



856 Ship Notice/Manifest - v4030

X12/V4030/856

Version: 1.3

Author:	OpenText
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OPENTEXT

Revision History

Date	Version	Revision	Approved By
April 1, 2008	1.0	Initial Publication	Diane Pizzarelli
October 20, 2008	1.1	Changed description of data associated with UK qualifier (LIN)	Diane Pizzarelli
May 15, 2009	1.2	Changed MAN02 min/max	Paul Heidler
September 16, 2015	1.3	Changed LIN05 Min/Max	Diane Pizzarelli

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.

Comments:

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

PLEASE NOTE THAT IN 4030 THE ISA 11 NO LONGER CONTAINS THE INTERCHANGE CONTROL STANDARDS IDENTIFIER. IT IS NOW USED TO IDENTIFY THE REPETITION SEPARATOR.

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

030	SN1	Item Detail (Shipment)	O	1		Used
110	TD1	Carrier Details (Quantity and Weight)	O	20		Must use
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
LOOP ID - TD3				12		
1300	TD3	Carrier Details (Equipment)	O	1		Used
150	REF	Reference Identification	O	>1		Must use
200	DTM	Date/Time Reference	O	10		Must use
LOOP ID - N1				200		
220	N1	Name	O	1		Must use
LOOP ID - HL				200000	C2/010L	
010	HL	Hierarchical Level	M	1		Must use
050	PRF	Purchase Order Reference	M	1		Must use
LOOP ID - HL				200000	C2/010L	
010	HL	Hierarchical Level	M	1		Must use
190	MAN	Marks and Numbers	O	>1		Must use
LOOP ID - HL				200000	C2/010L	
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
060	PO4	Item Physical Details	O	1		Must use
070	PID	Product/Item Description	O	200		Must use
110	TD1	Carrier Details (Quantity and Weight)	O	20		Must use

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			Must use
020	SE	Transaction Set Trailer	M	1			Must use
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

ISA Interchange Control Header

Pos:	Max: 1
Heading - 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 Description: Code identifying the type of information in the Authorization Information	M	ID	2/2	Must use
		Code Name				
		00 No Authorization Information Present (No Meaningful Information in I02)				
ISA02	I02	Authorization Information 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)	M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code identifying the type of information in the Security Information	M	ID	2/2	Must use
		Code Name				
		00 No Security Information Present (No Meaningful Information in I04)				
ISA04	I04	Security Information 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)	M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier 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.	M	ID	2/2	Must use
ISA06	I06	Interchange Sender ID 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	M	AN	15/15	Must use
ISA07	I05	Interchange ID Qualifier Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID	2/2	Must use
		Code Name				
		01 Duns (Dun & Bradstreet)				
		ZZ Mutually Defined				
ISA08	I07	Interchange Receiver ID	M	AN	15/15	Must use

		<p>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</p> <p>User Note: <i>Inovis Test: CLPEPBOYS</i> <i>Pep Boys Test: 007914401T</i> <i>Production: 007914401</i></p>										
ISA09	I08	<p>Interchange Date Description: Date of the interchange</p>	M	DT	6/6	Must use						
ISA10	I09	<p>Interchange Time Description: Time of the interchange</p>	M	TM	4/4	Must use						
ISA11	I65	<p>Repetition Separator 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</p>	M		1/1	Must use						
ISA12	I11	<p>Interchange Control Version Number Description: Code specifying the version number of the interchange control segments</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>00403</td> <td>Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1999</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	00403	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1999	M	ID	5/5	Must use		
<u>Code</u>	<u>Name</u>											
00403	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1999											
ISA13	I12	<p>Interchange Control Number Description: A control number assigned by the interchange sender</p>	M	N0	9/9	Must use						
ISA14	I13	<p>Acknowledgment Requested Description: Code indicating sender's request for an interchange acknowledgment All valid standard codes are used.</p>	M	ID	1/1	Must use						
ISA15	I14	<p>Usage Indicator Description: Code indicating whether data enclosed by this interchange envelope is test, production or information</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>P</td> <td>Production Data</td> </tr> <tr> <td>T</td> <td>Test Data</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	P	Production Data	T	Test Data	M	ID	1/1	Must use
<u>Code</u>	<u>Name</u>											
P	Production Data											
T	Test Data											
ISA16	I15	<p>Component Element Separator 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</p>	M		1/1	Must use						

GS Functional Group Header

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

User Option (Usage): Must use

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

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.

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 Description: Code identifying a group of application related transaction sets	M	ID	2/2	Must use
		Code Name SH Ship Notice/Manifest (856)				
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 User Note: <i>Inovis Test: CLPEPBOYS</i> <i>Pep Boys Test: 007914401T</i> <i>Production: 007914401</i>	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	M	ID	1/2	Must use
		Code Name X Accredited Standards Committee X12				
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	M	AN	1/12	Must use
		Code Name 004030 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1999				

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

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).

Example:

ST*856*0001~

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 Description: Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
		Code Name				
		856 Ship Notice/Manifest				
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

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

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.

Example:

*BSN*OO*1828458823*20080201*1454*0001~*

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN01	353	Transaction Set Purpose Code Description: Code identifying purpose of transaction set	M	ID	2/2	Must use
		Code Name 00 Original				
BSN02	396	Shipment Identification Description: A unique control number assigned by the original shipper to identify a specific shipment	M	AN	2/30	Must use
BSN03	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
BSN04	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	4/4	Must use
BSN05	1005	Hierarchical Structure Code Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set	M	ID	4/4	Must use
		Code Name 0001 Shipment, Order, Packaging, Item				

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 2

HL Hierarchical Level

User Option (Usage): Must use

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

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.

Example:

*HL*1**S~*

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 Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Must use
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Must use
		Code Name				
		S Shipment				

SN1 Item Detail (Shipment)

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

User Option (Usage): Used

To specify line-item detail relative to shipment

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.

Example:

SN1**9*EA~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SN102	382	Number of Units Shipped Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set User Note: <i>Must equal the sum of all SN102s at Item Level.</i>	M	R	1/10	Must use
SN103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Code Name EA Each	M	ID	2/2	Must use

TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 20
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Must use

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

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.

Example:

TD1**1****G*30*LB~

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>
TD102	80	Lading Quantity Description: Number of units (pieces) of the lading commodity User Note: <i>Must equal total number of MAN segments at the Pack Level</i>	X	N0	1/7	Must use
TD106	187	Weight Qualifier Description: Code defining the type of weight Code Name G Gross Weight	O	ID	1/2	Must use
TD107	81	Weight Description: Numeric value of weight	X	R	1/10	Must use
TD108	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Code Name LB Pound	X	ID	2/2	Must use

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 120	Max: 12
Detail - Mandatory	
Loop: HL	Elements: 2

User Option (Usage): Used

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

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.

Example:

TD5**2*WATK~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	M	ID	1/2	Must use
		Code Name				
		2 Standard Carrier Alpha Code (SCAC)				
TD503	67	Identification Code X AN 2/10	Must use			Description: Code identifying a party or other code

TD3 Carrier Details (Equipment)

Pos: 1300	Max: 1
Detail - Optional	
Loop: TD3	Elements: 2

User Option (Usage): Used

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

Syntax Rules:

1. E0110 - Only one of TD301 or TD310 may be present.
2. C0203 - If TD302 is present, then TD303 is required.
3. C0405 - If TD304 is present, then TD305 is required.
4. P0506 - If either TD305 or TD306 is present, then the other is required.

Example:

TD3*TL**12345678~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD301	40	Equipment Description Code Description: Code identifying type of equipment used for shipment	X	ID	2/2	Must use
		Code Name TL Trailer (not otherwise specified)				
TD303	207	Equipment Number Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	X	AN	1/10	Must use

REF Reference Identification

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

User Option (Usage): Must use

To specify identifying information

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.

Example:

REF*BM*1234567890~

User Note:

*Bill of Lading Number (BM) is required.
Carrier's Reference Number (CN) is optional.
Packing List Number (PK) is optional.*

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 Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name				
		BM Bill of Lading Number				
		CN Carrier's Reference Number (PRO/Invoice)				
		PK Packing List Number				
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/17	Must use

DTM Date/Time Reference

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

User Option (Usage): Must use

To specify pertinent dates and times

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.

Example:

DTM*011*20080215~
DTM*371*20080220~

User Note:

*Shipped Date (011) is required.
Current Shchedule Delivery Date (067) is optional.
Estimated Arrival Date (371) is required.*

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 Description: Code specifying type of date or time, or both date and time Code Name 011 Shipped 067 Current Schedule Delivery 371 Estimated Arrival Date	M	ID	3/3	Must use
DTM02	373	Date Description: Date expressed as CCYYMMDD	X	DT	8/8	Must use

N1**Name**

Pos: 220	Max: 1
Detail - Optional	
Loop: N1	Elements: 3

User Option (Usage): Must use

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

Example:

N1*ST**92*14011~

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 Description: Code identifying an organizational entity, a physical location, property or an individual Code Name ST Ship To	M	ID	2/3	Must use
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) Code Name 92 Assigned by Buyer or Buyer's Agent	X	ID	1/2	Must use
N104	67	Identification Code Description: Code identifying a party or other code	X	AN	5/5	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

Example:

HL*2*1*O~

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 Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Must use
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	M	AN	1/12	Must use
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Must use
		<u>Code</u>		<u>Name</u>		
		O		Order		

PRF Purchase Order Reference

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

User Option (Usage): Must use

To provide reference to a specific purchase order

Semantics:

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

Example:

*PRF*S3482451~*

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 Description: Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	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

Example:

*HL*3*2*P~*

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 Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Must use
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Must use
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Must use
		<u>Code</u> <u>Name</u>				
		P Pack				

MAN Marks and Numbers

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

User Option (Usage): Must use

To indicate identifying marks and numbers for shipping containers

Syntax Rules:

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

Example:

*MAN*GM*000079405300190343~*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MAN01	88	Marks and Numbers Qualifier Description: Code specifying the application or source of Marks and Numbers (87)	M	ID	1/2	Must use
		Code Name				
		AA SSCC-18				
		GM SSCC-18 and Application Identifier				
MAN02	87	Marks and Numbers Description: Marks and numbers used to identify a shipment or parts of a shipment	M	AN	18/20	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 Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Must use
HL02	734	Hierarchical Parent ID Number Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Must use
HL03	735	Hierarchical Level Code Description: Code defining the characteristic of a level in a hierarchical structure	M	ID	1/2	Must use
		<u>Code</u> <u>Name</u>				
		I Item				

LIN Item Identification

Pos: 020	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 6

User Option (Usage): Must use

To specify basic item identification data

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

Example:

LIN**UK*00794053018326*IN*8400211*MF*33968209~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN02	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	M	ID	2/2	Must use
		Code Name UK 14-digit UPC Code Description: Pep Boys expects 12-digit UPC with 2 leading zeroes.				
LIN03	234	Product/Service ID Description: Identifying number for a product or service	M	AN	14/14	Must use
LIN04	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID	2/2	Used
		Code Name IN Buyer's Item Number				
LIN05	234	Product/Service ID	X	AN	1/48	Used

		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)				
		Code				
		Name				
		MF				
		Manufacturer				
LIN07	234	Product/Service ID	X	AN	1/15	Used
		Description: Identifying number for a product or service				

SN1 Item Detail (Shipment)

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

User Option (Usage): Must use

To specify line-item detail relative to shipment

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.

Example:

SN1**9*EA~

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SN102	382	Number of Units Shipped Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M	R	1/10	Must use
SN103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		EA Each				

PO4 Item Physical Details

Pos: 060	Max: 1
Detail - Optional	
Loop: HL	Elements: 1

User Option (Usage): Must use

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

Syntax Rules:

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

Example:

PO4*3~

User Note:

Item level PO401 must equal item level SN102 divided by item level TD102.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO401	356	Pack Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container	O	N0	1/6	Must use

PID Product/Item Description

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

User Option (Usage): Must use

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

Syntax Rules:

1. C0403 - If PID04 is present, then PID03 is required.
2. C0703 - If PID07 is present, then PID03 is required.
3. C0804 - If PID08 is present, then PID04 is required.
4. C0905 - If PID09 is present, then PID05 is required.
5. R0405 - At least one of PID04 or 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.

Example:

*PID*F****PART DESCRIPTION~*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type Description: Code indicating the format of a description	M	ID	1/1	Must use
		Code Name F Free-form				
PID05	352	Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Must use

TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 20
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Must use

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

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.

Example:

TD1**3****G*10*LB~

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>
TD102	80	Lading Quantity Description: Number of units (pieces) of the lading commodity	X	N0	1/7	Used
TD106	187	Weight Qualifier Description: Code defining the type of weight	O	ID	1/2	Must use
		Code Name				
		G Gross Weight				
TD107	81	Weight Description: Numeric value of weight	X	R	1/10	Must use
TD108	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	X	ID	2/2	Must use
		Code Name				
		LB Pound				

CTT Transaction Totals

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

User Option (Usage): Must use

To transmit a hash total for a specific element 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.

Example:

CTT*25~

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 Description: Total number of line items in the transaction set	M	N0	1/6	Must use

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)

Comments:

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

Example:

*SE*42*0001~*

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 Description: Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

GE Functional Group Trailer

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

User Option (Usage): Must use

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

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.

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 Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

IEA Interchange Control Trailer

Pos:	Max: 1
Summary - 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 Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use

Sample 856

ISA*00* *00* *ZZ*YOURID *01*007914401 *080201*1454*^*00403*000000001*1*P*>~
 GS*SH*YOURID*007914401*20080201*1454*000001*X*004030~
 ST*856*0001~
 BSN*OO*1828458823*20080201*1454*0001~
 HL*1**S~
 SN1**18*EA~
 TD1**1****G*60*LB~
 TD5**2*WATK~
 TD3*TL*12345678~
 REF*BM*1234567890~
 DTM*011*20080215~
 DTM*371*20080220~
 N1*ST**92*14011~
 HL*2*1*O~
 PRF*S3482451~
 HL*3*2*P~
 MAN*GM*000079405300190343~
 HL*4*3*I
 LIN**UK*00794053018326*IN*84002115*MF*33968209~
 SN1**9*EA~
 PO4*3~
 PID*F****PART A~
 TD1**3****G*10*LB~
 HL*5*3*I~
 LIN**UK*00794053018490*IN*84002146*MF*33968209~
 SN1**9*EA~
 PO4*3~
 PID*F****PART B~
 TD1**3****G*10*LB~
 CTT*2~
 SE*29*0001~
 GE*1*000001~
 IEA*1*000000001~