

EDI Guideline

X12/V4010/856: Ship Notice/Manifest

Version: 2.0

Author: InterTrade Publication: 1/25/2016

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Table of Contents

Ship Notice/Manifest	1
Interchange Control Header	3
Functional Group Header	5
Transaction Set Header	6
Beginning Segment for Ship Notice	7
Loop Hierarchical Level	8
Hierarchical Level	9
Reference Identification	10
Administrative Communications Contact	11
Date/Time Reference	12
Loop Name	13
Name	14
Address Information	15
Geographic Location	16
Loop Hierarchical Level	17
Hierarchical Level	18
Purchase Order Reference	19
Loop Hierarchical Level	20
Hierarchical Level	21
Item Identification	22
Item Detail (Shipment)	23
Product/Item Description	24
Transaction Totals	25
Transaction Set Trailer	26
Functional Group Trailer	27
Interchange Control Trailer	28
Sample 856:	29

856

Ship Notice/Manifest

Functional Group= \mathbf{SH}

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

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<u>Pos</u>	<u>Id</u>	Segment Name	<u>Req</u>	Max Use	<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	:						
Pos	<u>Id</u>	Segment Name	Req	Max Use	Repeat	Notes	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BSN	Beginning Segment for Ship Notice	M	1			Must use

Detail:							
Pos	<u>Id</u>	Segment Name	Req	Max Use	Repeat	<u>Notes</u>	<u>Usage</u>
LOOP I	D - HL				200000	C2/010L	
010	HL	Hierarchical Level	M	1			Must use
150	REF	Reference Identification	M	>1			Must use
151	PER	Administrative Communications Contact	M	3			Must use
200	DTM	Date/Time Reference	M	10			Must use
LOOP I	<u>D - N1</u>				<u>2</u>		
220	N 1	Name	M	1			Must use
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
LOOP I	D - HL				200000		
010	HL	Hierarchical Level	M	1			Must use
050	PRF	Purchase Order Reference	M	1			Must use
LOOPI	D - HL				200000		
010	HL	Hierarchical Level	M	1			Must use
020	LIN	Item Identification	M	1			Must use
030	SN1	Item Detail (Shipment)	M	1			Must use
070	PID	Product/Item Description	M	200			Used

Summary:

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

Not Defined:

<u>Pos</u>	<u>Id</u>	Segment Name	<u>Req</u>	Max Use	Repeat	<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.

ISA Interchange Control Header

Pos: Max: 1 Not Defined - 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:

Element		-	ъ	TD.	3.51 (3.5	T T				
<u>Ref</u> ISA01	<u>Id</u> I01	Element Name Authorization Information Qualifier	<u>Req</u> M	<u>Type</u> ID	Min/Max 2/2	<u>Usage</u> Must use				
107101	101	Description: Code to identify the type of information Valid standard codes are used. (Total Codes)	mation in							
ISA02	I02	Authorization Information	M	AN	10/10	Must use				
		Description: Information used for additional ic or the data in the interchange; the type of information (I01)								
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use				
		Description: Code to identify the type of informall valid standard codes are used. (Total Codes)		the Secur	ity Information					
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/ or receiver ID element being qualified All valid standard codes are used. (Total Cod		f code stru	ucture used to de	signate the sender				
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	105	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. (Total Codes: 38)								
ISA08	I07	Interchange Receiver ID	M	AN	15/15	Must use				
		Description: Identification code published by t sender as their sending ID, thus other parties se 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				
		Description: Time of the interchange								
ISA11	I10	Interchange Control Standards Identifier	M	ID	1/1	Must use				
		Description: Code to identify the agency responsible that is enclosed by the interchange header and the All valid standard codes are used. (Total Codes)	railer	the contro	ol standard used	by the message				

ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use
	Description: Code specifying the version number of the interchange control segments					
		CodeList Summary (Total Codes: 14, Include Code Name 00401 Draft Standards for Trial Use A Review Board through October	approved fo	r Publication	n by ASC X12 I	Procedures
ISA13	I12	Interchange Control Number	M	N0	9/9	Must use
		Description: A control number assigned by the	e interchan	ge sender		
ISA14	I13	Acknowledgment Requested	M	ID	1/1	Must use
		Description: Code sent by the sender to request All valid standard codes are used. (Total Co		hange ackno	wledgment (TA	1)
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. (Total Codes: 3)					
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 dat element; this field provides the delimiter used to separate component data elements within a comp data structure; this value must be different than the data element separator and the segment termine.					ithin a composite	

Functional Group Header GS

Pos: Max: 1 **Not Defined - 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	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>			
GS01	479	Functional Identifier Code	M	ID	2/2	Must use			
		Description: Code identifying a group of applic	ation rela	ated trans	action sets				
		CodeList Summary (Total Codes: 240, Include	d: 1)						
		CodeNameSHShip 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 to HHMMSSD, or HHMMSSDD, where H = hours (00-59) and DD = decimal seconds; decimal second DD = hundredths (00-99)	s (00-23)	M = mir	nutes (00-59), S =	integer seconds			
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 s Element 480 All valid standard codes are used. (Total Cod		this code	is used in conju	nction with Data			
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use			
		Description: Code indicating the version, releas standard being used, including the GS and GE so DE 480 positions 1-3 are the version number; poversion; and positions 7-12 are the industry or tr	egments; ositions 4	if code in -6 are the	DE455 in GS se release and subr	egment is X, then i elease, level of the			

in ne user); if code in DE455 in GS segment is T, then other formats are allowed

CodeList Summary (Total Codes: 39, Included: 1)

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

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

Element Summary:

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Must use
		Description: Code uniquely identifying a Transa	action Se	t		
CodeList Summary (Total Codes: 298, Included: 1)						
		<u>Code</u> <u>Name</u>				
		Ship Notice/Manifest				
ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
		Description: Identifying control number that mu group assigned by the originator for a transaction		que withi	n the transaction	set functional

Semantics:

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

BSN Beginning Segment for Ship Notice

Pos: 020 Max: 1 Heading - Mandatory Loop: N/A Elements: 5

User Option (Usage): Must use

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

Element Summary:

Ref BSN01	<u>Id</u> 353	Element Name Transaction Set Purpose Code	Req M	<u>Type</u> ID	Min/Max 2/2	<u>Usage</u> Must use	
		Description: Code identifying purpose of transa	ction set				
		CodeList Summary(Total Codes: 65, IncludedCodeName00Original14Advance Notification	: 2)				
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 HHMMSSDD, 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					set that utilizes the	
		CodeList Summary (Total Codes: 61, Included Code Name O004 Shipment, Order, Item	: 1)				

Semantics:

- 1. BSN03 is the date the shipment transaction set is created.
- 2. BSN04 is the time the shipment transaction set is created.

Loop Hierarchical Level

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

User Option (Usage): Must use

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

Loop Summary:

Pos	<u>Id</u>	Segment Name	Req	Max Use	Repeat	<u>Usage</u>
010	HL	Hierarchical Level	M	1		Must use
150	REF	Reference Identification	M	>1		Must use
151	PER	Administrative Communications Contact	M	3		Must use
200	DTM	Date/Time Reference	M	10		Must use
220		Loop N1	M		2	Must use

HL Hierarchical Level

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>	
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use	
		Description: A unique number assigned by the hierarchical structure	sender to	identify a	a particular data s	segment in a	
HL02	734	Hierarchical Parent ID Number	O	AN	1/12	Used	
		Description: Identification number of the next being described is subordinate to	nigher hie	erarchical	data segment tha	at the data segment	
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use	
		Description: Code defining the characteristic of	a level i	n a hierard	chical structure		
		CodeList Summary (Total Codes: 170, Included: 1)					
		<u>Code</u> <u>Name</u>					
		S Shipment					

Comments:

- 1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
- 2. The HL segment defines a top-down/left-right ordered structure.
- 3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

REF Reference Identification

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

User Option (Usage): Must use

Purpose: To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Na	ame	Req	Type	Min/Max	<u>Usage</u>		
REF01	128	Reference	Identification Qualifier	M	ID	2/3	Must use		
		Description	Description: Code qualifying the Reference Identification						
		CodeList Summary (Total Codes: 1503, Included: 5)							
		Code	<u>Name</u>						
		BM	Bill of Lading Number						
		CN	Carrier's Reference Number (PR	O/Invoice	e)				
		MB	Master Bill of Lading						
		PK	Packing List Number						
		ZZ	Mutually Defined						
REF02	127	Reference :	Identification	X	AN	1/30	Must use		

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

Reference Identification Qualifier

Syntax Rules:

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

PER Administrative Communications Contact

Pos: 151 Max: 3 Detail - Mandatory Loop: HL Elements: 4

User Option (Usage): Must use

Purpose: To identify a person or office to whom administrative communications should be directed

Element Summary: Ref Id Element Na

<u>Ref</u>	<u>Id</u>	Element Nan	<u>ne</u>	Req	Type	Min/Max	<u>Usage</u>
PER01	366	Contact Fund	ction Code	M	ID	2/2	Must use
		Description:	Code identifying the major duty or	responsi	bility of the	he person or gro	up named
		CodeList Sur Code DI	nmary (Total Codes: 230, Included Name Delivery Instructions Contact	l: 1)			
PER02	93	Name		M	AN	1/60	Must use
		Description:	Free-form name				
PER03	365	Communicat	ion Number Qualifier	M	ID	2/2	Must use
		Description:	Code identifying the type of comm	unication	number		
		CodeList Sur	nmary (Total Codes: 40, Included:	3)			
		Code	<u>Name</u>				
		EM	Electronic Mail				
		FX	Facsimile				
		TE	Telephone				
PER04	364	Communicat	ion Number	M	AN	1/80	Must use
		Description:	Complete communications number	includin	g country	or area code wh	nen applicable

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.

DTM Date/Time Reference

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

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	Element N	<u>ame</u>	Req	Type	Min/Max	<u>Usage</u>		
DTM01	374	Date/Time	Qualifier	M	ID	3/3	Must use		
		Descriptio	Description: Code specifying type of date or time, or both date and time						
		CodeList S	Summary (Total Codes: 1112, Includ	led: 5)					
		Code	<u>Name</u>						
		002	Delivery Requested						
		011	Shipped						
		017	Estimated Delivery						
		067	Current Schedule Delivery						
		068	Current Schedule Ship						
DTM02	373	Date		X	DT	8/8	Must use		

Description: Date expressed as CCYYMMDD

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.

Loop Name

Pos: 220 Repeat: 2 Mandatory Loop: N1 Elements: N/A

User Option (Usage): Must use

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

Loop Summary:

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

N1 Name

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u> N101	<u>Id</u> 98	<u>Element Name</u> Entity Identifier Code	<u>Req</u> M	<u>Type</u> ID	Min/Max 2/3	<u>Usage</u> Must use		
			Description: Code identifying an organizational entity, a physical location, property or an individual User Note 1: <i>N1_ST and N1_VN are both required</i>					
		Code Summary (Total Codes: 1312, Inc. Code Name ST Ship To VN Vendor	cluded: 2)					
N102	93	Name	X	AN	1/60	Must use		
		Description: Free-form name						
N103	66	Identification Code Qualifier	X	ID	1/2	Must use		
		Description: Code designating the system/m CodeList Summary (Total Codes: 215, Incl. Code Name 91 Assigned by Seller or Seller's 92 Assigned by Buyer or Buyer's ZZ Mutually Defined	uded: 3) Agent	le structure	e used for Identi	fication Code (67)		
N104	67	Identification Code	X	AN	2/80	Must use		
		Description: Code identifying a party or other code						

Syntax Rules:

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

N3 Address Information

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

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

<u>Ref</u> N301	<u>Id</u> 166	Element Name Address Information	<u>Req</u> O	<u>Type</u> AN	Min/Max 1/55	<u>Usage</u> Used
		Description: Address information				
N302	166	Address Information	O	AN	1/55	Used
		Description: Address information				

N4 Geographic Location

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

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<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) a	s defined	by approp	oriate governmen	t agency
N403	116	Postal Code	O	ID	3/15	Used
		Description: Code defining international posta for United States)	l zone coo	le excludi	ng punctuation a	nd blanks (zip code
N404	26	Country Code	O	ID	2/3	Used
		Description: Code identifying the country				

Comments:

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

Loop Hierarchical Level

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

User Option (Usage): Must use

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

Loop Summary:

Pos	<u>Id</u>	Segment Name	<u>Req</u>	Max Use	Repeat	<u>Usage</u>
010	HL	Hierarchical Level	M	1		Must use
050	PRF	Purchase Order Reference	M	1		Must use

HL Hierarchical Level

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>	
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use	
		Description: A unique number assigned by the shierarchical structure	sender to	identify a	ı particular data s	segment in a	
HL02	734	Hierarchical Parent ID Number	O	AN	1/12	Used	
		Description: Identification number of the next has being described is subordinate to	nigher hie	erarchical	data segment tha	at the data segment	
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use	
		Description: Code defining the characteristic of	a level i	n a hierard	chical structure		
		CodeList Summary (Total Codes: 170, Included: 1)					
		<u>Code</u> <u>Name</u>					
		O Order					

Comments:

- 1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
- 2. The HL segment defines a top-down/left-right ordered structure.
- 3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

PRF Purchase Order Reference

Pos: 050 Max: 1 Detail - Mandatory Loop: HL Elements: 2

User Option (Usage): Must use

Purpose: To provide reference to a specific purchase order

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
PRF01	324	Purchase Order Number	M	AN	1/22	Must use
		Description: Identifying number for Purchase O	rder assi	gned by tl	ne orderer/purch	aser
PRF04	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				

Semantics:

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

Loop Hierarchical Level

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

User Option (Usage): Must use

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

Loop Summary:

Pos	<u>Id</u>	Segment Name	Req	Max Use	Repeat	<u>Usage</u>
010	HL	Hierarchical Level	M	1		Must use
020	LIN	Item Identification	M	1		Must use
030	SN1	Item Detail (Shipment)	M	1		Must use
070	PID	Product/Item Description	M	200		Used

HL Hierarchical Level

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use
		Description: A unique number assigned by the hierarchical structure	sender to	identify a	a particular data s	segment in a
HL02	734	Hierarchical Parent ID Number	O	AN	1/12	Used
		Description: Identification number of the next being described is subordinate to	nigher hie	erarchical	data segment tha	at the data segment
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use
		Description: Code defining the characteristic of	a level i	n a hierar	chical structure	
		CodeList Summary (Total Codes: 170, Include	d: 1)			
		<u>Code</u> <u>Name</u>				
		I Item				

Comments:

- 1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
- 2. The HL segment defines a top-down/left-right ordered structure.
- 3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

LIN Item Identification

Pos: 020 Max: 1 Detail - Mandatory Loop: HL Elements: 5

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
LIN01	350	Assigned Identification	О	AN	1/20	Used
		Description: Alphanumeric characters assigned	for diffe	rentiation	within a transac	tion set
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use
		Description: Code identifying the type/source o (234)	f the des	criptive n	umber used in Pr	roduct/Service ID
		CodeList Summary (Total Codes: 477, Include	d: 2)			
		<u>Code</u> <u>Name</u>				
		VC Vendor's (Seller's) Catalog Numl	oer			
		VN Vendor's (Seller's) Item Number				
LIN03	234	Product/Service ID	M	AN	1/48	Must use
		Description: Identifying number for a product of	r service			
LIN04	235	Product/Service ID Qualifier	O	ID	2/2	Used
		Description: Code identifying the type/source o (234)	f the des	criptive n	umber used in Pr	roduct/Service ID
		CodeList Summary (Total Codes: 477, Include	d: 1)			
		<u>Code</u> <u>Name</u>				
		IN Buyer's Item Number				
LIN05	234	Product/Service ID	X	AN	1/48	Used
		Description: Identifying number for a product of	r service			

Syntax Rules:

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

Semantics:

1. LIN01 is the line item identification

SN1 Item Detail (Shipment)

Pos: 030 Max: 1 Detail - Mandatory Loop: HL Elements: 4

User Option (Usage): Must use

Purpose: To specify line-item detail relative to shipment

Element Summary:

<u>Ref</u> SN102	<u>Id</u> 382	<u>Element Name</u> Number of Units Shipped	Req M	Type R	Min/Max 1/10	<u>Usage</u> Must use
		Description: Numeric value of units shipped i transaction set	n manufac	turer's shi	pping units for a	line item or
SN103	355	Unit or Basis for Measurement Code	M	ID	2/2	Must use
		Description: Code specifying the units in whice measurement has been taken All valid standard codes are used. (Total Co		is being e	xpressed, or man	ner in which a
SN105	330	Quantity Ordered	O	R	1/15	Used
		Description: Quantity ordered				
SN106	355	Unit or Basis for Measurement Code	О	ID	2/2	Used
		Description: Code specifying the units in which measurement has been taken All valid standard codes are used. (Total Co		is being e	xpressed, or man	ner in which a

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.

PID Product/Item Description

Pos: 070 Max: 200 Detail - Mandatory Loop: HL Elements: 2

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
PID01	349	Item Description Type	M	ID	1/1	Must use
		Description: Code indicating the format of a d	escription			
		CodeList Summary (Total Codes: 3, Included	: 1)			
		<u>Code</u> <u>Name</u>				
		F Free-form				
PID05	352	Description	M	AN	1/80	Must use
		Description: A free-form description to clarify	the relate	ed data ele	ments and their	content

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.

CTT Transaction Totals

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	<u>Req</u>	Type	Min/Max	<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

Comments:

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

User Note 1:

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.

SE Transaction Set Trailer

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
SE01	96	Number of Included Segments	M	N0	1/10	Must use
		Description: Total number of segments include	d in a tra	nsaction s	et including ST	and SE segments
SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
		Description: Identifying control number that me group assigned by the originator for a transaction		ique withi	in the transaction	set functional

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
GE01	97	Number of Transaction Sets Included	M	N0	1/6	Must use
		Description: Total number of transaction sets i (transmission) group terminated by the trailer co			U 1	nterchange
GE02	28	Group Control Number	M	N0	1/9	Must use
		Description: Assigned number originated and	maintaine	d by the se	ender	

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

Purpose: 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>	Element Name	Req	Type	Min/Max	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups	M	N0	1/5	Must use
		Description: A count of the number of function	nal groups	s included	in an interchange	e
IEA02	I12	Interchange Control Number	M	N0	9/9	Must use
		Description: A control number assigned by the	interchar	nge sender	•	

Sample 856:

ISA*00* *00* *ZZ*SUPPLIER *ZZ*HOSPITAL *150120*1112*U*00401*000014605*0*P**~ GS*SH*SUPPLIER*HOSPITAL*20150120*1112*14605*X*004010~ ST*856*146050001~ BSN*00*99999*20150120*110253*0001~ HL*1**S~ REF*BM*99999~ PER*DI*CUSTOMER SERVICE*TE*1-800-555-5555~ DTM*067*20150120~ N1*SF*SUPPLIER*91*12345~ N1*ST*HOSPITAL*91*12345-6~ HL*2*1*O~ PRF*1234567***20150120~ HL*3*2*I~ LIN**VC*123-ABC~ SN1**1*EA**1*EA~ HL*4*2*I~ LIN**VC*456-DEF~ SN1**1*EA**1*EA~ CTT*4~ SE*18*146050001~ GE*1*14605~ IEA*1*000014605~