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856 Ship Notice/Manifest

Functional Group=SH

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.

Not Defined:

<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>
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

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	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
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	M	1		C2/010	Must use
050	PRF	Purchase Order Reference	O	1			Used
150	REF	Reference Identification	O	>1			Used
200	DTM	Date/Time Reference	O	10			Used
LOOP ID - SAC					≥1		
320	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used

<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	M	1		C2/010	Must use
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used
150	REF	Reference Identification	O	>1			Used

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

<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>
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control 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.
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ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 16

User Option (Usage): Must use

To start and identify an interchange of zero or more functional groups and interchange-related control 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>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use
		Description: Code to identify the type of information in the Authorization Information All valid standard codes are used.				
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 to identify the type of information in the Security Information All valid standard codes are used.				
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: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.				
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: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.				
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

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Time of the interchange				
ISA11	I10	Interchange Control Standards Identifier	M	ID	1/1	Must use
		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.				
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.				
ISA13	I12	Interchange Control Number	M	NO	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 sent by the sender to request an interchange acknowledgment (TA1) All valid standard codes are used.				
ISA15	I14	Usage Indicator	M	ID	1/1	Must use
		Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.				
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
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use

To indicate the beginning of a functional group and to provide control 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>
GS01	479	Functional Identifier Code	M	ID	2/2	Must use
Description: Code identifying a group of application related transaction sets						
Code Name						
SH Ship Notice/Manifest (856)						
GS02	142	Application Sender's Code	M	AN	2/15	Must use
Description: Code identifying party sending transmission; codes agreed to by trading partners						
GS03	124	Application Receiver's Code	M	AN	2/15	Must use
Description: Code identifying party receiving transmission; codes agreed to by trading partners						
GS04	373	Date	M	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						
GS05	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)						
GS06	28	Group Control Number	M	N0	1/9	Must use
Description: Assigned number originated and maintained by the sender						
GS07	455	Responsible Agency Code	M	ID	1/2	Must use
Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480						
All valid standard codes are used.						
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use
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						
Code Name						
004010 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997						

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

User Option (Usage): Must use

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						
All valid standard codes are used.						
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) 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

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BSN01	353	Transaction Set Purpose Code	M	ID	2/2	Must use
		Description: Code identifying purpose of transaction set				
		Code Name				
		00		Original		
BSN02	396	Shipment Identification	M	AN	2/30	Must use
		Description: A unique control number assigned by the original shipper to identify a specific shipment				
BSN03	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
BSN04	337	Time	M	TM	4/8	Must use
		Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				
BSN05	1005	Hierarchical Structure Code	O	ID	4/4	Used
		Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set				
		Code Name				
		0004		Shipment, Order, Item		

Syntax Rules:

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

Semantics:

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

Comments:

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

Loop HL

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

User Option (Usage): Must use

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	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
220		Loop N1	O		200	Used
010		Loop HL	M		200000	Must use

HL Hierarchical Level

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

User Option (Usage): Must use

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	Not 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				
		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: 110	Max: 20
Detail - Optional	
Loop: HL	Elements: 8

User Option (Usage): Used

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 Name				
		CTN Carton				
TD102	80	Lading Quantity	X	NO	1/7	Used
		Description: Number of units (pieces) of the lading commodity				
TD103	23	Commodity Code Qualifier	O	ID	1/1	Not used
		Description: Code identifying the commodity coding system used for Commodity Code All valid standard codes are used.				
TD104	22	Commodity Code	X	AN	1/30	Not used
		Description: Code describing a commodity or group of commodities				
TD105	79	Lading Description	O	AN	1/50	Not used
		Description: Description of an item as required for rating and billing purposes				
TD106	187	Weight Qualifier	O	ID	1/2	Used
		Description: Code defining the type of weight All valid standard codes are used.				
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.				

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: 120	Max: 12
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

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	Not used
		Description: Code describing the relationship of a carrier to a specific shipment movement All valid standard codes are used.				
TD502	66	Identification Code Qualifier	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		<u>Code</u> <u>Name</u>				
		91 Assigned by Seller or Seller's Agent				
TD503	67	Identification Code	X	AN	2/80	Used
		Description: Code identifying a party or other code				
		<u>Code</u> <u>Name</u>				
		WC WILL CALL				
		AB2 AIRBORNE SECOND DAY				
		ABE AIRBORNE NEXT MORNING				
		ABE AIRBORNE NEXT MORNING				
		ABG AIRBORNE GROUND				
		ABP AIRBORNE NEXT DAY AFTERNOON				
		AM5 AMERICAN FREIGHT 5 DAY				
		AMF AMERICAN FREIGHT WAYS				
		BX2 BAX 2 DAY DELIVERY - EXPANETS ONLY				
		BXA BAX AM DELIVERY - EXPANETS ONLY				
		BXP BAX PM DELIVERY - EXPANETS ONLY				
		F48 FEDEX 2 DAY ECONOMY PACKAGE				
		FAM FEDEX O/N PRIORITY DELIVER BY 10:30				
		FDG FEDEX GROUND				
		FFE FEDEX FREIGHT EAST				
		FFO FEDEX FIRST OVERNIGHT DELIVERY				
		FIP FEDEX INTERNATIONAL PRIORITY				
		FPM FEDEX ECONOMY O/N DELIVER BY 3PM				
		FSD FEDEX SATURDAY DELIVERY				
		FXS FEDEX EXPRESS SAVER PACKAGE				
		KF2 KFS INC 2 DAY				
		L25 KFS FREIGHT - 2 TO 5 DAY				
		OTH OTHER				

Code Name

PEC FEDERAL EXPRESS INTERNATIONAL ECONOMY
 PRE PURALATOR EAST
 UPB UPS 2ND DAY AIR
 UPR UPS NEXT DAY AIR
 UPS UPS GROUND
 YEL YELLOW FREIGHT
 YEX YELLOW EXACT EXPRESS

TD504 91 **Transportation Method/Type Code** X ID 1/2 Not used

Description: Code specifying the method or type of transportation for the shipment

All valid standard codes are used.

TD505 387 **Routing** X 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.

Loop N1

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

User Option (Usage): Used

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

N1 Name

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

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		Code Name				
		BT				Bill-to-Party
		SE				Selling Party
		ST				Ship To
N102	93	Name	X	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)				
		Code Name				
		91				Assigned by Seller or Seller's Agent
		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.

N2 Additional Name Information

Pos: 230	Max: 2
Detail - Optional	
Loop: N1	Elements: 1

User Option (Usage): Used

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

N3 Address Information

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

User Option (Usage): Used

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: 3

User Option (Usage): Used

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)				

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 HL

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

User Option (Usage): Must use

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	M	1		Must use
050	PRF	Purchase Order Reference	O	1		Used
150	REF	Reference Identification	O	>1		Used
200	DTM	Date/Time Reference	O	10		Used
320		Loop SAC	O		>1	Used
010		Loop HL	M		200000	Must use

HL Hierarchical Level

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	Hierarchical Parent ID Number	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		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: 050	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

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				
PRF02	328	Release Number	O	AN	1/30	Not used
		Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction				
PRF03	327	Change Order Sequence Number	O	AN	1/8	Not used
		Description: Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set				
PRF04	373	Date	O	DT	8/8	Used
		Description: Date expressed as CCYYMMDD				
PRF05	350	Assigned Identification	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				

Semantics:

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

REF Reference Identification

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

User Option (Usage): Used

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code Name

BM	Bill of Lading Number
IV	Seller's Invoice Number

REF02	127	Reference Identification	X	AN	1/30	Used
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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

To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		Code Name				
		011 Shipped				
DTM02	373	Date	X	DT	8/8	Used
		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.

Loop SAC

Pos: 320	Repeat: >1
Optional	
Loop: SAC	Elements: N/A

User Option (Usage): Used

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

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>
320	SAC	Service, Promotion, Allowance, or Charge Information	O	1		Used

SAC Service, Promotion, Allowance, or Charge Information

Pos: 320	Max: 1
Detail - Optional	
Loop: SAC	Elements: 4

User Option (Usage): Used

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

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>
SAC01	248	Allowance or Charge Indicator	M	ID	1/1	Must use
Description: Code which indicates an allowance or charge for the service specified						
Code Name						
C Charge						
SAC02	1300	Service, Promotion, Allowance, or Charge Code	X	ID	4/4	Used
Description: Code identifying the service, promotion, allowance, or charge						
Code Name						
D240 Freight						
D980 Insurance						
SAC05	610	Amount	O	N2	1/15	Used
Description: Monetary amount						
SAC12	331	Allowance or Charge Method of Handling Code	O	ID	2/2	Used
Description: Code indicating method of handling for an allowance or charge						
All valid standard codes are used.						

Syntax Rules:

1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 is required.

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.

4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Loop HL

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

User Option (Usage): Must use

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	M	1		Must use
020	LIN	Item Identification	O	1		Used
030	SN1	Item Detail (Shipment)	O	1		Used
150	REF	Reference Identification	O	>1		Used

HL Hierarchical Level

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	Hierarchical Parent ID Number	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		<u>Code</u>	<u>Name</u>			
		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: 020	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

To specify basic item identification data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN01	350	Assigned Identification	O	AN	1/20	Used
Description: Alphanumeric characters assigned for differentiation within a transaction set						
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use
Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)						
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	Used
Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)						
Code Name						
MG Manufacturer's Part Number						
LIN05	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: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 6

User Option (Usage): Used

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>
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				
		<u>Code</u> <u>Name</u>				
		EA Each				
SN104	646	Quantity Shipped to Date	O	R	1/15	Not used
		Description: Number of units shipped to date				
SN105	330	Quantity Ordered	X	R	1/15	Used
		Description: Quantity ordered				
SN106	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				
		<u>Code</u> <u>Name</u>				
		EA Each				

Syntax Rules:

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

Semantics:

1. SN101 is the ship notice line-item identification.

Comments:

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

REF Reference Identification

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

User Option (Usage): Used

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code Name

SE Serial Number

REF02	127	Reference Identification	X	AN	1/30	Used
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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.

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: N/A	Elements: 1

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	N0	1/6	Must use

Description: Total number of line items in the transaction set

Syntax Rules:

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

Comments:

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

SE Transaction Set Trailer

Pos: 020	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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	NO	1/10	Must use
		Description: Total number of segments included in a transaction set including ST and SE segments				
SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

Comments:

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

GE Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

To indicate the end of a functional group and to provide control 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>
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
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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