

856 Ship Notice/Manifest

Author: DOT FOODS, INC.
Publication: March 3, 2005

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			Used
	GS	Functional Group Header	M	1			Used

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
150	REF	Reference Identification	O	>1			Used
200	DTM	Date/Time Reference	O	10			Used
LOOP ID - N1					200		
220	N1	Name	O	1			Used
250	N4	Geographic Location	O	1			Used
LOOP ID - N1					200		
220	N1	Name	O	1			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
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
150	REF	Reference Identification	O	>1			Used
LOOP ID - N1					200		
220	N1	Name	O	1			Used
LOOP ID - HL					200000	C2/010L	
010	HL	Hierarchical Level	M	1		C2/010	Must use
190	MAN	Marks and Numbers	O	>1			Used
LOOP ID - HL					200000	C2/010L	

<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	HL	Hierarchical Level	M	1		C2/010	Must use
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used
070	PID	Product/Item Description	O	200			Used
080	MEA	Measurements	O	40			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.
- 2/010 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
- 2/010L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
- 2/010 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
- 2/010L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
- 2/010 The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
- 2/010L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
- 2/010 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): Used

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>	<u>Rep</u>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use	1
<p>Description: Code to identify the type of information in the Authorization Information</p> <p>Code Name 00 No Authorization Information Present (No Meaningful Information in I02)</p>							
ISA02	I02	Authorization Information	M	AN	10/10	Must use	1
<p>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)</p>							
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use	1
<p>Description: Code to identify the type of information in the Security Information</p> <p>Code Name 00 No Security Information Present (No Meaningful Information in I04)</p>							
ISA04	I04	Security Information	M	AN	10/10	Must use	1
<p>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)</p>							
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	Must use	1
<p>Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified</p> <p>Code Name 08 UCC EDI Communications ID (Comm ID)</p>							
ISA06	I06	Interchange Sender ID	M	AN	15/15	Must use	1
<p>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</p> <p>User Note 1: 9288030000</p>							
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	Must use	1
<p>Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified</p>							

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>	<u>Rep</u>
ISA08	I07	Interchange Receiver ID 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	M	AN	15/15	Must use	1
ISA09	I08	Interchange Date Description: Date of the interchange	M	DT	6/6	Must use	1
ISA10	I09	Interchange Time Description: Time of the interchange	M	TM	4/4	Must use	1
ISA11	I10	Interchange Control Standards Identifier 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.	M	ID	1/1	Must use	1
ISA12	I11	Interchange Control Version Number Description: This version number covers the interchange control segments Code Name 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M	ID	5/5	Must use	1
ISA13	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use	1
ISA14	I13	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1) Code Name 1 Interchange Acknowledgment Requested	M	ID	1/1	Must use	1
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information Code Name P Production Data	M	ID	1/1	Must use	1
ISA16	I15	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	M		1/1	Must use	1

GS Functional Group Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Used

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>	<u>Rep</u>
GS01	479	Functional Identifier Code	M	ID	2/2	Must use	1
		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	1
		Description: Code identifying party sending transmission; codes agreed to by trading partners					
		User Note 1: 9288030000					
GS03	124	Application Receiver's Code	M	AN	2/15	Must use	1
		Description: Code identifying party receiving transmission. Codes agreed to by trading partners					
GS04	373	Date	M	DT	8/8	Must use	1
		Description: Date expressed as CCYYMMDD					
GS05	337	Time	M	TM	4/8	Must use	1
		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	NO	1/9	Must use	1
		Description: Assigned number originated and maintained by the sender					
GS07	455	Responsible Agency Code	M	ID	1/2	Must use	1
		Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard					
		Code Name					
		X Accredited Standards Committee X12					
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use	1
		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					

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>	<u>Rep</u>
		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					
		<u>Code</u> <u>Name</u>					
		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>	<u>Rep</u>
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Must use	1
		Description: Code uniquely identifying a Transaction Set					
		Code Name					
		856 Ship Notice/Manifest					
ST02	329	Transaction Set Control Number	M	AN	4/9	Must use	1
		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>	<u>Rep</u>
BSN01	353	Transaction Set Purpose Code	M	ID	2/2	Must use	1
		Description: Code identifying purpose of transaction set					
		Code Name					
		00 Original					
BSN02	396	Shipment Identification	M	AN	2/30	Must use	1
		Description: A unique control number assigned by the original shipper to identify a specific shipment					
BSN03	373	Date	M	DT	8/8	Must use	1
		Description: Date expressed as CCYYMMDD					
BSN04	337	Time	M	TM	4/8	Must use	1
		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	1
		Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set					
		User Note 1: "0001" - Shipment, Order, Packaging					
		Code Name					
		0001 Shipment, Order, Packaging, 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.

HL Hierarchical Level

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

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>	<u>Rep</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use	1
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure					
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use	1
		Description: Code defining the characteristic of a level in a hierarchical structure					
		<u>Code</u> <u>Name</u>					
		S Shipment					

Comments:

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

TD1 Carrier Details (Quantity and Weight)

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

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>	<u>Rep</u>
TD101	103	Packaging Code 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 CAS Case	O	AN	3/5	Used	1
TD102	80	Lading Quantity Description: Number of units (pieces) of the lading commodity User Note 1: Total number of cases	C	NO	1/7	Used	1
TD106	187	Weight Qualifier Description: Code defining the type of weight Code Name G Gross Weight	O	ID	1/2	Used	1
TD107	81	Weight Description: Numeric value of weight	C	R	1/10	Used	1
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	C	ID	2/2	Used	1

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: 3

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>	<u>Rep</u>
TD501	133	Routing Sequence Code Description: Code describing the relationship of a carrier to a specific shipment movement Code Name B Origin/Delivery Carrier (Any Mode)	O	ID	1/2	Used	1
TD503	67	Identification Code Description: Code identifying a party or other code	C	AN	2/80	Used	1
TD504	91	Transportation Method/Type Code Description: Code specifying the method or type of transportation for the shipment Code Name H Customer Pickup M Motor (Common Carrier)	C	ID	1/2	Used	1

Syntax Rules:

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

Semantics:

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

Comments:

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

REF Reference Identification

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

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>	<u>Rep</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use	1

Description: Code qualifying the Reference Identification

User Note 1: *Load number*

Code Name

BM Bill of Lading Number

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>	<u>Rep</u>
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use	1
		Description: Code specifying type of date or time, or both date and time					
		Code Name					
		011 Shipped					
DTM02	373	Date	C	DT	8/8	Used	1
		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.

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>	<u>Rep</u>
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual Code Name SF Ship From	M	ID	2/3	Must use	1
N102	93	Name Description: Free-form name	C	AN	1/60	Used	1
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) Code Name 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	C	ID	1/2	Used	1
N104	67	Identification Code Description: Code identifying a party or other code	C	AN	2/80	Used	1

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.

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>	<u>Rep</u>
N401	19	City Name	O	AN	2/30	Used	1
		Description: Free-form text for city name					
N402	156	State or Province Code	O	ID	2/2	Used	1
		Description: Code (Standard State/Province) as defined by appropriate government agency					
N403	116	Postal Code	O	ID	3/15	Used	1
		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.

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>	<u>Rep</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	1
N102	93	Name Description: Free-form name	C	AN	1/60	Used	1
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) Code Name 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	C	ID	1/2	Used	1
N104	67	Identification Code Description: Code identifying a party or other code	C	AN	2/80	Used	1

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.

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>	<u>Rep</u>
N401	19	City Name	O	AN	2/30	Used	1
		Description: Free-form text for city name					
N402	156	State or Province Code	O	ID	2/2	Used	1
		Description: Code (Standard State/Province) as defined by appropriate government agency					
N403	116	Postal Code	O	ID	3/15	Used	1
		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.

HL Hierarchical Level

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

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>	<u>Rep</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use	1
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure					
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use	1
		Description: Code defining the characteristic of a level in a hierarchical structure					
		<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.
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: 1

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>	<u>Rep</u>
PRF01	324	Purchase Order Number	M	AN	1/22	Must use	1

Description: Identifying number for Purchase Order assigned by the orderer/purchaser

Semantics:

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

TD1 Carrier Details (Quantity and Weight)

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

User Option (Usage): Used

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>	<u>Rep</u>
TD101	103	Packaging Code 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 CAS Case	O	AN	3/5	Used	1
TD102	80	Lading Quantity Description: Number of units (pieces) of the lading commodity User Note 1: Total number of cases	C	NO	1/7	Used	1
TD106	187	Weight Qualifier Description: Code defining the type of weight Code Name G Gross Weight	O	ID	1/2	Used	1
TD107	81	Weight Description: Numeric value of weight	C	R	1/10	Used	1
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	C	ID	2/2	Used	1

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.

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>	<u>Rep</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use	1
		Description: Code qualifying the Reference Identification					
		Code Name					
		VN Vendor Order Number					
REF02	127	Reference Identification	C	AN	1/30	Used	1
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier					
		User Note 1: <i>Dot order number</i>					

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.

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>	<u>Rep</u>
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual Code Name SN Store	M	ID	2/3	Must use	1
N102	93	Name Description: Free-form name	C	AN	1/60	Used	1
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67) Code Name 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	C	ID	1/2	Used	1
N104	67	Identification Code Description: Code identifying a party or other code	C	AN	2/80	Used	1

Syntax Rules:

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

Comments:

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

User Note 1:

SN N1 Loop used for cross-dock shipments only.

HL Hierarchical Level

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

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>	<u>Rep</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use	1
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure					
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use	1
		Description: Code defining the characteristic of a level in a hierarchical structure					
		<u>Code</u> <u>Name</u>					
		T Shipping Tare					

Comments:

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

MAN Marks and Numbers

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

User Option (Usage): Used

To indicate identifying marks and numbers for shipping containers

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>	<u>Rep</u>
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Must use	1
		Description: Code specifying the application or source of Marks and Numbers (87)					
		Code Name					
		GM SSCC-18 and Application Identifier					
MAN02	87	Marks and Numbers	M	AN	1/48	Must use	1
		Description: Marks and numbers used to identify a shipment or parts of a shipment					
		User Note 1: <i>Pallet License Plate</i>					

Syntax Rules:

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

Semantics:

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

Comments:

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

HL Hierarchical Level

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

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>	<u>Rep</u>
HL01	628	Hierarchical ID Number	M	AN	1/12	Must use	1
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure					
HL03	735	Hierarchical Level Code	M	ID	1/2	Must use	1
		Description: Code defining the characteristic of a level in a hierarchical structure					
		<u>Code</u> <u>Name</u>					
		P Pack					

Comments:

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

LIN Item Identification

Pos: 020 Max: 1

Detail - Optional

Loop: HL

Elements: 4

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>	<u>Rep</u>
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use	1

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

Code Name

UA U.P.C./EAN Case Code (2-5-5)

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

User Note 1:

UK preferred

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

Description: Identifying number for a product or service

LIN04	235	Product/Service ID Qualifier	C	ID	2/2	Used	1
-------	-----	------------------------------	---	----	-----	------	---

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

Code Name

VN Vendor's (Seller's) Item Number

LIN05	234	Product/Service ID	C	AN	1/48	Used	1
-------	-----	--------------------	---	----	------	------	---

Description: Identifying number for a product or service

User Note 1: *Dot Item Number*

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: 2

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>	<u>Rep</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	1
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 All valid standard codes are used.	M	ID	2/2	Must use	1

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 - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Element Summary:

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

Syntax Rules:

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

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

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>	<u>Rep</u>
MEA01	737	Measurement Reference ID Code	O	ID	2/2	Used	1
		Description: Code identifying the broad category to which a measurement applies					
		Code Name					
		WT Weights					
MEA02	738	Measurement Qualifier	O	ID	1/3	Used	1
		Description: Code identifying a specific product or process characteristic to which a measurement applies					
		Code Name					
		N Actual Net Weight					
MEA03	739	Measurement Value	C	R	1/20	Used	1
		Description: The value of the measurement					
MEA04	C001	Composite Unit of Measure	C	Comp		Used	1
		Description: To identify a composite unit of measure(See Figures Appendix for examples of use)					
	355	Unit or Basis for Measurement Code	M	ID	2/2	Must use	1
		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					

Syntax Rules:

1. R03050608 - At least one of MEA03, MEA05, MEA06 or MEA08 is required.
2. C0504 - If MEA05 is present, then MEA04 is required.
3. C0604 - If MEA06 is present, then MEA04 is required.
4. L07030506 - If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. E0803 - Only one of MEA08 or MEA03 may be present.

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

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>	<u>Rep</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use	1
		Description: Code qualifying the Reference Identification					
		Code Name					
		CO Customer Order Number					
REF02	127	Reference Identification	C	AN	1/30	Used	1
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier					
		User Note 1: <i>Optional (used for cross-dock)</i>					

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>	<u>Rep</u>
CTT01	354	Number of Line Items	M	NO	1/6	Must use	1

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>	<u>Rep</u>
SE01	96	Number of Included Segments	M	NO	1/10	Must use	1
		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	1
		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>	<u>Rep</u>
GE01	97	Number of Transaction Sets Included	M	NO	1/6	Must use	1
		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	NO	1/9	Must use	1
		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>	<u>Rep</u>
IEA01	I16	Number of Included Functional Groups	M	N0	1/5	Must use	1
		Description: A count of the number of functional groups included in an interchange					
IEA02	I12	Interchange Control Number	M	N0	9/9	Must use	1
		Description: A control number assigned by the interchange sender					

Table of Contents

856 Ship Notice/Manifest	2
ISA Interchange Control Header	4
GS Functional Group Header	6
ST Transaction Set Header	8
BSN Beginning Segment for Ship Notice	9
HL Hierarchical Level	10
TD1 Carrier Details (Quantity and Weight)	11
TD5 Carrier Details (Routing Sequence/Transit Time)	12
REF Reference Identification	13
DTM Date/Time Reference	14
N1 Name	15
N4 Geographic Location	16
N1 Name	17
N4 Geographic Location	18
HL Hierarchical Level	19
PRF Purchase Order Reference	20
TD1 Carrier Details (Quantity and Weight)	21
REF Reference Identification	22
N1 Name	23
HL Hierarchical Level	24
MAN Marks and Numbers	25
HL Hierarchical Level	26
LIN Item Identification	27
SN1 Item Detail (Shipment)	29
PID Product/Item Description	30
MEA Measurements	31
REF Reference Identification	32
CTT Transaction Totals	33
SE Transaction Set Trailer	34
GE Functional Group Trailer	35
IEA Interchange Control Trailer	36