(Your Logo Here)

Boscov's Department Stores

Electronic Data Interchange

856 - Ship Notice/Manifest (VICS Version - 4010)

February 2001

Powered By:



Purpose

This document provides detailed guidelines and conventions for implementing electronic ship notice/manifests with Boscov's Department Stores. Our 856 Ship Notice Manifest, as detailed in this document, will provide you with all of the information necessary to fill our requirements.

These guidelines comply with published VICS standards for EDI version 4010 for all data elements and segments.

Mandatory segments and elements are always required on every document. Optional segments and elements that are required by Boscov's Department Stores are marked as "Must Use". Segment usage is marked at the top of each page under Usage. Element usage is marked in the far-left column beside each element. If the column is blank, the element is optional. Information in the Attributes column is from the VICS standards and is provided for reference only. Trading Partners must adhere to our requirements as indicated by "Must Use".

Business Rules

Contacts

Transaction Testing: QRS Corporation 1-800-872-8255 Select Option 2, Option 2 again, then Option 1.

Production Support: QRS Corporation 1-800-872-8255 Select Option 2, Option 1, then Option 1 again.

Boscov's Department Stores:

Communication IDs

Testing

S/R ID:

Account/User ID:

VAN:

Production

S/R ID: 01/014492501 Account/User ID: QRS4/ELINKP VAN: AT&T Global Network Services

Delimiters

Element Separator - "*"

(HEX "2A" in ASCII) (HEX "5C" in EBCDIC)

Component (Sub Element) Separator - ">"

(HEX "3E" in ASCII) (HEX "6E" in EBCDIC)

Segment Terminator - "~"

(HEX "7E" in ASCII) (HEX "A1" in EBCDIC)

Need an EDI Solution?

We have selected QRS Corporation to administer our EDI operations and to enable our trading partners. For those trading partners who do not trade documents electronically, QRS offers a number of electronic commerce solutions to assist you.

For Service Bureau, call 1-800-872-8255. Select Option 2, then Option 3.

For all other solutions, call 1-800-872-8255. Select Option 1, then Option 4.

Boscov's Department Stores 856 Ship Notice/Manifest

Functional Group ID=SH

Introduction:

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.

Envelope:

Page	Pos.	Seg.		Req.		Loop	Notes and
No.	No.	ID	<u>Name</u>	Des.	Max.Use	Repeat	Comments
6-7	010	ISA	Interchange Control Header	M	1	_	
8	020	GS	Functional Group Header	M	1		

Heading:

Page	Pos.	Seg.		Req.		Loop	Notes and
No.	No.	ID	Name	Des.	Max.Use	Repeat	Comments
9	010	ST	Transaction Set Header	M	1		
10	020	BSN	Beginning Segment for Ship Notice	M	1		

Detail:

Page No.	Pos. No.	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - HL			200000	2 2 3 3 3 3
11	010	HL	Hierarchical Level - Shipment	M	1		c1
12	110	TD1	Carrier Details (Quantity and Weight)	O	20		
13-14	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
15	130	TD3	Carrier Details (Equipment)	O	12		
16	150	REF	Reference Identification	O	>1		
17	200	DTM	Date/Time Reference	O	10		
18	210	FOB	F.O.B. Related Instructions	O	1		
			LOOP ID - N1			200	
19	220	N1	Name	О	1		
20	240	N3	Address Information	O	2		
21	250	N4	Geographic Location	О	1		
			LOOP ID - HL			200000	
22	010	HL	Hierarchical Level - Order	M	1		
23	050	PRF	Purchase Order Reference	O	1		
24	150	REF	Reference Identification	O	>1		
			LOOP ID - N1			200	
25	220	N1	Name	O	1		
			LOOP ID - HL			200000	
26	010	HL	Hierarchical Level - Tare	M	1		
27	145	TSD	Trailer Shipment Details	O	1		

O

1

Summary:

060

PO4

Item Physical Details

Page	Pos.	Seg.		Req.		Loop	Notes and
No.	No.	<u>ID</u>	<u>Name</u>	Des.	Max.Use	Repeat	Comments
37	010	CTT	Transaction Totals	O	1		
38	020	SE	Transaction Set Trailer	M	1		

Envelope:

Page	Pos.	Seg.		Req.		Loop	Notes and
No.	No.	<u>ID</u>	<u>Name</u>	Des.	Max.Use	Repeat	Comments
39	030	GE	Functional Group Trailer	M	1		
40	040	IEA	Interchange Control Trailer	M	1		

Transaction Set Notes

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

Transaction Set Comments

1. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Segment: ISA Interchange Control Header

Position: 010

Loop: Level:

Usage: Mandatory

Max Use: 1

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

related control segments

Syntax Notes: Semantic Notes: Comments:

	D 6	D (Data Element Summary		
	Ref.	Data	N 7		
	Des.	Element	Name	_	<u>ributes</u>
Must Use	ISA01	I01	Authorization Information Qualifier		ID 2/2
			Code to identify the type of information in the Authorization		
			No Authorization Information Present (1	No M	leaningful
			Information in IO2)		
Must Use	ISA02	I02	Authorization Information	M	AN 10/10
			Information used for additional identification or authorization	ı of tl	ne
			interchange sender or the data in the interchange; the type of	infor	mation is set
			by the Authorization Information Qualifier (I01)		
			" 10 blank spaces		
Must Use	ISA03	I03	Security Information Qualifier	M	ID 2/2
			Code to identify the type of information in the Security Information	natio	n
			No Security Information Present (No Mo	eanin	gful
			Information in IO4)		
Must Use	ISA04	I04	Security Information	\mathbf{M}	AN 10/10
			This is used for identifying the security information about the	inte	change
			sender or the data in the interchange; the type of information	is set	by the
			Security Information Qualifier (I03)		·
			" 10 blank spaces		
Must Use	ISA05	105	Interchange ID Qualifier	M	ID 2/2
			Qualifier to designate the system/method of code structure us	ed to	designate the
			sender or receiver ID element being qualified		C
			Refer to 004010 Data Element Dictionary for acceptable code	e valu	ies.
Must Use	ISA06	106	Interchange Sender ID	M	AN 15/15
			Identification code published by the sender for other parties to	o use	as the
			receiver ID to route data to them; the sender always codes thi		
			sender ID element		
Must Use	ISA07	105	Interchange ID Qualifier	M	ID 2/2
			Qualifier to designate the system/method of code structure us	ed to	designate the
			sender or receiver ID element being qualified		
			01 Duns (Dun & Bradstreet)		
Must Use	ISA08	107	Interchange Receiver ID	M	AN 15/15
			Identification code published by the receiver of the data; Whe	en ser	nding, it is
			used by the sender as their sending ID, thus other parties send	ling t	o them will
			use this as a receiving ID to route data to them	_	
			Boscov's Department Stores ID is "014492501"		
Must Use	ISA09	108	Interchange Date	M	DT 6/6
			Date of the interchange		
Must Use	ISA10	109	Interchange Time	M	TM 4/4
			Time of the interchange		
Must Use	ISA11	I10	Interchange Control Standards Identifier	M	ID 1/1
			Code to identify the agency responsible for the control standa	rd us	
			message that is enclosed by the interchange header and trailer		•
			U U.S. EDI Community of ASC X12, TD0		nd UCS
			· · · · · · · · · · · · · · · · · · ·		

02/14/01

					02/14/01			
Must Use	ISA12	I11	Interchange Control Version Number	M	ID 5/5			
			This version number covers the interchange control segment	S				
			00401 Draft Standards for Trial Use Approved	d for F	Publication by			
			ASC X12 Procedures Review Board th	rough	October			
			1997					
Must Use	ISA13	I12	Interchange Control Number	M	N0 9/9			
			A control number assigned by the interchange sender					
Must Use	ISA14	I13	Acknowledgment Requested	M	ID 1/1			
			Code sent by the sender to request an interchange acknowled	lgmen	t (TA1)			
			0 No Acknowledgment Requested					
Must Use	ISA15	I14	Usage Indicator	M	ID 1/1			
			Code to indicate whether data enclosed by this interchange e	nvelo	pe is test,			
			production or information		•			
			P Production Data					
			T Test Data					
Must Use	ISA16	I15	Component Element Separator	M	AN 1/1			
			Type is not applicable; the component element separator is a	delin	niter and not a			
			data element; this field provides the delimiter used to separa	te con	nponent data			
			elements within a composite data structure; this value must be differ					
			data element separator and the segment terminator					
			> The value identified for retail use					

Segment: GS Functional Group Header

Position: 020

Loop: Level:

Usage: Mandatory

Max Use:

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

Syntax Notes:

Semantic Notes: 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:

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.

	Ref.	Data	Data Diement Summary			
	Des.	Element	Name	Attr	<u>ibutes</u>	
Must Use	GS01	479	Functional Identifier Code	M	ID 2/2	
			Code identifying a group of application related transaction set	is		
			SH Ship Notice/Manifest (856)			
Must Use	GS02	142	Application Sender's Code	M	AN 2/15	
			Code identifying party sending transmission; codes agreed to	by tra	ading	
			partners			
Must Use	GS03	124	Application Receiver's Code	M	AN 2/15	
			Code identifying party receiving transmission; codes agreed to	o by	trading	
			partners			
			Boscov's Department Stores ID is "014492501"			
Must Use	GS04	373	Date	M	DT 8/8	
			Date expressed as CCYYMMDD			
Must Use	GS05	337	Time	M	TM 4/8	
			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 (00-59) and DD = decima			
3.5	GG0.6	•0	expressed as follows: $D = tenths (0-9)$ and $DD = hundredths (0-9)$			
Must Use	GS06	28	Group Control Number	M	N0 1/9	
March IIaa	CC07	455	Assigned number originated and maintained by the sender	M	ID 1/2	
Must Use	GS07	455	Responsible Agency Code Code yeard in conjugation with Data Flamont 480 to identify to	M	ID 1/2	
			Code used in conjunction with Data Element 480 to identify the standard	ne iss	suer of the	
			X Accredited Standards Committee X12			
Must Use	GS08	480	Version / Release / Industry Identifier Code	M	AN 1/12	
Must Ose	GSUO	400	Code indicating the version, release, subrelease, and industry			
			EDI standard being used, including the GS and GE segments;			
			in GS segment is X, then in DE 480 positions 1-3 are the vers			
			positions 4-6 are the release and subrelease, level of the version			
			7-12 are the industry or trade association identifiers (optional)			
			user); if code in DE455 in GS segment is T, then other format	-		
			004010VICS Draft Standards Approved for Publication			
			procedures Review Board through Octob			
			4, Release 1, the VICS EDI subset		*	

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

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

Syntax Notes: Semantic Notes:

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

Comments:

Example:

ST*856*856000706~

			Data Element Summar y					
	Ref.	Data						
	Des.	Element	<u>Name</u>	Attı	<u>Attributes</u>			
Must Use	ST01	143	Transaction Set Identifier Code	M	ID 3/3			
			Code uniquely identifying a Transaction Set					
			Ship Notice/Manifest					
Must Use	ST02	329	Transaction Set Control Number	\mathbf{M}	AN 4/9			
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set					
			The number is sequentially assigned by the sender, starting v	vith o	ne within			
			each functional group. For each functional group, the first tracontrol number will be 0001 and incremented by one for each transaction set within the group.	ansact	ion set			

Segment: BSN Beginning Segment for Ship Notice

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

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

Syntax Notes: 1 If BSN07 is present, then BSN06 is required.

Semantic Notes: 1 BSN03 is the date the shipment transaction set is created.

2 BSN04 is the time the shipment transaction set is created.

BSN06 is limited to shipment related codes.

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

Notes: In some implementations, it may be appropriate to omit the unit load level and packaging

levels, i.e., tare and pack, from the transaction set. Depending on the retailer's receiving systems, carton identification may not be required. Code 0004 in BSN05 indicates the use of a hierarchical structure that does not include a unit load level or any packaging levels.

Example:

BSN*00*007111*20001031*0745*0001~

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>
Must Use	BSN01	353	Transaction Set Pu	urpose Code	M	ID 2/2
			Code identifying pu	rpose of transaction set		
			00	Original		
Must Use	BSN02	396	Shipment Identific	cation	\mathbf{M}	AN 2/30
			A unique control nu	imber assigned by the original shipper to i	identi	fy a specific
			shipment			
Must Use	BSN03	373	Date		M	DT 8/8
			Date expressed as C	CCYYMMDD		
Must Use	BSN04	337	Time		\mathbf{M}	TM 4/8
			Time expressed in 2	24-hour clock time as follows: HHMM, or	HHN	MMSS, or
			HHMMSSD, or HHMMSSDD, where $H = hours (00-23)$, $M = minutes (00-59)$,			
			S = integer seconds	(00-59) and DD = decimal seconds; decir	mal se	econds are
			expressed as follow	s: $D = tenths (0-9)$ and $DD = hundredths$	(00-9)	9)
Must Use	BSN05	1005	Hierarchical Struc	eture Code	O	ID 4/4
			Code indicating the	hierarchical application structure of a train	nsacti	on set that
			utilizes the HL segr	ment to define the structure of the transact	ion se	et
			0001	Shipment, Order, Packaging, Item		
				Pick and Pack Structure		
			0002	Shipment, Order, Item, Packaging		
				Standard Carton Pack Structure		
			0004	Shipment, Order, Item		

Segment: **HL** Hierarchical Level - Shipment

Position: 010

Loop: HL Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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

segments

Syntax Notes: Semantic Notes: 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.

The HL segment defines a top-down/left-right ordered structure.

- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

Example: HL*1**S~

	Ref.	Data			
	Des.	Element	<u>Name</u>	Attı	<u>ributes</u>
Must Use	HL01	628	Hierarchical ID Number	M	AN 1/12
			A unique number assigned by the sender to identify a particular in a hierarchical structure	ılar da	ta segment
			The value for this level (shipment) is 1.		
Must Use	HL03	735	Hierarchical Level Code	M	ID 1/2
			Code defining the characteristic of a level in a hierarchical st	ructui	re e
			S Shipment		

Segment: TD1 Carrier Details (Quantity and Weight)

Position: 110

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: 20

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

Syntax Notes: 1 If TD101 is present, then TD102 is required.

2 If TD103 is present, then TD104 is required.
3 If TD106 is present, then TD107 is required.

4 If either TD107 or TD108 is present, then the other is required.
5 If either TD109 or TD110 is present, then the other is required.

Semantic Notes: Comments:

Notes: This segment, at the shipment level, is used to specify total containers and gross weight

of the shipment.

Example:

TD1*BAG*7****G*147*LB~

Ref.	Data	Duta Brom	one summer y					
Des.	Element	<u>Name</u>		Attı	<u>ributes</u>			
TD101	103	Packaging Code		O	AN 3/5			
		Code identifying the	e type of packaging; Part 1: Packaging Fo	orm, P	art 2:			
		Packaging Materials	; if the Data Element is used, then Part 1	is alw	ays required			
		BAG	Bag		•			
		CTN	Carton					
		MIX	Mixed Container Types					
			More than one type of container is included in a shipment					
			(shipment could consist of 3 pieces that include 1 box, 1					
			crate, and 1 basket)					
			Can be used only with code 71 in Part 2	2				
		PLT	Pallet					
		SLP	Slip Sheet					
			Shipping containers utilizing slip sheets, which are					
			cardboard platforms used to hold product for storage or					
			transportation					
		SRW	Shrink Wrap					
			In packaging, a method of securing a un	nit loa	d by placing			
			a large "bag" of plastic film over the co	mpon	ents and			
			applying heat to induce shrinkage and c	ause 1	the bag to			
			tighten around the contents					
TD102	80	Lading Quantity		\mathbf{X}	N0 1/7			
		Number of units (pi	eces) of the lading commodity					
		The number of pack	tages in the shipment as described in TD1	101				
TD106	187	Weight Qualifier		O	ID 1/2			
		Code defining the ty	ype of weight					
		G	Gross Weight					
TD107	81	Weight		\mathbf{X}	R 1/10			
		Numeric value of w						
TD108	355	Unit or Basis for M		\mathbf{X}	ID 2/2			
		Code specifying the	units in which a value is being expressed	d, or r	nanner in			
		which a measureme						
		See Section III for c	code list.					
		LB	Pound					

Segment: TD5 Carrier Details (Routing Sequence/Transit Time)

Position: 120

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: 12

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

Syntax Notes: 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.

2 If TD502 is present, then TD503 is required.

3 If TD507 is present, then TD508 is required.4 If TD510 is present, then TD511 is required.

4 If TD510 is present, then TD511 is required.
5 If TD513 is present, then TD512 is required.

6 If TD514 is present, then TD513 is required.

7 If TD515 is present, then TD512 is required.

Semantic Notes: Comments:

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

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.

Notes:

This segment is used to specify every carrier in the routing sequence or a specific routing sequence that has been previously identified (usually from a routing guide). The segment can also be used to indicate estimated transit time in days. Only use TD501 if needed for clarity; this is not a requirement in most retail applications. When referring to a preestablished routing guide, use code 91 or 92 in TD502 and identify the routing sequence, from the routing guide, in TD503. To identify a specific private parcel service, TD502 will contain code 2 and TD503 will contain the corresponding SCAC. TD510 and TD511 are used to specify transit time.

When using a small package service provider as the carrier, TD502 will contain code 2, TD503 will contain the carrier's SCAC, and TD504 will contain code U to inform the receiver of a small package service shipment.

Example:

TD5*O*2*CENF~

Ref.	Data	2 404 2101110110 % 4111111111 J		
Des.	Element	Name	Attr	ibutes
TD501	133	Routing Sequence Code	0	ID 1/2
		Code describing the relationship of a carrier to a specific ship	ment	movement
		B Origin/Delivery Carrier (Any Mode)		
		O Origin Carrier (Air, Motor, or Ocean)		
TD502	66	Identification Code Qualifier	\mathbf{X}	ID 1/2
		Code designating the system/method of code structure used for	or Ide	entification
		Code (67)		
		2 Standard Carrier Alpha Code (SCAC)		
TD503	67	Identification Code	\mathbf{X}	AN 2/80
		Code identifying a party or other code		
TD505	387	Routing	X	AN 1/35
		Free-form description of the routing or requested routing for	shipm	nent, or the
		originating carrier's identity		
TD506	368	Shipment/Order Status Code	X	ID 2/2
		Code indicating the status of an order or shipment or the disp		
		difference between the quantity ordered and the quantity ship	ped f	or a line item
		or transaction		
		BK Back Ordered from Previous Order	_	
		BP Shipment Partial, Back Order to Ship or	ı (Dat	te)
		CC Shipment Complete on (Date)		
		CM Shipment Complete with Additional Qu	antity	I

02/14/01

CP	Partial Shipment on (Date), Considered No Backorder
CS	Shipment Complete with Substitution
DE	Deleted Order
IC	Item Canceled
IS	Item Represents Substitution from Original Order
PR	Partial Shipment
SS	Split Shipment

 $\textbf{Segment:} \quad \textbf{TD3} \; \; \textbf{Carrier Details (Equipment)}$

Position: 130

Loop: HL Mandatory

Level: Detail Usage: Optional Max Use: 12

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

Syntax Notes: 1 Only one of TD301 or TD310 may be present.

2 If TD302 is present, then TD303 is required.
3 If TD304 is present, then TD305 is required.

4 If either TD305 or TD306 is present, then the other is required.

Semantic Notes: Comments:

Notes: This segment is used to specify the trailer number for a truckload shipment.

Example:

TD3*TL**123456~

				<i></i>		
	Ref.	Data				
	Des.	Element	<u>Name</u>		Attr	<u>ibutes</u>
Must Use	TD301	40	Equipment Descrip	otion Code	\mathbf{X}	ID 2/2
			Code identifying typ	be of equipment used for shipment		
			CV	Closed Van		
			FT	Flat Bed Trailer		
			RT	Controlled Temperature Trailer (Reefer))	
			TL	Trailer (not otherwise specified)		
	TD302	206	Equipment Initial		O	AN 1/4
			Prefix or alphabetic	part of an equipment unit's identifying nu	ımber	•
Must Use	TD303	207	Equipment Numbe	er	\mathbf{X}	AN 1/10
			Sequencing or serial	part of an equipment unit's identifying n	umbe	r (pure
			numeric form for eq	uipment number is preferred)		-

Segment: REF Reference Identification

Position: 150

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

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

Semantic Notes: Comments:

Notes: In some cases, individual shipments with bill of lading may be grouped under a Master

Bill of Lading. Under this circumstance, specifying both the bill of lading and the

associated Master Bill of Lading Number will facilitate tracking.

Example:

REF*BM*13828700000A~

	Ref. Des.	Data Element	Name	•	Attr	ibutes
Must Use	REF01	128	Reference	e Identification Qualifier	M	ID 2/3
			Code qua	lifying the Reference Identification		
			BM	Bill of Lading Number		
			CN	Carrier's Reference Number (PRO/Invoice	:e)	
Must Use	REF02	127	Reference	e Identification	X	AN 1/30
				e information as defined for a particular Transaction by the Reference Identification Qualifier	Set o	or as

Segment: DTM Date/Time Reference

Position: 200

Loop: HL Mandatory

Level: Detail

Usage: Optional (Must Use)

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Example:

DTM*011*20000202~

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374		me Qualifier	Attr M	ributes ID 3/3
			Code spe	ecifying type of date or time, or both date and time		
			011	Shipped		
			017	Estimated Delivery		
			067	Current Schedule Delivery		
			068	Current Schedule Ship		
Must Use	DTM02	373	Date Date exp	pressed as CCYYMMDD	X	DT 8/8

Segment: FOB F.O.B. Related Instructions

Position: 210

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify transportation instructions relating to shipment

Syntax Notes: 1 If FOB03 is present, then FOB02 is required.

2 If FOB04 is present, then FOB05 is required.
3 If FOB07 is present, then FOB06 is required.

4 If FOB08 is present, then FOB09 is required.

Semantic Notes: 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.

Comments:

Example: FOB*PP~

			Data Elem	ent Summar y				
	Ref.	Data						
	Des.	Element	<u>Name</u>		Attr	<u>ributes</u>		
Must Use	FOB01	146	Shipment Method	of Payment	M	ID 2/2		
			Code identifying pa	syment terms for transportation charges				
			CC	Collect				
			CF	Collect, Freight Credited Back to Custo	mer			
			DF	Defined by Buyer and Seller				
			PC	Prepaid but Charged to Customer				
			PO	Prepaid Only				
			PP	Prepaid (by Seller)				
			TP	Third Party Pay				
	FOB02	309	Location Qualifier	•	X	ID 1/2		
			Code identifying ty	pe of location				
			AC	City and State				
			OR	Origin (Shipping Point)				
	FOB04	334	Transportation Te	erms Qualifier Code	O	ID 2/2		
			Code identifying the	e source of the transportation terms				
			01	Incoterms				
				See External Code Source 35 in Section	i III fo	or the		
				source reference document of INCOTE	RMS	codes,		
				which will appear in FOB05.				
	FOB05	335	Transportation Te	erms Code	X	ID 3/3		
			Code identifying the responsibility	Code identifying the trade terms which apply to the shipment transportation responsibility				
			Refer to 004010VIO	efer to 004010VICS Data Element Dictionary for acceptable code values.				

Segment: N1 Name

Position: 220

Loop: N1 Optional

Level: Detail
Usage: Optional
Max Use: 1

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

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

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.

Notes: N103 and N104 are required except when N101 contains code MA or OB.

When the ship to is the end consumer (customer of retailer), N103 and N104 are not required.;

In some EDI implementations, it may be necessary to identify the sender and/or receiver of the transaction set within each transaction set. To identify the sender of the transaction set, N101 will contain code FR, N103 will contain code 93, and N104 will contain the actual identification number. To identify the receiver of the transaction set, N101 will contain code TO, N103 will contain code 94, and N104 will contain the actual identification number. These four codes may be used only in the combination listed above and may be used only to identify the sender and/or receiver of the transaction set.

Example:

N1*ST*BOSCOV*92*87447~

			Data Ele	ment Summary				
	Ref.	Data						
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>		
Must Use	N101	98	Entity Identifier	Code	M	ID 2/3		
			Code identifying	an organizational entity, a physical locatior	ı, prop	perty or an		
			individual					
			BY	Buying Party (Purchaser)				
			SF	Ship From				
			ST	Ship To				
	N102	93	Name		X	AN 1/60		
			Free-form name					
	N103	66	Identification Co	Identification Code Qualifier				
			Code designating	the system/method of code structure used t	for Ide	entification		
			Code (67)					
			1	D-U-N-S Number, Dun & Bradstreet				
			91	Assigned by Seller or Seller's Agent				
			92	Assigned by Buyer or Buyer's Agent				
	N104	67	Identification Co	ode	X	AN 2/80		
				a party or other code				
				on code as defined by N103. The location co				
			formal number, e.	g., DUNS, or it may be assigned by either	the bu	yer or seller.		
			The location refers to a store, warehouse, distribution center, plant, etc.					
			Location codes ar	e used to alleviate the need to send comple	te nan	nes and		
			addresses.					

N3 Address Information **Segment:**

Position:

Loop: Level: N1 Optional

Detail Usage: Optional Max Use:

Purpose: To specify the location of the named party

Syntax Notes: Semantic Notes: Comments:

Example: N3*100 MAIN ST~

	Ref. <u>Des.</u>	Data Element	Name	Attributes
Must Use	N301	166	Address Information	M AN 1/55
	- 10 0 -		Address information	3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2
	N302	166	Address Information	O AN 1/55
			Address information	

Segment: N4 Geographic Location

Position: 250

Loop: N1 Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.

Semantic Notes:

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.

Notes: N401 and N402 are required unless N405 and N406 are used.

Example:

N4*SAN FRANCISCO*CA*94111~

	Ref.	Data			•1	
	Des.	<u>Element</u>	<u>Name</u>	Atti	<u>ributes</u>	
Must Use	N401	19	City Name	O	AN 2/30	
			Free-form text for city name			
Must Use	N402	156	State or Province Code	0	ID 2/2	
			Code (Standard State/Province) as defined by appropriate government a			
	N403	116	Postal Code	\mathbf{o}	ID 3/15	
			Code defining international postal zone code excluding punc (zip code for United States)	tuatio	n and blanks	
	N404	26	Country Code	O	ID 2/3	
			Code identifying the country			

Segment: **HL** Hierarchical Level - Order

Position: 010

Loop: HL Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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

segments

Syntax Notes: Semantic Notes: 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 lineitem data.

The HL segment defines a top-down/left-right ordered structure.

- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

Example:

HL*2*1*O~

			Data Element Summary				
	Ref.	Data					
	Des.	Element	<u>Name</u>	Att	<u>ributes</u>		
Must Use	HL01	628	Hierarchical ID Number	M	AN 1/12		
			A unique number assigned by the sender to identify a particular data segment				
			in a hierarchical structure				
Must Use	HL02	734	Hierarchical Parent ID Number	O	AN 1/12		
			Identification number of the next higher hierarchical data se	gment	that the data		
			segment being described is subordinate to				
Must Use	HL03	735	Hierarchical Level Code	M	ID 1/2		
			Code defining the characteristic of a level in a hierarchical s	tructu	re		
			O Order				
	HL04	736	Hierarchical Child Code	O	ID 1/1		
			Code indicating if there are hierarchical child data segments	subor	dinate to the		
			level being described				
			Refer to 004010VICS Data Element Dictionary for acceptab	le cod	le values.		

Segment: PRF Purchase Order Reference

Position: 050

Loop: HL Mandatory

Level: Detail

Usage: Optional (Must Use)

Max Use:

Purpose: To provide reference to a specific purchase order

Syntax Notes:

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

Comments:

Example:

PRF*835490-1***20000114~

	Ref.	Data							
	Des.	Element	<u>Name</u>	Attı	<u>ributes</u>				
Must Use	PRF01	324	Purchase Order Number	M	AN 1/22				
			Identifying number for Purchase Order assigned by the order	Identifying number for Purchase Order assigned by the orderer/purchaser					
			Retailer's original purchase order number						
	PRF04	373	Date	O	DT 8/8				
			Date expressed as CCYYMMDD						
			Retailer's original purchase order date						
			retailer 5 original parenase order date						

Segment: REF Reference Identification

Position: 150

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

2 If either C04003 or C04004 is present, then the other is required.

3 If either C04005 or C04006 is present, then the other is required.
1 REF04 contains data relating to the value cited in REF02.

Semantic Notes:

Comments:

REF*IV*807764626~

Example:

			Da	ta Element Summary		
	Ref.	Data				
	Des.	Element	<u>Name</u>		Attr	<u>ibutes</u>
Must Use	REF01	128	Reference	Identification Qualifier	M	ID 2/3
			Code qualif	ying the Reference Identification		
			DP	Department Number		
			IV	Seller's Invoice Number		
			VN	Vendor Order Number		
Must Use	REF02	127	Reference	Identification	X	AN 1/30
			Reference i	nformation as defined for a particular Transaction	n Set o	or as
			specified by	the Reference Identification Qualifier		

Segment: N1 Name

Position: 220

Loop: N1 Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use: 1

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

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

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.

Notes: There will be at least one occurrence, of this segment, to identify the buying party by

using code BY in N101.

N103 and N104 are required except when N101 contains code CT, MA or OB.

Example:

N1*BY**92*1900~

			Data Element Summary				
	Ref.	Data					
	Des.	Element	<u>Name</u>	<u>Attr</u>	<u>ributes</u>		
Must Use	N101	98	Entity Identifier Code	\mathbf{M}	ID 2/3		
			Code identifying an organizational entity, a physical location	property or an			
			individual				
			BY Buying Party (Purchaser)				
	N102	93	Name	\mathbf{X}	AN 1/60		
			Free-form name				
Must Use	N103	66	Identification Code Qualifier	\mathbf{X}	ID 1/2		
			Code designating the system/method of code structure used for Identification				
			Code (67)				
			92 Assigned by Buyer or Buyer's Agent				
Must Use	N104	67	Identification Code	\mathbf{X}	AN 2/80		
			Code identifying a party or other code				
			This is the location code as defined by N103. The location code may be a				
			formal number, e.g., DUNS, or it may be assigned by either the buyer or seller.				
			The location refers to a store, warehouse, distribution center, plant, etc.				
			Location codes are used to alleviate the need to send complete names and				
			addresses.				

Segment: **HL** Hierarchical Level - Tare

Position: 010

Loop: HL Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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

segments

Syntax Notes: Semantic Notes: 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 lineitem data.

The HL segment defines a top-down/left-right ordered structure.

- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

Example: HL*3*2*T~

			Butu Element Summary		
	Ref.	Data			
	Des.	Element	<u>Name</u>	Att	<u>ributes</u>
Must Use	HL01	628	Hierarchical ID Number	M	AN 1/12
			A unique number assigned by the sender to identify a particular	ılar da	ıta segment
			in a hierarchical structure		
Must Use	HL02	734	Hierarchical Parent ID Number	O	AN 1/12
			Identification number of the next higher hierarchical data seg	gment	that the data
			segment being described is subordinate to		
Must Use	HL03	735	Hierarchical Level Code	\mathbf{M}	ID 1/2
			Code defining the characteristic of a level in a hierarchical st	tructu	re
			T Shipping Tare		
	HL04	736	Hierarchical Child Code	O	ID 1/1
			Code indicating if there are hierarchical child data segments subordinate to the		
			level being described		
			Refer to 004010VICS Data Element Dictionary for acceptable code values.		

Segment: TSD Trailer Shipment Details

Position: 145

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify details of shipments on a trailer

Syntax Notes: Semantic Notes:

1 TSD01 indicates the loading sequence and relative shipment position on the trailer.

Comments:

Notes: This segment may be used to indicate the location of the pallet within the

trailer/container.

Example:

TSD*001*1

	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Attri</u>	<u>butes</u>
	TSD01	350	Assigned Identification	\mathbf{O}	AN 1/20
			Alphanumeric characters assigned for differentiation within a	a transa	action set
			Indicates the loading sequence		
Must Use	TSD02	219	Position	\mathbf{O}	AN 1/3
			Relative position of shipment in car, trailer, or container (mu	tually o	defined)
			1 First quarter of the trailer/container		
			2 Second quarter of the trailer/container		
			3 Third quarter of the trailer/container		
			4 Fourth quarter of the trailer/container		

Segment: MAN Marks and Numbers

Position: 190

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To indicate identifying marks and numbers for shipping containers
Syntax Notes: 1 If either MAN04 or MAN05 is present, then the other is required.

2 If MAN06 is present, then MAN05 is required.

Semantic Notes: 1 MAN01/MAN02 and MAN04/MA

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. 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.

Notes: This segment, at the tare level, is used to specify the identification numbers for the

pallet.;

Example:

MAN*GM*00007000320000113901~

Must Use	Ref. <u>Des.</u> MAN01	Data Element 88	Name Marks and Numbers Qualifier Code specifying the application or source of Marks a	• ,
			GM SSCC-18 and Application Iden This is a twenty-character UCC Shipping Container Code (SSC two digit application identifier. and the modulo 103 check digit	C/EAN-128 Serial C-18) that includes the The symbology code
Must Use	MAN02	87	Marks and Numbers Marks and numbers used to identify a shipment or pa	M AN 1/48 arts of a shipment

PAL Pallet Information **Segment:**

Position:

HLLoop: Mandatory

Level: Detail Usage: Optional Max Use:

Purpose: To identify the type and physical attributes of the pallet, and, gross weight, gross volume,

and height of the load and the pallet

If either PAL05 or PAL06 is present, then the other is required. **Syntax Notes:**

2 If PAL07 is present, then PAL10 is required. 3 If PAL08 is present, then PAL10 is required. 4 If PAL09 is present, then PAL10 is required.

5 If PAL10 is present, then at least one of PAL07 PAL08 or PAL09 is required.

If either PAL11 or PAL12 is present, then the other is required. 7 If either PAL13 or PAL14 is present, then the other is required.

PAL04 (Pack) is the number of pieces on the pallet. **Semantic Notes:** 1

> 2 PAL05 (Unit Weight) is the weight of the pallet alone, before loading.

3 PAL07 and PAL08 (Length and Width) are the dimensions of the pallet before

PAL09 (Height) is the height of the pallet and load.

PAL11 and PAL13 (Gross Weight and Gross Volume) are measured after loading and includes the pallet.

Comments:

Example:

PAL*4*4*9*36

			Data Element Summary		
	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Att</u>	<u>ributes</u>
Must Use	PAL01	883	Pallet Type Code	O	ID 1/2
			Code indicating the type of pallet		
			4 Standard		
	PAL02	884	Pallet Tiers	\mathbf{O}	N0 1/3
			The number of layers per pallet		
	PAL03	885	Pallet Blocks	\mathbf{O}	N0 1/3
			The number of pieces (cartons) per layer on the pallet		
Must Use	PAL04	356	Pack	O	N0 1/6
			The number of inner containers, or number of eaches if ther	e are n	o inner
			containers, per outer container		
			Number of cartons on pallet		

Segment: HL Hierarchical Level - Pack

Position: 010

Loop: HL Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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

segments

Syntax Notes: Semantic Notes: Comments:

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.

The HL segment defines a top-down/left-right ordered structure.

- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

Example:

HL*4*3*P~

outes		
nites		
<u>juics</u>		
AN 1/12		
segment		
AN 1/12		
nat the data		
ID 1/2		
ID 1/1		
Code indicating if there are hierarchical child data segments subordinate to the level being described Refer to 004010VICS Data Element Dictionary for acceptable code values.		
A na II n		

Segment: MAN Marks and Numbers

Position: 190

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: >1

Purpose: To indicate identifying marks and numbers for shipping containers
Syntax Notes: 1 If either MAN04 or MAN05 is present, then the other is required.

2 If MAN06 is present, then MAN05 is required.

Semantic Notes:

- 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:

- 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. 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.

Notes:

When the shipping container is the same as the consumer unit, the U.P.C. may be the only UCC identification code on the container. In many applications, it is necessary to positively identify what identification code is to be scanned and matched at point of receipt. Since the U.P.C. is not a unique serial shipping container code, only one pack level for each item is required when using the pick and pack structure. The total number of shipping units for this item is the same as the quantity for the item in the SN1 segment at the item level.

Example:

MAN*GM*00007000320000113906~

	Ref.	Data			
	Des.	Element	<u>Name</u>		<u>Attributes</u>
Must Use	MAN01	88	Marks and Number	ers Qualifier	M ID 1/2
			Code specifying the	application or source of Marks and Nun	nbers (87)
			GM	SSCC-18 and Application Identifier	
				This is a twenty-character UCC/EAN-1	128 Serial
				Shipping Container Code (SSCC-18) tl	hat includes the
				two digit application identifier. The syr	mbology code
				and the modulo 103 check digit are not	included.
Must Use	MAN02	87	Marks and Number	ers	M AN 1/48
			Marks and numbers used to identify a shipment or parts of a shipment		

Segment: **HL** Hierarchical Level - Item

Position: 010

Loop: HL Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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

segments

Syntax Notes: Semantic Notes: Comments:

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.

The HL segment defines a top-down/left-right ordered structure.

- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

The HL segment is used to identify levels of detail information using a hierarchical structure.

HL01 shall contain a unique number for each occurrence of the HL segment within the transaction set. The value assigned to the first HL segment will be 1, and is incremented by one for each subsequent HL segment within the transaction set.

HL02 identifies the hierarchical ID of the HL segment to which it is subordinate (child of). HL02 will be omitted for the first occurrence of the HL segment in the transaction set, since it has no parent. HL03 identifies the application content of the series of segments following the current HL segment up to the next occurrence of an HL segment, or the CTT or SE segment, e.g., Shipment, Unit Load, Order, Tare, Pack and Item.

Example:

HL*5*4*I~

		Data Element Sammary		
Ref.	Data			
Des.	Element	<u>Name</u>	Att	<u>ributes</u>
HL01	628	Hierarchical ID Number	M	AN 1/12
		A unique number assigned by the sender to identify a particular	lar da	ita segment
		in a hierarchical structure		
HL02	734	Hierarchical Parent ID Number	O	AN 1/12
		Identification number of the next higher hierarchical data seg	gment	that the data
		segment being described is subordinate to		
HL03	735	Hierarchical Level Code	\mathbf{M}	ID 1/2
		Code defining the characteristic of a level in a hierarchical st	ructu	re
		I Item		
HL04	736	Hierarchical Child Code	O	ID 1/1
		Code indicating if there are hierarchical child data segments	subor	dinate to the
		level being described		
		Refer to 004010VICS Data Element Dictionary for acceptab	le cod	le values.
	Des. HL01 HL02 HL03	Des. HL01 Element 628 HL02 734 HL03 735	Ref. Data Des. Element Name HL01 628 Hierarchical ID Number A unique number assigned by the sender to identify a particular in a hierarchical structure HL02 734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment being described is subordinate to HL03 735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure HL04 736 Hierarchical Child Code Code indicating if there are hierarchical child data segments level being described	Ref. Data Des. Element Name HL01 628 Hierarchical ID Number A unique number assigned by the sender to identify a particular dation a hierarchical structure HL02 734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment segment being described is subordinate to HL03 735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure. I Item HL04 736 Hierarchical Child Code Code indicating if there are hierarchical child data segments subordinate to

Segment: LIN Item Identification

Position: 020

Loop: HL Mandatory

Level: Detail

Usage: Optional (Must Use)

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes: 1 If either LIN04 or LIN05 is present, then the other is required.

- If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes: Comments:

1 LIN01 is the line item identification

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.

Notes:

The codes listed for LIN02 apply to every occurrence of Data Element 235 in the LIN

segment.

See Section III for complete U.P.C. and EAN code definitions.

Example:

LIN**UP*700032591261*VA*20191~

	Ref.	Data	Duta Bronn	siic suiiiiiii y		
	Des.	Element	Name		Attr	ibutes
Must Use	LIN02	235	Product/Service ID	Qualifier	M	ID 2/2
			Code identifying the	type/source of the descriptive number us	ed in	
			Product/Service ID	(234)		
			EN	European Article Number (EAN) (2-5-5	-1)	
			SZ	Vendor Alphanumeric Size Code (NRM	A)	
				This is the code assigned by the vendor.		
			UP	U.P.C. Consumer Package Code (1-5-5-	1)	
			VA	Vendor's Style Number		
			VC	Vendor's (Seller's) Catalog Number		
				This code will be deleted after Version 0	0401	0.
			VE	Vendor Color		
Must Use	LIN03	234	Product/Service ID		M	AN 1/48
				for a product or service		
	LIN04	235	Product/Service ID	•	X	ID 2/2
				e type/source of the descriptive number us	ed in	
			Product/Service ID			
			EN	European Article Number (EAN) (2-5-5		
			SZ	Vendor Alphanumeric Size Code (NRM	,	
			UP	U.P.C. Consumer Package Code (1-5-5-	1)	
			VA	Vendor's Style Number		
			VC	Vendor's (Seller's) Catalog Number		
			VE	Vendor Color		
	LIN05	234	Product/Service ID		X	AN 1/48

02/14/01

				02/11/0
		Identifying number for a product or		
LIN06	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of	the descriptive number used in	Į.
		Product/Service ID (234)		
			icle Number (EAN) (2-5-5-1)	
			numeric Size Code (NRMA)	
			mer Package Code (1-5-5-1)	
		VA Vendor's Style	e Number	
		VC Vendor's (Sel.	ler's) Catalog Number	
		VE Vendor Color		
LIN07	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or	service	
LIN08	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of	the descriptive number used in	
		Product/Service ID (234)	•	
		EN European Arti	icle Number (EAN) (2-5-5-1)	
		SZ Vendor Alpha	numeric Size Code (NRMA)	
		UP U.P.C. Consu	mer Package Code (1-5-5-1)	
		VA Vendor's Style	e Number	
		VC Vendor's (Sel	ler's) Catalog Number	
		VE Vendor Color		
LIN09	234	Product/Service ID	X	AN 1/48
		Identifying number for a product or	service	
LIN10	235	Product/Service ID Qualifier	X	ID 2/2
		Code identifying the type/source of	the descriptive number used in	
		Product/Service ID (234)	1	
			icle Number (EAN) (2-5-5-1)	
			numeric Size Code (NRMA)	
			mer Package Code (1-5-5-1)	
		VA Vendor's Style		
		<u> </u>	ler's) Catalog Number	
		VE Vendor Color		
LIN11	234	Product/Service ID	X	AN 1/48
	·	Identifying number for a product of	==	
		, , , , , , , , , , , , , , , , , , ,		

SN1 Item Detail (Shipment) **Segment:**

Position:

Loop: HLMandatory

Level: Detail

Usage: Optional (Must Use)

Max Use:

Purpose: To specify line-item detail relative to shipment

If either SN105 or SN106 is present, then the other is required. **Syntax Notes:**

Semantic Notes: SN101 is the ship notice line-item identification.

SN103 defines the unit of measurement for both SN102 and SN104. **Comments: Notes:** This segment is used to specify the quantities associated with the item identified in the

LIN at the item level.

When specifying an item, which is comprised of two or more components that are in unique shipping containers, SN103 will contain code ST for set and the quantity specified in SN102 is the number of sets as identified in the LIN segment. Each different component is identified in one pack level. See the VICS Note, on the SLN segment, at the pack level.

Example:

SN1**1*EA*100*200*EA~

Data Flament Summary

			Data	a Element Summary			
	Ref.	Data					
	Des.	Element	<u>Name</u>		Attı	<u>ibutes</u>	
	SN101	350	Assigned Ide	Assigned Identification		AN 1/20	
			Alphanumeri	c characters assigned for differentiation within a	trans	saction set	
Must Use	SN102	382	Number of U	Units Shipped	M	R 1/10	
			Numeric valu	ue of units shipped in manufacturer's shipping un	its fo	r a line item	
			or transaction	ı set			
Must Use	SN103	355	Unit or Basi	s for Measurement Code	M	ID 2/2	
			Code specify	ing the units in which a value is being expressed	or n	nanner in	
			which a meas	surement has been taken			
			See Section I	See Section III for code list.			
			CA	Case			
			DZ	Dozen			
			EA	Each			
			PK	Package			
			PR	Pair			
	SN104	646		ipped to Date	O	R 1/15	
				nits shipped to date			
	SN105	330	Quantity Or		X	R 1/15	
			Quantity orde				
	SN106	355		s for Measurement Code	X	ID 2/2	
				ing the units in which a value is being expressed	, or n	nanner in	
				surement has been taken			
				II for code list.			
			CA	Case			
			DZ	Dozen			
			EA	Each			
			PK	Package			
			PR	Pair			

Segment: PO4 Item Physical Details

Position: 060

Loop: HL Mandatory

Level: Detail
Usage: Optional
Max Use: 1

Purpose:

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

Syntax Notes: 1 If either PO402 or PO403 is present, then the other is required.

- 2 If PO405 is present, then PO406 is required.
- 3 If either PO406 or PO407 is present, then the other is required.
- 4 If either PO408 or PO409 is present, then the other is required.
- 5 If PO410 is present, then PO413 is required.
- 6 If PO411 is present, then PO413 is required.
- 7 If PO412 is present, then PO413 is required.
- **8** If PO413 is present, then at least one of PO410 PO411 or PO412 is required.
- **9** If PO417 is present, then PO416 is required.
- 10 If PO418 is present, then PO404 is required.

Semantic Notes:

- 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.

Notes:

This segment is used to specify the packaging of the item in the case or carton. There may be two levels of packaging specified. The first level is always specified by using PO401 (Pack). The first level may be actual items, e.g., consumer units, or it may be the number of smaller containers within the case. The second level, specified using PO414 (Inner Pack), is the number of eaches in each inner container when PO401 is the number of smaller containers within the case. See Section V (Pack/Inner Pack Usage) for usage examples.

This segment can be used also to specify the weight and/or volume (cube) for the item by using PO406 and PO407, and/or PO408 and PO409.

Example:

PO4*1*2*EA~

Kei.	Data			
Des.	Element	<u>Name</u>	Attı	ributes
PO401	356	Pack	O	N0 1/6
		The number of inner containers, or number of eaches if there containers, per outer container	are n	o inner
PO402	357	Size	\mathbf{X}	R 1/8
		Size of supplier units in pack		
PO403	355	Unit or Basis for Measurement Code	X	ID 2/2
		Code specifying the units in which a value is being expressed	d, or r	nanner in
		which a measurement has been taken		
		EA Each		

Segment: CTT Transaction Totals

Position: 010

Loop:

Level: Summary Usage: Optional

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set
 Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.
 2 If either CTT05 or CTT06 is present, then the other is required.

Semantic Notes:

Comments: 1 This segment is intended to provide hash totals to validate transaction completeness

and correctness.

Example: CTT*9~

	Ref.	Data	•			
	Des.	Element	<u>Name</u>	<u>Attributes</u>		
Must Use	CTT01	354	Number of Line Items	M	N0 1/6	
			Total number of line items in the transaction set			
			The number of HL segments present in the transaction set			

Segment: **SE** Transaction Set Trailer

Position: 020

Loop:

Level: Summary Usage: Mandatory

Max Use: 1

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)

Syntax Notes:

Semantic Notes:

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

Example:

SE*40*856000706~

Must Use	Ref. <u>Des.</u> SE01	Data <u>Element</u> 96	Name Number of Included Segments Total number of segments included in a transaction set inclu	Attributes M N0 1/10		
Must Use	SE02	329	segments Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			
			This must be the same number as is in the ST segment (STO) transaction set.	2) for the		

Segment: \mathbf{GE} Functional Group Trailer

Position: 030

Loop: Level:

Usage: Mandatory

Max Use: 1

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

Syntax Notes: Semantic Notes:

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, GS06.

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.

	Ref.	Data	·			
	Des.	Element	<u>Name</u>	Att	<u>ributes</u>	
Must Use	GE01	97	Number of Transaction Sets Included	M	N0 1/6	
			Total number of transaction sets included in the functional group or			
			interchange (transmission) group terminated by the trailer co	ntaini	ng this data	
			element			
Must Use	GE02	28	Group Control Number Assigned number originated and maintained by the sender	M	N0 1/9	

Segment: IEA Interchange Control Trailer

Position: 040

Loop: Level:

Usage: Mandatory

Max Use: 1

Purpose: To define the end of an interchange of zero or more functional groups and interchange-

related control segments

Syntax Notes: Semantic Notes: Comments:

	Ref. <u>Des.</u>	Data <u>Element</u>	Name .	<u>Attributes</u>			
Must Use	IEA01	I16	Number of Included Functional Groups	M	N0 1/5		
			A count of the number of functional groups included in an i	nterch	ange		
Must Use	IEA02	I12	Interchange Control Number	M	N0 9/9		
			A control number assigned by the interchange sender				

Example

Sample Ship Notice/Manifest Transaction

ST*856*856000706~

BSN*00*007111*20001031*0745*0001~

HL*1**S~

TD1*BAG*7****G*147*LB~

TD5*O*2*CENF~

TD3*TL**123456~

REF*BM*13828700000A~

DTM*011*20000202~

FOB*PP~

N1*ST*BOSCOV*92*87447~

N3*100 MAIN ST~

N4*SAN FRANCISCO*CA*94111~

HL*2*1*O~

PRF*835490-1***20000114~

REF*IV*807764626~

N1*BY**92*1900~

HL*3*2*T~

TSD*001*1~

MAN*GM*00007000320000113901~

PAL*4*4*9*36~

HL*4*3*P~

MAN*GM*00007000320000113906~

HL*5*4*I~

LIN**UP*700032591261*VA*20191~

SN1**1*EA*100*200*EA~

PO4*1*2*EA~

HL*6*2*T~

MAN*GM*00007000320000113831~

HL*7*6*P~

MAN*GM*00007000320000113838~

HL*8*7*I~

LIN**UP*700032591285*VA*20195~

SN1**2*EA*400*600*EA~

PO4*2*3*EA~

HL*9*7*I~

LIN**UP*700032591339*VA*20205~

SN1**1*EA*800*900*EA~

PO4*3*4*EA~

CTT*9~

SE*40*856000706~