	M	1			Must use
0200	BSN	Beginning Segment for Ship Notice	M	1			Must use
LOOP ID - HL					**1**	**C1/0100L**	

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
1100	TD1	Carrier Details (Quantity and Weight)	O	20			Used
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Must use
1500	REF	Reference Information	O	>1			Used
2000	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					**1**		
2200	N1	Party Identification	O	1			Used
2400	N3	Party Location	O	2			Used
2500	N4	Geographic Location	O	1			Used
LOOP ID - N1					**1**		
2200	N1	Party Identification	O	1			Used
2400	N3	Party Location	O	2			Used
2500	N4	Geographic Location	O	1			Used
LOOP ID - N1					**1**		
2200	N1	Party Identification	O	1			Used
2400	N3	Party Location	O	2			Used
2500	N4	Geographic Location	O	1			Used
LOOP ID - HL					**200000**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0500	PRF	Purchase Order Reference	O	1			Used

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
1100	TD1	Carrier Details (Quantity and Weight)	O	20			Used
1900	MAN	Marks and Numbers Information	O	>1			Used
LOOP ID - HL					**200000**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
1900	MAN	Marks and Numbers Information	O	>1			Used
LOOP ID - HL					**200000**	**C2/0100L**	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0200	LIN	Item Identification	O	1			Used
0300	SN1	Item Detail (Shipment)	O	1			Used
0400	SLN	Subline Item Detail	O	1000			Used
0600	PO4	Item Physical Details	O	1			Used
0700	PID	Product/Item Description	O	200			Used

Summary:

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

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

Notes:

3/0100 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Comments:

1/0100L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

2/0100 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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ISA Interchange Control Header

Pos:	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 16

User Option (Usage): Must use

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA01	I01	**Authorization Information Qualifier**	M	ID	2/2	Must use
		Description: Code identifying the type of information in the Authorization Information **All valid standard codes are used. (Total Codes: 7)**				
ISA02	I02	**Authorization Information**	M	AN	10/10	Must use
		Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)				
ISA03	I03	**Security Information Qualifier**	M	ID	2/2	Must use
		Description: Code identifying the type of information in the Security Information **All valid standard codes are used. (Total Codes: 2)**				
ISA04	I04	**Security Information**	M	AN	10/10	Must use
		Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)				
ISA05	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use
		Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified **All valid standard codes are used. (Total Codes: 41)**				
ISA06	I06	**Interchange Sender ID**	M	AN	15/15	Must use
		Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element				
ISA07	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use
		Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified **All valid standard codes are used. (Total Codes: 41)**				
ISA08	I07	**Interchange Receiver ID**	M	AN	15/15	Must use
		Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them				
ISA09	I08	**Interchange Date**	M	DT	6/6	Must use
		Description: Date of the interchange				
ISA10	I09	**Interchange Time**	M	TM	4/4	Must use

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: Time of the interchange				
ISA11	I65	**Repetition Separator**	M		1/1	Must use
		Description: Type is not applicable; the repetition separator is a delimiter and not a data element; this field provides the delimiter used to separate repeated occurrences of a simple data element or a composite data structure; this value must be different than the data element separator, component element separator, and the segment terminator				
ISA12	I11	**Interchange Control Version Number**	M	ID	5/5	Must use
		Description: Code specifying the version number of the interchange control segments **All valid standard codes are used. (Total Codes: 18)**				
ISA13	I12	**Interchange Control Number**	M	N0	9/9	Must use
		Description: A control number assigned by the interchange sender				
ISA14	I13	**Acknowledgment Requested**	M	ID	1/1	Must use
		Description: Code indicating sender's request for an interchange acknowledgment				
		CodeList Summary (Total Codes: 2, Included: 1) **Code** **Name** 0 No Interchange Acknowledgment Requested				
ISA15	I14	**Interchange Usage Indicator**	M	ID	1/1	Must use
		Description: Code indicating whether data enclosed by this interchange envelope is test, production or information				
		CodeList Summary (Total Codes: 3, Included: 1) **Code** **Name** P Production Data				
ISA16	I15	**Component Element Separator**	M		1/1	Must use
		Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator				

GS Functional Group Header

Pos:	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS01	479	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets **CodeList Summary** (Total Codes: 260, Included: 1) **Code** **Name** SH Ship Notice/Manifest (856)	M	ID	2/2	Must use
GS02	142	**Application Sender's Code** **Description:** Code identifying party sending transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS03	124	**Application Receiver's Code** **Description:** Code identifying party receiving transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS04	373	**Date** **Description:** Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	M	DT	8/8	Must use
GS05	337	**Time** **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)	M	TM	4/8	Must use
GS06	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	**Responsible Agency Code** **Description:** Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **All valid standard codes are used. (Total Codes: 2)**	M	ID	1/2	Must use
GS08	480	**Version / Release / Industry Identifier Code** **Description:** Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed **CodeList Summary** (Total Codes: 50, Included: 1)	M	AN	1/12	Must use

Code	Name
004060	Standards Approved for Publication by ASC X12 Procedures Review Board through October 2002

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST Transaction Set Header

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

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use
		Description: Code uniquely identifying a Transaction Set				
		CodeList Summary (Total Codes: 316, Included: 1)				
		Code **Name**				
		856 Ship Notice/Manifest				
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

Semantics:

1. The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
2. The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition. When used, this implementation convention reference takes precedence over the implementation reference specified in the GS08.

BSN Beginning Segment for Ship Notice

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

User Option (Usage): Must use

Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN01	353	**Transaction Set Purpose Code**	M	ID	2/2	Must use
		Description: Code identifying purpose of transaction set **All valid standard codes are used. (Total Codes: 66)**				
BSN02	396	**Shipment Identification**	M	AN	2/30	Must use
		Description: A unique control number assigned by the original shipper to identify a specific shipment **HDPRO Description:** *Must be a unique document identifier. This reference number should be guaranteed not to repeat for at least a twelve month period. Supplier should insure that this number could be associated with the corresponding invoice.*				
BSN03	373	**Date**	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year **HDPRO Description:** *Transaction create date*				
BSN04	337	**Time**	M	TM	4/8	Must use
		Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) **HDPRO Description:** *HHMMSS Transaction create time*				

Syntax Rules:

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

Semantics:

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

Comments:

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

HL Hierarchical Level

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		CodeList Summary (Total Codes: 250, Included: 1)				
		Code **Name**				
		S Shipment				

Comments:

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

TD1 Carrier Details (Quantity and Weight)

Pos: 1100	Max: 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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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 **All valid standard codes are used. (Total Codes: 212)**				
TD102	80	**Lading Quantity**	X	N0	1/7	Used
		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 **All valid standard codes are used. (Total Codes: 52)**				
TD107	81	**Weight**	X	R	1/10	Used
		Description: Numeric value of weight				
TD108	355	**Unit or Basis for Measurement Code**	X	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **All valid standard codes are used. (Total Codes: 811)**				

Syntax Rules:

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

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 1200	Max: 12
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD502	66	**Identification Code Qualifier**	O	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67) **All valid standard codes are used. (Total Codes: 240)**				
TD503	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code **HDPRO Description:** *Should be the the carrier's SCAC code as assigned by the National Motor Freight Traffic Association*				
TD505	387	**Routing**	O	AN	1/35	Used
		Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity				

Syntax Rules:

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

Semantics:

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

Comments:

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

REF Reference Information

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

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use
		Description: Code qualifying the Reference Identification				
		CodeList Summary (Total Codes: 1703, Included: 2)				
		Code **Name**				
		BM Bill of Lading Number				
		CN Carrier's Reference Number (PRO/Invoice)				
REF02	127	**Reference Identification**	C	AN	1/50	Used
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

Syntax Rules:

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

Semantics:

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

DTM Date/Time Reference

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

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		CodeList Summary (Total Codes: 1277, Included: 1)				
		Code **Name** 011 Shipped				
DTM02	373	**Date**	X	DT	8/8	Used
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				

Syntax Rules:

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

N1 Party Identification

Pos: 2200	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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		CodeList Summary (Total Codes: 1494, Included: 1)				
		Code Name OB Ordered By				
N102	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		CodeList Summary (Total Codes: 240, Included: 1)				
		Code Name 92 Assigned by Buyer or Buyer's Agent				
N104	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				

Syntax Rules:

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

Comments:

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

N3 Party Location

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

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/55	Must use
		Description: Address information				
N302	166	**Address Information**	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

Pos: 2500	Max: 1
Detail - Optional	
Loop: N1	Elements: 6

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	X	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**	X	ID	1/2	Used
		Description: Code identifying type of location **All valid standard codes are used. (Total Codes: 184)**				
N406	310	**Location Identifier**	O	AN	1/30	Used
		Description: Code which identifies a specific location				

Syntax Rules:

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

Comments:

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

N1 Party Identification

Pos: 2200	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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		CodeList Summary (Total Codes: 1494, Included: 1) **Code** **Name** SF Ship From				
N102	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		CodeList Summary (Total Codes: 240, Included: 1) **Code** **Name** 92 Assigned by Buyer or Buyer's Agent				
N104	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				

Syntax Rules:

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

Comments:

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

N3 Party Location

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

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/55	Must use
		Description: Address information				
N302	166	**Address Information**	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

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

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	X	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. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 is required.

Comments:

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

N1 Party Identification

Pos: 2200	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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		CodeList Summary (Total Codes: 1494, Included: 1) **Code** **Name** SH Shipper				
N102	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		CodeList Summary (Total Codes: 240, Included: 1) **Code** **Name** 92 Assigned by Buyer or Buyer's Agent				
N104	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				

Syntax Rules:

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

Comments:

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

N3 Party Location

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

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/55	Must use
		Description: Address information				
N302	166	**Address Information**	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

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

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	X	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. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 is required.

Comments:

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

HL Hierarchical Level

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		CodeList Summary (Total Codes: 250, Included: 1)				
		Code **Name**				
		O Order				

Comments:

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

PRF Purchase Order Reference

Pos: 0500	Max: 1
Detail - Optional	
Loop: HL	Elements: 1

User Option (Usage): Used

Purpose: To provide reference to a specific purchase order

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PRF01	324	**Purchase Order Number**	M	AN	1/22	Must use
		Description: Identifying number for Purchase Order assigned by the orderer/purchaser				

Semantics:

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

TD1 Carrier Details (Quantity and Weight)

Pos: 1100	Max: 20
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD106	187	**Weight Qualifier**	O	ID	1/2	Used
		Description: Code defining the type of weight **All valid standard codes are used. (Total Codes: 52)**				
TD107	81	**Weight**	X	R	1/10	Used
		Description: Numeric value of weight				
TD108	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **All valid standard codes are used. (Total Codes: 811)**				

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.

MAN Marks and Numbers Information

Pos: 1900	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)				
		CodeList Summary (Total Codes: 21, Included: 1)				
		Code **Name**				
		CP Carrier-Assigned Package ID Number				
MAN02	87	**Marks and Numbers**	M	AN	1/48	Must use
		Description: Marks and numbers used to identify a shipment or parts of a shipment				

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.

HL Hierarchical Level

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		CodeList Summary (Total Codes: 250, Included: 1)				
		Code **Name**				
		T Shipping Tare				

Comments:

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

MAN Marks and Numbers Information

Pos: 1900	Max: >1
Detail - 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)				
		CodeList Summary (Total Codes: 21, Included: 1)				
		Code **Name**				
		GM SSCC-18 and Application Identifier				
MAN02	87	**Marks and Numbers**	M	AN	1/48	Must use
		Description: Marks and numbers used to identify a shipment or parts of a shipment				

Syntax Rules:

1. P0405 - If either MAN04 or MAN05 is present, then the other is required.
2. C0605 - If MAN06 is present, then MAN05 is required.

Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
2. When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
3. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.

Comments:

1. When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
2. MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
3. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.

HDPRO Description:

Package tracking numbers required for SCAC code “FDEG” and SCAC code beginning “UPS”

HL Hierarchical Level

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		CodeList Summary (Total Codes: 250, Included: 1)				
		Code **Name**				
		I Item				

Comments:

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

LIN Item Identification

Pos: 0200	Max: 1
Detail - Optional	
Loop: HL	Elements: 7

User Option (Usage): Used

Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN01	350	**Assigned Identification**	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		CodeList Summary (Total Codes: 519, Included: 1)				
		Code **Name** VP Vendor's (Seller's) Part Number				
LIN03	234	**Product/Service ID**	M	AN	1/48	Must use
		Description: Identifying number for a product or service				
LIN04	235	**Product/Service ID Qualifier**	X	ID	2/2	Must use
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		CodeList Summary (Total Codes: 519, Included: 1)				
		Code **Name** SK Stock Keeping Unit (SKU)				
LIN05	234	**Product/Service ID**	X	AN	1/48	Must use
		Description: Identifying number for a product or service				
LIN06	235	**Product/Service ID Qualifier**	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		CodeList Summary (Total Codes: 519, Included: 1)				
		Code **Name** UP UCC - 12 **Description:** *Data structure for the 12 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN). Also known as the Universal Product Code (U.P.C.)*				
LIN07	234	**Product/Service ID**	X	AN	1/48	Used
		Description: Identifying number for a product or service				

Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.

3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

Semantics:

1. LIN01 is the line item identification

Comments:

1. See the Data Dictionary for a complete list of IDs.
2. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

SN1 Item Detail (Shipment)

Pos: 0300	Max: 1
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

Purpose: To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN101	350	**Assigned Identification**	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
SN102	382	**Number of Units Shipped**	M	R	1/10	Must use
		Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
SN103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **All valid standard codes are used. (Total Codes: 811)**				

Syntax Rules:

1. P0506 - If either SN105 or SN106 is present, then the other is required.

Semantics:

1. SN101 is the ship notice line-item identification.
2. SN105 is quantity ordered.

Comments:

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

SLN Subline Item Detail

Pos: 0400	Max: 1000
Detail - Optional	
Loop: HL	Elements: 6

User Option (Usage): Used

Purpose: To specify product subline detail item data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN01	350	**Assigned Identification**	M	AN	1/20	Must use
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
SLN02	350	**Assigned Identification**	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
SLN03	662	**Relationship Code**	M	ID	1/1	Must use
		Description: Code indicating the relationship between entities **All valid standard codes are used. (Total Codes: 5)**				
SLN04	380	**Quantity**	X	R	1/15	Used
		Description: Numeric value of quantity				
SLN05	C001	**Composite Unit of Measure**	X	Comp		Used
		Description: To identify a composite unit of measure (See Figures Appendix for examples of use)				
SLN05-01	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **All valid standard codes are used. (Total Codes: 811)**				
SLN06	212	**Unit Price**	X	R	1/17	Used
		Description: Price per unit of product, service, commodity, etc.				

Syntax Rules:

1. P0405 - If either SLN04 or SLN05 is present, then the other is required.
2. C0706 - If SLN07 is present, then SLN06 is required.
3. C0806 - If SLN08 is present, then SLN06 is required.
4. P0910 - If either SLN09 or SLN10 is present, then the other is required.
5. P1112 - If either SLN11 or SLN12 is present, then the other is required.
6. P1314 - If either SLN13 or SLN14 is present, then the other is required.
7. P1516 - If either SLN15 or SLN16 is present, then the other is required.
8. P1718 - If either SLN17 or SLN18 is present, then the other is required.
9. P1920 - If either SLN19 or SLN20 is present, then the other is required.
10. P2122 - If either SLN21 or SLN22 is present, then the other is required.
11. P2324 - If either SLN23 or SLN24 is present, then the other is required.
12. P2526 - If either SLN25 or SLN26 is present, then the other is required.
13. P2728 - If either SLN27 or SLN28 is present, then the other is required.

Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

PO4 Item Physical Details

Pos: 0600	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO401	356	**Pack**	O	N0	1/6	Must use
		Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container				
PO402	357	**Size**	X	R	1/8	Used
		Description: Size of supplier units in pack				
PO403	355	**Unit or Basis for Measurement Code**	X	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **All valid standard codes are used. (Total Codes: 811)**				
PO404	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 **All valid standard codes are used. (Total Codes: 212)**				

Syntax Rules:

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

Semantics:

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

Comments:

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

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

PID Product/Item Description

Pos: 0700	Max: 200
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	**Item Description Type**	M	ID	1/1	Must use
		Description: Code indicating the format of a description				
		CodeList Summary (Total Codes: 3, Included: 1)				
		Code **Name**				
		F Free-form				
PID05	352	**Description**	X	AN	1/80	Used
		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.

CTT Transaction Totals

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

User Option (Usage): Used

Purpose: To transmit a hash total for a specific element in the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use
		Description: Total number of line items in the transaction set				
CTT02	347	**Hash Total**	O	R	1/10	Used
		Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. --------- 1855 Hash Total				

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

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

User Option (Usage): Must use

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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				
		HDPRO Description:				
		A count of the number of segments in the transaction				
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				
		HDPRO Description:				
		Must match the transaction set control number in the ST02 element.				

Comments:

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

GE Functional Group Trailer

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

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE01	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use
		Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				
GE02	28	**Group Control Number**	M	N0	1/9	Must use
		Description: Assigned number originated and maintained by the sender				

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

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

User Option (Usage): Must use

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA01	I16	**Number of Included Functional Groups**	M	N0	1/5	Must use
		Description: A count of the number of functional groups included in an interchange				
IEA02	I12	**Interchange Control Number**	M	N0	9/9	Must use
		Description: A control number assigned by the interchange sender				