

856 Ship Notice/Manifest

X12/V4010/856: 856 Ship Notice/Manifest

Version: 1.5 Final

Author:	Global Exchange Services
Company:	Crate & Barrel
Notes:	Shipment-Order-Item-Pack Structure FINAL APPROVED 03-16- 2009

856

Ship Notice/Manifest

Functional Group=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.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage	Page
	ISA	Interchange Control Header	M	1			Must use	10
	GS	Functional Group Header	M	1			Must use	12
010	ST	Transaction Set Header	M	1			Must use	14
020	BSN	Beginning Segment for Ship Notice	M	1			Must use	15
040	DTM	Date/Time Reference	O	10			Used	16

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage	Page
LOOP ID - HL					200000	C2/010L		17
010	HL	Hierarchical Level	M	1		C2/010	Must use	18
* 020	LIN	Item Identification	O	1				N/A
* 030	SN1	Item Detail (Shipment)	O	1				N/A
* 040	SLN	Subline Item Detail	O	1000				N/A
* 050	PRF	Purchase Order Reference	O	1				N/A
* 060	PO4	Item Physical Details	O	1				N/A
* 070	PID	Product/Item Description	O	200				N/A
* 080	MEA	Measurements	O	40				N/A
* 090	PWK	Paperwork	O	25				N/A
* 100	PKG	Marking, Packaging, Loading	O	25				N/A
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used	19
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used	20
130	TD3	Carrier Details (Equipment)	O	12			Used	22
* 140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5				N/A
* 145	TSD	Trailer Shipment Details	O	1				N/A
150	REF	Reference Identification	O	>1			Used	23
* 151	PER	Administrative Communications Contact	O	3				N/A
* LOOP ID - LH1					100			N/A
* 152	LH1	Hazardous Identification Information	O	1				N/A

* 153	LH2	Hazardous Classification Information	O	4			N/A
* 154	LH3	Hazardous Material Shipping Name	O	12			N/A
* 155	LFH	Freeform Hazardous Material Information	O	20			N/A
* 156	LEP	EPA Required Data	O	>1			N/A
* 157	LH4	Canadian Dangerous Requirements	O	1			N/A
* 158	LHT	Transborder Hazardous Requirements	O	3			N/A
* 159	LHR	Hazardous Material Identifying Reference Numbers	O	10			N/A
* 160	PER	Administrative Communications Contact	O	5			N/A
* 161	LHE	Empty Equipment Hazardous Material Information	O	1			N/A
* LOOP ID - CLD				200			N/A
* 170	CLD	Load Detail	O	1			N/A
* 180	REF	Reference Identification	O	200			N/A
* 185	DTP	Date or Time or Period	O	1			N/A
* 190	MAN	Marks and Numbers	O	>1			N/A
200	DTM	Date/Time Reference	O	10		Used	24
210	FOB	F.O.B. Related Instructions	O	1		Used	25
* 215	PAL	Pallet Information	O	1			N/A
LOOP ID - N1				200			26
220	N1	Name	O	1		Used	27
* 230	N2	Additional Name Information	O	2			N/A
240	N3	Address Information	O	2		Used	29
250	N4	Geographic Location	O	1		Used	30
* 260	REF	Reference Identification	O	12			N/A
270	PER	Administrative Communications Contact	O	3		Used	31
* 280	FOB	F.O.B. Related Instructions	O	1			N/A
* 290	SDQ	Destination Quantity	O	50			N/A
* 300	ETD	Excess Transportation Detail	O	1			N/A
* 310	CUR	Currency	O	1			N/A
* LOOP ID - SAC				≥1			N/A
* 320	SAC	Service, Promotion, Allowance, or Charge Information	O	1			N/A
* 325	CUR	Currency	O	1			N/A
* 330	GF	Furnished Goods and Services	O	1			N/A
* 335	YNQ	Yes/No Question	O	10			N/A
* LOOP ID - LM				10			N/A
* 340	LM	Code Source Information	O	1			N/A
* 350	LQ	Industry Code	M	100			N/A
* LOOP ID - V1				≥1			N/A

* 360	V1	Vessel Identification	O	1				N/A
* 370	R4	Port or Terminal	O	>1				N/A
* 380	DTM	Date/Time Reference	O	>1				N/A
LOOP ID - HL					200000	C2/010L		33
010	HL	Hierarchical Level	M	1		C2/010	Must use	34
* 020	LIN	Item Identification	O	1				N/A
* 030	SN1	Item Detail (Shipment)	O	1				N/A
* 040	SLN	Subline Item Detail	O	1000				N/A
050	PRF	Purchase Order Reference	O	1			Used	35
* 060	PO4	Item Physical Details	O	1				N/A
* 070	PID	Product/Item Description	O	200				N/A
* 080	MEA	Measurements	O	40				N/A
* 090	PWK	Paperwork	O	25				N/A
* 100	PKG	Marking, Packaging, Loading	O	25				N/A
* 110	TD1	Carrier Details (Quantity and Weight)	O	20				N/A
* 120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12				N/A
* 130	TD3	Carrier Details (Equipment)	O	12				N/A
* 140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5				N/A
* 145	TSD	Trailer Shipment Details	O	1				N/A
150	REF	Reference Identification	M	>1			Must use	36
* 151	PER	Administrative Communications Contact	O	3				N/A
* LOOP ID - LH1					100			N/A
* 152	LH1	Hazardous Identification Information	O	1				N/A
* 153	LH2	Hazardous Classification Information	O	4				N/A
* 154	LH3	Hazardous Material Shipping Name	O	12				N/A
* 155	LFH	Freeform Hazardous Material Information	O	20				N/A
* 156	LEP	EPA Required Data	O	>1				N/A
* 157	LH4	Canadian Dangerous Requirements	O	1				N/A
* 158	LHT	Transborder Hazardous Requirements	O	3				N/A
* 159	LHR	Hazardous Material Identifying Reference Numbers	O	10				N/A
* 160	PER	Administrative Communications Contact	O	5				N/A
* 161	LHE	Empty Equipment Hazardous Material Information	O	1				N/A
* LOOP ID - CLD					200			N/A
* 170	CLD	Load Detail	O	1				N/A
* 180	REF	Reference Identification	O	200				N/A
* 185	DTP	Date or Time or Period	O	1				N/A

* 190	MAN	Marks and Numbers	O	>1				N/A
* 200	DTM	Date/Time Reference	O	10				N/A
* 210	FOB	F.O.B. Related Instructions	O	1				N/A
* 215	PAL	Pallet Information	O	1				N/A
* LOOP ID - N1					200			N/A
* 220	N1	Name	O	1				N/A
* 230	N2	Additional Name Information	O	2				N/A
* 240	N3	Address Information	O	2				N/A
* 250	N4	Geographic Location	O	1				N/A
* 260	REF	Reference Identification	O	12				N/A
* 270	PER	Administrative Communications Contact	O	3				N/A
* 280	FOB	F.O.B. Related Instructions	O	1				N/A
* 290	SDQ	Destination Quantity	O	50				N/A
* 300	ETD	Excess Transportation Detail	O	1				N/A
* 310	CUR	Currency	O	1				N/A
* LOOP ID - SAC					>1			N/A
* 320	SAC	Service, Promotion, Allowance, or Charge Information	O	1				N/A
* 325	CUR	Currency	O	1				N/A
* 330	GF	Furnished Goods and Services	O	1				N/A
* 335	YNQ	Yes/No Question	O	10				N/A
* LOOP ID - LM					10			N/A
* 340	LM	Code Source Information	O	1				N/A
* 350	LQ	Industry Code	M	100				N/A
* LOOP ID - V1					>1			N/A
* 360	V1	Vessel Identification	O	1				N/A
* 370	R4	Port or Terminal	O	>1				N/A
* 380	DTM	Date/Time Reference	O	>1				N/A
LOOP ID - HL					200000	C2/010L		37
010	HL	Hierarchical Level	M	1		C2/010	Must use	38
020	LIN	Item Identification	O	1			Must use	39
030	SN1	Item Detail (Shipment)	O	1			Used	41
* 040	SLN	Subline Item Detail	O	1000				N/A
* 050	PRF	Purchase Order Reference	O	1				N/A
* 060	PO4	Item Physical Details	O	1				N/A
* 070	PID	Product/Item Description	O	200				N/A
* 080	MEA	Measurements	O	40				N/A
* 090	PWK	Paperwork	O	25				N/A
* 100	PKG	Marking, Packaging, Loading	O	25				N/A
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used	42
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used	44
* 130	TD3	Carrier Details (Equipment)	O	12				N/A
* 140	TD4	Carrier Details (Special	O	5				N/A

		Handling, or Hazardous Materials, or Both)						
* 145	TSD	Trailer Shipment Details	O	1				N/A
* 150	REF	Reference Identification	O	>1				N/A
* 151	PER	Administrative Communications Contact	O	3				N/A
* LOOP ID - LH1					100			N/A
* 152	LH1	Hazardous Identification Information	O	1				N/A
* 153	LH2	Hazardous Classification Information	O	4				N/A
* 154	LH3	Hazardous Material Shipping Name	O	12				N/A
* 155	LFH	Freeform Hazardous Material Information	O	20				N/A
* 156	LEP	EPA Required Data	O	>1				N/A
* 157	LH4	Canadian Dangerous Requirements	O	1				N/A
* 158	LHT	Transborder Hazardous Requirements	O	3				N/A
* 159	LHR	Hazardous Material Identifying Reference Numbers	O	10				N/A
* 160	PER	Administrative Communications Contact	O	5				N/A
* 161	LHE	Empty Equipment Hazardous Material Information	O	1				N/A
* LOOP ID - CLD					200			N/A
* 170	CLD	Load Detail	O	1				N/A
* 180	REF	Reference Identification	O	200				N/A
* 185	DTP	Date or Time or Period	O	1				N/A
* 190	MAN	Marks and Numbers	O	>1				N/A
200	DTM	Date/Time Reference	O	10			Must use	45
* 210	FOB	F.O.B. Related Instructions	O	1				N/A
* 215	PAL	Pallet Information	O	1				N/A
* LOOP ID - N1					200			N/A
* 220	N1	Name	O	1				N/A
* 230	N2	Additional Name Information	O	2				N/A
* 240	N3	Address Information	O	2				N/A
* 250	N4	Geographic Location	O	1				N/A
* 260	REF	Reference Identification	O	12				N/A
* 270	PER	Administrative Communications Contact	O	3				N/A
* 280	FOB	F.O.B. Related Instructions	O	1				N/A
* 290	SDQ	Destination Quantity	O	50				N/A
* 300	ETD	Excess Transportation Detail	O	1				N/A
* 310	CUR	Currency	O	1				N/A
* LOOP ID - SAC					≥1			N/A
* 320	SAC	Service, Promotion, Allowance, or Charge Information	O	1				N/A

* 325	CUR	Currency	O	1				N/A
* 330	GF	Furnished Goods and Services	O	1				N/A
* 335	YNQ	Yes/No Question	O	10				N/A
* LOOP ID - LM				10				N/A
* 340	LM	Code Source Information	O	1				N/A
* 350	LQ	Industry Code	M	100				N/A
* LOOP ID - V1				≥1				N/A
* 360	V1	Vessel Identification	O	1				N/A
* 370	R4	Port or Terminal	O	>1				N/A
* 380	DTM	Date/Time Reference	O	>1				N/A
LOOP ID - HL				200000	C2/010L			46
010	HL	Hierarchical Level	M	1	C2/010	Must use		47
* 020	LIN	Item Identification	O	1				N/A
* 030	SN1	Item Detail (Shipment)	O	1				N/A
* 040	SLN	Subline Item Detail	O	1000				N/A
* 050	PRF	Purchase Order Reference	O	1				N/A
060	PO4	Item Physical Details	O	1		Used		48
* 070	PID	Product/Item Description	O	200				N/A
* 080	MEA	Measurements	O	40				N/A
* 090	PWK	Paperwork	O	25				N/A
* 100	PKG	Marking, Packaging, Loading	O	25				N/A
* 110	TD1	Carrier Details (Quantity and Weight)	O	20				N/A
* 120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12				N/A
* 130	TD3	Carrier Details (Equipment)	O	12				N/A
* 140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5				N/A
* 145	TSD	Trailer Shipment Details	O	1				N/A
* 150	REF	Reference Identification	O	>1				N/A
* 151	PER	Administrative Communications Contact	O	3				N/A
* LOOP ID - LH1				100				N/A
* 152	LH1	Hazardous Identification Information	O	1				N/A
* 153	LH2	Hazardous Classification Information	O	4				N/A
* 154	LH3	Hazardous Material Shipping Name	O	12				N/A
* 155	LFH	Freeform Hazardous Material Information	O	20				N/A
* 156	LEP	EPA Required Data	O	>1				N/A
* 157	LH4	Canadian Dangerous Requirements	O	1				N/A
* 158	LHT	Transborder Hazardous Requirements	O	3				N/A
* 159	LHR	Hazardous Material Identifying Reference Numbers	O	10				N/A
* 160	PER	Administrative	O	5				N/A

* 161	LHE	Communications Contact Empty Equipment Hazardous Material Information	O	1					N/A
* LOOP ID - CLD				200					N/A
* 170	CLD	Load Detail	O	1					N/A
* 180	REF	Reference Identification	O	200					N/A
* 185	DTP	Date or Time or Period	O	1					N/A
190	MAN	Marks and Numbers	O	>1			Used		49
* 200	DTM	Date/Time Reference	O	10					N/A
* 210	FOB	F.O.B. Related Instructions	O	1					N/A
* 215	PAL	Pallet Information	O	1					N/A
* LOOP ID - N1				200					N/A
* 220	N1	Name	O	1					N/A
* 230	N2	Additional Name Information	O	2					N/A
* 240	N3	Address Information	O	2					N/A
* 250	N4	Geographic Location	O	1					N/A
* 260	REF	Reference Identification	O	12					N/A
* 270	PER	Administrative Communications Contact	O	3					N/A
* 280	FOB	F.O.B. Related Instructions	O	1					N/A
* 290	SDQ	Destination Quantity	O	50					N/A
* 300	ETD	Excess Transportation Detail	O	1					N/A
* 310	CUR	Currency	O	1					N/A
* LOOP ID - SAC				≥1					N/A
* 320	SAC	Service, Promotion, Allowance, or Charge Information	O	1					N/A
* 325	CUR	Currency	O	1					N/A
* 330	GF	Furnished Goods and Services	O	1					N/A
* 335	YNQ	Yes/No Question	O	10					N/A
* LOOP ID - LM				10					N/A
* 340	LM	Code Source Information	O	1					N/A
* 350	LQ	Industry Code	M	100					N/A
* LOOP ID - V1				≥1					N/A
* 360	V1	Vessel Identification	O	1					N/A
* 370	R4	Port or Terminal	O	>1					N/A
* 380	DTM	Date/Time Reference	O	>1					N/A

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage	Page
010	CTT	Transaction Totals	O	1		N3/010	Used	51
020	SE	Transaction Set Trailer	M	1			Must use	52
	GE	Functional Group Trailer	M	1			Must use	53
	IEA	Interchange Control Trailer	M	1			Must use	54

Notes:

3/010 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Comments:

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

Buyer Usage:

Outlines Shipment/Order/Item/Pack (SOIP) Structure. A separate guideline will be provided for Shipment/Order/Pack/Item (SOP).

Change Log:

03-03-2009 v 1.5

Added element TD506 (within the TD5 loop within the HL1 segment) to contain a 'CD' if the shipment is being consolidated by someone other than the vendor.

Added N3 and N4 segments (within the N1 loop within the HL1 segment) to send additional address information for a Stuffer, Consolidator, Manufacturer and Booking Party (ZZ).

The Stuffer, code 'LG', is mandatory for all international shipments to the U.S. arriving by ocean. This is necessary to provide US Customs with an ISF (Importer Security Filing) document 24 hours prior to the goods being loaded onto an ocean vessel.

*Added following codes to element N101:
MF, LG, CS, ZZ*

ISA Interchange Control Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use
		Description: Code to identify the type of information in the Authorization Information All valid standard codes are used.				
ISA02	I02	Authorization Information	M	AN	10/10	Must use
		Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)				
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use
		Description: Code to identify the type of information in the Security Information All valid standard codes are used.				
ISA04	I04	Security Information	M	AN	10/10	Must use
		Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)				
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	Must use
		Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.				
ISA06	I06	Interchange Sender ID	M	AN	15/15	Must use
		Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element				
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	Must use
		Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified				
		<u>Code</u>	<u>Name</u>			
		12	Phone (Telephone Companies)			
			Buyer Usage:			
			<i>"12" is the Production ID Qualifier</i>			
		ZZ	Mutually Defined			
			Buyer Usage:			
			<i>"ZZ" is the Test ID Qualifier</i>			
ISA08	I07	Interchange Receiver ID	M	AN	15/15	Must use
		Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them				
		Buyer Usage: 8472722888 - Production ID 8472722888T - Test ID				
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 for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.				
ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use
		Description: Code specifying the version number of the interchange control segments All valid standard codes are used.				
ISA13	I12	Interchange Control Number	M	N0	9/9	Must use
		Description: A control number assigned by the interchange sender				
ISA14	I13	Acknowledgment Requested	M	ID	1/1	Must use
		Description: Code sent by the sender to request an interchange acknowledgment (TA1) All valid standard codes are used.				
ISA15	I14	Usage Indicator	M	ID	1/1	Must use
		Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.				
ISA16	I15	Component Element Separator	M		1/1	Must use
		Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator				

Example:

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ISA^00^  ^00^  ^01^123456789  ^12^8472722888  ^070602^1339^U^00401^000000310^0^P^|
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GS Functional Group Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

<u>Code</u>	<u>Name</u>
SH	Ship Notice/Manifest (856)

GS02	142	Application Sender's Code	M	AN	2/15	Must use
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Description: Code identifying party sending transmission; codes agreed to by trading partners

GS03	124	Application Receiver's Code	M	AN	2/15	Must use
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Description: Code identifying party receiving transmission; codes agreed to by trading partners

Buyer Usage: You should return the GS ID as sent in the original 850 GS02 element.

It is possible for you to receive multiple IDs over a range of purchase orders from us. Each purchase order will belong to only one GS ID.

Here are the possible GS IDs:

"CRATEDOMES" - Crate and Barrel Domestic
 "CRATEDOMREP" - Crate and Barrel Domestic Rep
 "EUROMDESIG" - Crate and Barrel International
 "EUROMDESAGT" - Crate and Barrel International Agent
 "CRATECUST" - Crate and Barrel Custom

"CB2DOMES" - CB2 Domestic
 "CB2DOMREP" - CB2 Domestic Rep
 "CB2INTL" - CB2 International
 "CB2INTLAGT" - CB2 International Agent

"CRATECANADA" - Crate and Barrel Canada
 "CRATECANREP" - Crate and Barrel Canada Rep

"LONODDOMES" - Land of Nod Domestic
 "LONODDOMREP" - Land of Nod Domestic Rep
 "LONODMBRK" - Land of Nod International
 "LONODMBAGT" - Land of Nod International Agent
 "LONODCUST" - Land of Nod Custom

GS04	373	Date	M	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

GS05	337	Time	M	TM	4/8	Must use
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Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

GS06	28	Group Control Number	M	N0	1/9	Must use
------	----	-----------------------------	---	----	-----	----------

Description: Assigned number originated and maintained by the sender

GS07	455	Responsible Agency Code	M	ID	1/2	Must use
Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480						
All valid standard codes are used.						
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use
Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed						
		<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.

Example:

```
GS^SH^123456789^CRATEDOMES^070602^1339^101^X^004010
```

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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Must use
Description: Code uniquely identifying a Transaction Set All valid standard codes are used.						
ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

Semantics:

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

Example:

ST^856^1234

BSN Beginning Segment for Ship Notice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

User Option (Usage): Must use

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

Element Summary:

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

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^00^81307151^20070305^06321115

DTM Date/Time Reference

Pos: 040	Max: 10
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

Code	Name
011	Shipped

DTM02	373	Date	X	DT	8/8	Must use
-------	-----	------	---	----	-----	----------

Description: Date expressed as CCYYMMDD

DTM03	337	Time	X	TM	4/8	Used
-------	-----	------	---	----	-----	------

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)

Buyer Usage: Recommended if DTM_01 = "011"

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.

Buyer Usage:

Buyer requires DTM Segment with DTM_01 = "011".

Example:

DTM^011^20070305^06150422

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	Id	Segment Name	Req	Max Use	Repeat	Usage
010	HL	Hierarchical Level	M	1		Must use
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
130	TD3	Carrier Details (Equipment)	O	12		Used
150	REF	Reference Identification	O	>1		Used
200	DTM	Date/Time Reference	O	10		Used
210	FOB	F.O.B. Related Instructions	O	1		Used
220		Loop N1	O		200	Used
010		Loop HL	M		200000	Must use

Example:

```

HL^1^S
TD1^CTN90^8
TD5^2^ZCSU^M^CENTRAL STATES TRUCKING^CD
TD3^TL^DOLT^2398734223^012002348703719
REF^BM^ZPUD5498754
REF^IRN^Importer Ref Ltr of Credit
DTM^161^20070308
FOB^DF^KL^Saratoga, NY^PB^Naperville, IL
N1^ST^CRATE and BARREL^92^191
N1^SF^PANS FOR THE WORLD^92^999999
PER^IC^Joe in Shipping^TE^1-999-555-1212
N1^LG^PANS FOR THE WORLD
N3^1758 Mockingbird Lane^17th Ave west Hwy
N4^Northbrook^IL^60062^US
N1^MF^PANS R US
N3^1701 18th Street^Highview Terrace
N4^Northbrook^IL^60062^US
N1^MF^Bobs Pans
N3^1855 North Lake^Hwy 15
N4^Northbrook^IL^60062^US
N1^CS^Consolidators R US
N3^2101 Oak Street
N4^Northbrook^IL^60062^US
N1^ZZ^Freight Bookers R US
N3^2101 80th Street^Industrial Park
N4^Northbrook^IL^60062^US

```

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

Example:

HL^1^MS

TD1 Carrier Details (Quantity and Weight)

Pos: 110	Max: 20
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD101	103	Packaging Code	O	AN	3/5	Used
Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required						
		<u>Code</u>	<u>Name</u>			
		BAG90	Bag, Standard			
		BAL90	Bale, Standard			
		CRT90	Crate, Standard			
		CTN90	Carton, Standard			
		PLT90	Pallet, Standard			
		TRY90	Tray, Standard			
		WRP90	Wrapped, Standard			
TD102	80	Lading Quantity	X	N0	1/7	Used
Description: Number of units (pieces) of the lading commodity Buyer Usage: Total Number of shipping units (e.g. cartons or bags) for the shipment.						

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.

Buyer Usage:

Only one TD1 segment should be sent at the Shipment level.

Example:

There are eight cartons for this ASN:

TD1^CTN90^8

--- or ---

There are 10 bags (e.g. rugs) for this ASN:

TD1^BAG90^10

TD5 Carrier Details (Routing Sequence/Transit Time)

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

User Option (Usage): Used

Purpose: 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>
TD502	66	Identification Code Qualifier	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		<u>Code</u>		<u>Name</u>		
		2		Standard Carrier Alpha Code (SCAC)		
TD503	67	Identification Code	X	AN	2/80	Used
		Description: Code identifying a party or other code				
TD504	91	Transportation Method/Type Code	X	ID	1/2	Used
		Description: Code specifying the method or type of transportation for the shipment				
		<u>Code</u>		<u>Name</u>		
		A		Air		
		M		Motor (Common Carrier)		
		O		Containerized Ocean		
		R		Rail		
		T		Best Way (Shippers Option)		
		U		Private Parcel Service		
		AE		Air Express		
		LT		Less Than Trailer Load (LTL)		
		RR		Roadrailer		
				Description: Used for shipments that travel by roadrailer, i.e., a multimodal rail/highway trailer		
		ZZ		Mutually defined		
TD505	387	Routing	X	AN	1/35	Used
		Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity				
		Buyer Usage: Carrier Name				
TD506	368	Shipment/Order Status Code	X	ID	2/2	Used
		Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction				
		<u>Code</u>		<u>Name</u>		
		CD		Consolidated Freight		
				Buyer Usage:		
				Send this code if another company is going to place your product into the final container - it is going to be consolidated with other shipments. It is very important to notify us of this condition if it is an international shipment to the U.S. being made via an ocean vessel.		

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^ZCSU^M^CENTRAL STATES TRUCKING^CD

TD3 Carrier Details (Equipment)

Pos: 130	Max: 12
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used

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

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	X	ID	2/2	Used
Description: Code identifying type of equipment used for shipment						
		<u>Code</u>		<u>Name</u>		
		AF		Air Freight (Break Bulk)		
		TL		Trailer (not otherwise specified)		
		VE		Vessel, Ocean		
TD302	206	Equipment Initial	O	AN	1/4	Used
Description: Prefix or alphabetic part of an equipment unit's identifying number						
TD303	207	Equipment Number	X	AN	1/10	Used
Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)						
TD309	225	Seal Number	O	AN	2/15	Used
Description: Unique number on seal used to close a shipment						

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^DOLT^2398734223^012002348703719
```

REF Reference Identification

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

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

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

Description: Code qualifying the Reference Identification

Code Name

2I Tracking Number

Buyer Usage:

Any standard or proprietary carrier reference number other than the Bill of Lading Number (use code BM) or the PRO number (use code CN).

BM Bill of Lading Number

Buyer Usage:

Bill of Lading Number is required by buyer.

CN Carrier's Reference Number (PRO/Invoice)

TF Transfer Number

IRN Importer's Reference Number to Letter of Credit

Description: *Letter of credit reference number issued by buyer; cross-references the bank's letter of credit number, once assigned*

REF02	127	Reference Identification	X	AN	1/30	Used
-------	-----	--------------------------	---	----	------	------

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

Syntax Rules:

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

Semantics:

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

Buyer Usage:

Buyer requires REF segment with REF_01 = "BM". Others are optional.

Example:

REF^BM^ZPUD5498754

REF^IRN^SVB00IS

DTM Date/Time Reference

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

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

<u>Code</u>	<u>Name</u>
161	Loaded on Vessel

Buyer Usage:

Date that goods are loaded at the Port of Loading or on a domestic truck.

DTM02	373	Date	X	DT	8/8	Used
-------	-----	------	---	----	-----	------

Description: Date expressed as CCYYMMDD

Syntax Rules:

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

Example:

DTM^161^20070308

FOB F.O.B. Related Instructions

Pos: 210	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

User Option (Usage): Used

Purpose: To specify transportation instructions relating 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>
FOB01	146	Shipment Method of Payment	M	ID	2/2	Must use
Description: Code identifying payment terms for transportation charges						
		<u>Code</u>		<u>Name</u>		
		DF		Defined by Buyer and Seller		
FOB02	309	Location Qualifier	X	ID	1/2	Used
Description: Code identifying type of location						
		<u>Code</u>		<u>Name</u>		
		KL		Port of Loading		
FOB03	352	Description	O	AN	1/80	Used
Description: A free-form description to clarify the related data elements and their content						
FOB06	309	Location Qualifier	X	ID	1/2	Used
Description: Code identifying type of location						
		<u>Code</u>		<u>Name</u>		
		PB		Port of Discharge		
		Description: Port where shipment is unloaded				
FOB07	352	Description	O	AN	1/80	Used
Description: A free-form description to clarify the related data elements and their content						

Syntax Rules:

1. C0302 - If FOB03 is present, then FOB02 is required.
2. C0405 - If FOB04 is present, then FOB05 is required.
3. C0706 - If FOB07 is present, then FOB06 is required.
4. C0809 - If FOB08 is present, then FOB09 is required.

Semantics:

1. FOB01 indicates which party will pay the carrier.
2. FOB02 is the code specifying transportation responsibility location.
3. FOB06 is the code specifying the title passage location.
4. FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and FOB06/FOB07.

Example:

International Shipment Example:

FOB^DF^KL^HAMBURG, GERMANY^^PB^New Jersey, NJ

Domestic Shipment Example:

FOB^DF^KL^Saratoga, NY^^PB^Naperville, IL

Loop Name

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

User Option (Usage): Used

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
220	N1	Name	O	1		Used
240	N3	Address Information	O	2		Used
250	N4	Geographic Location	O	1		Used
270	PER	Administrative Communications Contact	O	3		Used

Example:

```

N1^ST^CRATE and BARREL^92^191
N1^SF^PANS FOR THE WORLD^92^999999
PER^IC^Joe in Shipping^TE^1-999-555-1212
N1^LG^PANS FOR THE WORLD
N3^1758 Mockingbird Lane^17th Ave west Hwy
N4^Northbrook^IL^60062^US
N1^MF^PANS R US
N3^1701 18th Street^Highview Terrace
N4^Northbrook^IL^60062^US
N1^MF^Bobs Pans
N3^1855 North Lake^Hwy 15
N4^Northbrook^IL^60062^US
N1^CS^Consolidators R US
N3^2101 Oak Street
N4^Northbrook^IL^60062^US
N1^ZZ^Freight Bookers R US
N3^2101 80th Street^Industrial Park
N4^Northbrook^IL^60062^US

```

N1**Name**

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

User Option (Usage): Used**Purpose:** To identify a party by type of organization, name, and code**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual**Code** **Name**

CS Consolidator

Buyer Usage:*This is the name and address of the consolidator of your shipment.*

LG Location of Goods

Buyer Usage:*"LG" is required for all shipments coming to the United States via an Ocean Shipment (Air shipments are excluded as well as truck or rail from Canada or Mexico).**This should include the name of who stuffed the goods into the container and where the container was loaded. This could be either your factory or another company/location.*

MF Manufacturer of Goods

Buyer Usage:*This would be the name and address of who the final manufacturer of the product is.*

SF Ship From

ST Ship To

ZZ Mutually Defined

Buyer Usage:*Used to define the name and address for a "Booking Party" - company name and address of who booked the shipment on your behalf.*

N102	93	Name	X	AN	1/60	Used
------	----	------	---	----	------	------

Description: Free-form name

N103	66	Identification Code Qualifier	X	ID	1/2	Used
------	----	-------------------------------	---	----	-----	------

Description: Code designating the system/method of code structure used for Identification Code (67)**Code** **Name**

92 Assigned by Buyer or Buyer's Agent

N104	67	Identification Code	X	AN	2/80	Used
------	----	---------------------	---	----	------	------

Description: Code identifying a party or other code**Buyer Usage:** When N1_01 = ST the buyer's warehouse number is sent in N1_04.*This must match N1_04 from the original PO 850 where N1_01 = "ST" within the N1 loop (Pos: 310))**When N1_01 = SF the suppliers internal code for the ship from location is sent in N1_04.***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^CRATE and BARREL^92^191
N1^SF^PANS FOR THE WORLD^92^999999
N1^MF^PANS R US
N3^1701 18th Street^Highview Terrace
N4^Northbrook^IL^60062^US
N1^MF^Bobs Pans
N3^1855 North Lake^Hwy 15
N4^Northbrook^IL^60062^US

We only expect one entry for the ST (Ship To) and SF (Ship From).

There can be multiple addresses for the other types.

For example:

You should send all manufactures for the products being shipped. If you are sending two items and they are manufactured by two different companies then we would expect two MF entries.

The Manufacturer is the most likely party type to have multiple entries but the others are set up to handle this scenario if it is needed.

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>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	M	AN	1/55	Must use

Description: Address information

Buyer Usage: Only the First 30 characters should be used - any characters after that will be ignored.

N302	166	Address Information	O	AN	1/55	Used
------	-----	---------------------	---	----	------	------

Description: Address information

Buyer Usage: Only the First 30 characters should be used - any characters after that will be ignored.

Example:

N1^MF^PANS R US

N3^1701 18th Street^Highview Terrace

N4^Northbrook^IL^60062^US

N1^MF^Bobs Pans

N3^1855 North Lake^Hwy 15

N4^Northbrook^IL^60062^US

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>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name	O	AN	2/30	Used
Description: Free-form text for city name Buyer Usage: Only the first 35 characters should be used - any characters after 35 will be ignored.						
N402	156	State or Province Code	O	ID	2/2	Used
Description: Code (Standard State/Province) as defined by appropriate government agency Buyer Usage: This should either be a US state code or Country Sub-Entity code. Valid values are found at: http://www.unece.org/cefact/locode/service/sublocat.htm Only 2 characters for a Country Sub-Entity code can be sent. Leave blank if your sub-country code is 3 characters.						
N403	116	Postal Code	O	ID	3/15	Used
Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)						
N404	26	Country Code	O	ID	2/3	Used
Description: Code identifying the country Buyer Usage: The international Standards Organization (ISO) 2 alpha country code.						

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.

Example:

```

N1^MF^PANS R US
N3^1701 18th Street^Highview Terrace
N4^Northbrook^IL^60062^US
N1^MF^Bobs Pans
N3^1855 North Lake^Hwy 15
N4^Northbrook^IL^60062^US
  
```

PER Administrative Communications Contact

Pos: 270	Max: 3
Detail - Optional	
Loop: N1	Elements: 8

User Option (Usage): Used

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

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>
PER01	366	Contact Function Code	M	ID	2/2	Must use
Description: Code identifying the major duty or responsibility of the person or group named						
		<u>Code</u>			<u>Name</u>	
		IC			Information Contact	
PER02	93	Name	O	AN	1/60	Used
Description: Free-form name						
PER03	365	Communication Number Qualifier	X	ID	2/2	Used
Description: Code identifying the type of communication number						
		<u>Code</u>			<u>Name</u>	
		EM			Electronic Mail	
		FX			Facsimile	
		TE			Telephone	
PER04	364	Communication Number	X	AN	1/80	Used
Description: Complete communications number including country or area code when applicable						
PER05	365	Communication Number Qualifier	X	ID	2/2	Used
Description: Code identifying the type of communication number						
		<u>Code</u>			<u>Name</u>	
		EM			Electronic Mail	
		FX			Facsimile	
		TE			Telephone	
PER06	364	Communication Number	X	AN	1/80	Used
Description: Complete communications number including country or area code when applicable						
PER07	365	Communication Number Qualifier	X	ID	2/2	Used
Description: Code identifying the type of communication number						
		<u>Code</u>			<u>Name</u>	
		EM			Electronic Mail	
		FX			Facsimile	
		TE			Telephone	
PER08	364	Communication Number	X	AN	1/80	Used
Description: Complete communications number including country or area code when applicable						

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.

3. P0708 - If either PER07 or PER08 is present, then the other is required.

Buyer Usage:

Shipping Department contact is advised when N101 = "SF" and Not Used when N101 = "ST".

Example:

PER^C^Joe in Shipping^TE^1-999-555-1212

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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level	M	1		Must use
050	PRF	Purchase Order Reference	O	1		Used
150	REF	Reference Identification	M	>1		Must use
010		Loop HL	M		200000	Must use

Example:

```
HL^2^1^O
PRF^2414657
REF^IA^999999
```

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

Example:

HL^2^1^O

PRF Purchase Order Reference

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

User Option (Usage): Used

Purpose: To provide reference to a specific purchase order

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PRF01	324	Purchase Order Number	M	AN	1/22	Must use

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

Buyer Usage: *Must match BEG03 of corresponding 850 Purchase Order*

Semantics:

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

Example:

PRF^8884657

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>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use
Description: Code qualifying the Reference Identification						
		<u>Code</u>		<u>Name</u>		
		IA		Internal Vendor Number		
REF02	127	Reference Identification	M	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.

Semantics:

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

Example:

Buyer requires this be sent. It must match what was sent in the original 850 transaction element REF_02 where REF_01 = "IA"

REF^IA^1234567

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	Id	Segment Name	Req	Max Use	Repeat	Usage
010	HL	Hierarchical Level	M	1		Must use
020	LIN	Item Identification	O	1		Must use
030	SN1	Item Detail (Shipment)	O	1		Used
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
200	DTM	Date/Time Reference	O	10		Must use
010		Loop HL	M		200000	Must use

Example:

```
HL^3^2^I
LIN^^PL^1^IN^576050
SN1^^805^EA
TD1^CTN90^8^^G^2500^LB
TD1^CTN90^8^^N^2220^LB
TD1^PLT90^2
TD5^^^^^CC
DTM^068^20070305
```

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

Comments:

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

Example:

HL^3^2^1

LIN Item Identification

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

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use

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

Code	Name
PL	Purchaser's Order Line Number

Buyer Usage:

Original PO Line Item Number required by Buyer. Must match PO1_01 from 850.

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

Description: Identifying number for a product or service

LIN04	235	Product/Service ID Qualifier	X	ID	2/2	Must use
-------	-----	------------------------------	---	----	-----	----------

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

Code	Name
IN	Buyer's Item Number

Buyer Usage:

6 digit SKU number

LIN05	234	Product/Service ID	X	AN	1/48	Must use
-------	-----	--------------------	---	----	------	----------

Description: Identifying number for a product or service

LIN06	235	Product/Service ID Qualifier	X	ID	2/2	Used
-------	-----	------------------------------	---	----	-----	------

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

Code	Name
VN	Vendor's (Seller's) Item Number

LIN07	234	Product/Service ID	X	AN	1/48	Used
-------	-----	--------------------	---	----	------	------

Description: Identifying number for a product or service

Syntax Rules:

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.

- 13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
- 14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

Semantics:

- 1. LIN01 is the line item identification

Comments:

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

Example:

LIN^PL^1^IN^576050^VN^7618-AZ

SN1 Item Detail (Shipment)

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

User Option (Usage): Used

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

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:

SN1^805^EA

TD1 Carrier Details (Quantity and Weight)

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

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD101	103	Packaging Code	O	AN	3/5	Used
Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required						
		<u>Code</u>		<u>Name</u>		
		BAG90		Bag, Standard		
		BAL90		Bale, Standard		
		CRT90		Crate, Standard		
		CTN90		Carton, Standard		
		PLT90		Pallet, Standard		
		TRY90		Tray, Standard		
		WRP90		Wrapped, Standard		
TD102	80	Lading Quantity	X	N0	1/7	Used
Description: Number of units (pieces) of the lading commodity						
TD106	187	Weight Qualifier	O	ID	1/2	Used
Description: Code defining the type of weight						
		<u>Code</u>		<u>Name</u>		
		G		Gross Weight		
		N		Actual Net Weight		
TD107	81	Weight	X	R	1/10	Used
Description: Numeric value of weight						
TD108	355	Unit or Basis for Measurement Code	X	ID	2/2	Used
Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken						
		<u>Code</u>		<u>Name</u>		
		KG		Kilogram		
		LB		Pound		

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.

Buyer Usage:

TD1 segment can occur up to 3 times.

Buyer requires both Gross and Net weight. For the non-pallet shipping unit (e.g. carton, bag, etc.), send one occurrence with TD106 = "G" and the second with TD106 = "N". Weight Unit of Measure must be the same for both.

If applicable, a third TD1 segment may be sent to report the number of pallets (TD101 = "PLT90"); weight is not reported on this occurrence.

Example:

TD1^CTN90^9^^^G^2500^LB
TD1^CTN90^9^^^N^2220^LB

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 120	Max: 12
Detail - Optional	
Loop: HL	Elements: 1

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD506	368	Shipment/Order Status Code	X	ID	2/2	Used

Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction

Code	Name
CC	Shipment Complete on (Date)

Buyer Usage:

Indicates final shipment for Line Item.

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.

Buyer Usage:

Only send segment if TD5_06 = "CC".

This segment will indicate final shipment for Line Item.

Example:

TD5~~~~~CC

DTM Date/Time Reference

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

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

<u>Code</u>	<u>Name</u>
068	Current Schedule Ship

Buyer Usage:

Required by buyer. Current scheduled shipment date from the most recent purchase order acknowledgment.

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.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

Buyer Usage:

A DTM segment with the most recent PO acknowledgment date is required by the buyer.

Example:

DTM^068^20070305

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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	HL	Hierarchical Level	M	1		Must use
060	PO4	Item Physical Details	O	1		Used
190	MAN	Marks and Numbers	O	>1		Used

Example:

This depicts a range of cartons/containers on a pallet:

```
HL^4^3^P
PO4^100
MAN^W^0000074860075232455
MAN^GM^00000340860075232495^00000340860075232557
```

OR

Individual carton/containers on a pallet

```
HL^4^3^P
PO4^100
MAN^W^0000074860075232455
MAN^GM^00000340860075322495
MAN^GM^00000340860075322502
MAN^GM^00000340860075322546
MAN^GM^00000340860075322557
```

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

Example:

HL^4^3^P

PO4 Item Physical Details

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

User Option (Usage): Used

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

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	O	N0	1/6	Used

Description: The number of inner containers, or number of eaches if there are no inner containers, per outer container

Buyer Usage: *Quantity per carton/container and applies to all containers referenced in the following MAN segment(s) for this pack level.*

If a container is sent with a different container quantity, a new Pack level should be created.

Syntax Rules:

1. PO203 - If either PO402 or PO403 is present, then the other is required.
2. C0506 - If PO405 is present, then PO406 is required.
3. P0607 - If either PO406 or PO407 is present, then the other is required.
4. P0809 - If either PO408 or PO409 is present, then the other is required.
5. C1013 - If PO410 is present, then PO413 is required.
6. C1113 - If PO411 is present, then PO413 is required.
7. C1213 - If PO412 is present, then PO413 is required.
8. L13101112 - If PO413 is present, then at least one of PO410, PO411 or PO412 is required.
9. C1716 - If PO417 is present, then PO416 is required.
10. C1804 - If PO418 is present, then PO404 is required.

Semantics:

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

Comments:

1. PO403 - The "Unit or Basis for Measure Code" in this segment position is for purposes of defining the pack (PO401) /size (PO402) measure which indicates the quantity in the inner pack unit. For example: If the carton contains 24 12-Ounce packages, it would be described as follows: Data element 356 = "24"; Data element 357 = "12"; Data element 355 = "OZ".
2. PO413 defines the unit of measure for PO410, PO411, and PO412.

Example:

PO4^100

MAN Marks and Numbers

Pos: 190	Max: >1
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

Purpose: To indicate identifying marks and numbers for shipping containers

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	Must use

Description: Code specifying the application or source of Marks and Numbers (87)

Code	Name
W	Pallet Number
GM	SSCC-18 and Application Identifier

Buyer Usage:

If carton/containers are palletized:

UCC/EAN-128 Serial Shipping Container Code (SSCC-18) for the pallet

Buyer Usage:

UCC/EAN-128 Serial Shipping Container Code (SSCC-18) for each carton/container.

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
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Description: Marks and numbers used to identify a shipment or parts of a shipment

MAN03	87	Marks and Numbers	O	AN	1/48	Used
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Description: Marks and numbers used to identify a shipment or parts of a shipment

Syntax Rules:

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

Semantics:

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

Comments:

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

Example:

This depicts a range of cartons/containers on a pallet:

MAN^W^01100014480000001656

MAN^GM^00000340860075232455^00000340860075232488

This depicts two cartons/containers that are not palletized:

MAN^GM^00000340860075322495

MAN^GM^00000340860075322502

CTT Transaction Totals

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

User Option (Usage): Used

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

Element Summary:

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

Description: Total number of line items in the transaction set

Buyer Usage: *Total number of HL Segments in 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^5

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>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments	M	N0	1/10	Must use
Description: Total number of segments included in a transaction set including ST and SE segments						
SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

Comments:

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

Example:

SE^35^1234

GE Functional Group Trailer

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

Semantics:

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

Comments:

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

Example:

GE^1^101

IEA Interchange Control Trailer

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

Example:

IEA^1^000000310

Example to Demonstrate SOIP Structure Capabilities

Please refer to your Vendor Operations Guide for up to date shipping requirements.

This example depicts 1 pallet with 8 cartons of SKU 576-050.

All together there are 805 pieces being shipped:

7 cartons each have 100 pieces

-- and --

1 carton has 105 pieces

HL^1^^S
 TD1^CTN90^8
 TD5^2^ZCSU^M^CENTRAL STATES TRUCKING
 TD3^TL^DOLT^2398734223^012002348703719
 REF^BM^ZPUD5498754
 REF^IRN^Importer Ref Ltr of Credit
 DTM^161^20070308
 FOB^DF^KL^Saratoga, NY^^PB^Naperville, IL
 N1^ST^CRATE and BARREL^92^191
 N1^SF^PANS FOR THE WORLD^92^999999
 N1^LG^PANS FOR THE WORLD
 N3^1758 Mockingbird Lane^17th Ave west Hwy
 N4^Northbrook^IL^60062^US
 N1^MF^PANS R US
 N3^1701 18th Street^Highview Terrace
 N4^Northbrook^IL^60062^US
 N1^MF^Bobs pans
 N3^1855 North Lake^Hwy 15
 N4^Northbrook^IL^60062^US
 N1^CS^Consolidators R US
 N3^2101 Oak Street
 N4^Northbrook^IL^60062^US
 N1^ZZ^Freight Bookers R US
 N3^2101 80th Street^Industrial Park
 N4^Northbrook^IL^60062^US
 PER^IC^Joe in Shipping^TE^1-999-555-1212
 N1^ST^CRATE and BARREL^92^499

HL^2^1^O
PRF^2414657
REF^IA^999999
HL^3^2^I
LIN^PL^1^IN^576050
SN1^805^EA
TD1^CTN90^8^G^2500^LB
TD1^CTN90^8^N^2220^LB
TD5^CC
DTM^068^20070305
HL^4^3^P
PO4^100
MAN^W^0000074860075232455
MAN^GM^00000340860075232455
MAN^GM^00000340860075232466
MAN^GM^00000340860075232477
MAN^GM^00000340860075232488
MAN^GM^00000340860075322495
MAN^GM^00000340860075322502
MAN^GM^00000340860074989057
HL^5^3^P
PO4^105
MAN^W^0000074860075232455
MAN^GM^00000340860074989046

