Boscov's Department Stores

Electronic Data Interchange

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

PICK PACK STRUCTURE

January 2006

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INOVIS™

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

Boscov's prefers both Bill of Lading Number and Carrier Reference Number (PRO/Invoice) in REF segments. At a minimum, Bill of Lading Number must be sent.

Boscov's prefers both Shipped Date and Current Schedule Delivery Date in DTM segments. At a minimum, Shipped Date must be sent.

At a minimum, UPC or EAN code must be sent in LIN.

Contacts

Transaction Testing: INOVIS Corporation 1-877-446-6847 Select Option 2, Option 2 again, then Option 1.

Production Support: INOVIS Corporation 1-877-446-6847 Select Option 2, Option 1, then Option 1 again.

Boscov's Department Stores: Sandy MacGilvray, 1-610-370-3425

Communication IDs

<u>Production</u>
S/R ID: 01/014492501
VAN: Inovis, VANS, HAMAIL

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 INOVIS Corporation to administer our EDI operations and to enable our trading partners. For those trading partners who do not trade documents electronically, INOVIS 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 No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
6-7	010	ISA	Interchange Control Header	M	1		
8	020	GS	Functional Group Header	M	1		

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and 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. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - HL			200000	
11	010	HL	Hierarchical Level - Shipment	M	1		c1
12-13	110	TD1	Carrier Details (Quantity and Weight)	O	20		
14-15	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
16	130	TD3	Carrier Details (Equipment)	O	12		
17-19	150	REF	Reference Identification	O	>1		
20-21	200	DTM	Date/Time Reference	O	10		
22	210	FOB	F.O.B. Related Instructions	O	1		
			LOOP ID - N1 (Ship From)			200	
23	220	N1	Name	O	1		
24	240	N3	Address Information	O	2		
25	250	N4	Geographic Location	O	1		
			LOOP ID - N1 (Ship To)			200	
26	220	N1	Name	O	1		
27	240	N3	Address Information	O	2		
28	250	N4	Geographic Location	O	1		

			LOOP ID - HL			200000
29	010	HL	Hierarchical Level - Order	M	1	
30	050	PRF	Purchase Order Reference	O	1	
31-32	150	REF	Reference Identification	O	>1	
			LOOP ID - N1			200
33	220	N1	Name	O	1	
			LOOP ID - HL			200000
34	010	HL	Hierarchical Level - Tare	M	1	
35	145	TSD	Trailer Shipment Details	O	1	
36	190	MAN	Marks and Numbers	O	>1	
37	215	PAL	Pallet Information	O	1	
			LOOP ID - HL			200000
38	010	HL	Hierarchical Level - Pack	M	1	
39	190	MAN	Marks and Numbers	O	>1	
			LOOP ID - HL			200000
40	010	HL	Hierarchical Level - Item	M	1	
41-42	020	LIN	Item Identification	O	1	
43	030	SN1	Item Detail (Shipment)	O	1	

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
44	010	CTT	Transaction Totals	O	1		
45	020	SE	Transaction Set Trailer	M	1		

Envelope:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
46	030	GE	Functional Group Trailer	M	1		
47	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:	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	ISA01	I01	**Authorization Information Qualifier**	M ID 2/2

Code to identify the type of information in the Authorization Information
    00   No Authorization Information Present (No Meaningful Information in I02)

Must Use	ISA02	I02	**Authorization Information**	M AN 10/10

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)
    "   "   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
    00   No Security Information Present (No Meaningful Information in I04)

Must Use	ISA04	I04	**Security Information**	M AN 10/10

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)
    "   "   10 blank spaces

Must Use	ISA05	I05	**Interchange ID Qualifier**	M ID 2/2

Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified
Refer to 004010 Data Element Dictionary for acceptable code values.

Must Use	ISA06	I06	**Interchange Sender ID**	M AN 15/15

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

Must Use	ISA07	I05	**Interchange ID Qualifier**	M ID 2/2

Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified
    01   Duns (Dun & Bradstreet)

Must Use	ISA08	I07	**Interchange Receiver ID**	M AN 15/15

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
Boscov's Department Stores ID is "014492501"

Must Use	ISA09	I08	**Interchange Date**	M DT 6/6

Date of the interchange

Must Use	ISA10	I09	**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 standard used by the message that is enclosed by the interchange header and trailer
    U   U.S. EDI Community of ASC X12, TDCC, and UCS

| Must Use | ISA12 | I11 | **Interchange Control Version Number** | **M** | **ID 5/5** |

This version number covers the interchange control segments

| | | 00401 | Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through 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 acknowledgment (TA1)

| | | 0 | No Acknowledgment Requested |

| Must Use | ISA15 | I14 | **Usage Indicator** | **M** | **ID 1/1** |

Code to indicate whether data enclosed by this interchange envelope 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 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

| | | > | The value identified for retail use |

Segment: **GS** **Functional Group Header**

Position:	020
Loop:	
Level:	
Usage:	Mandatory
Max Use:	1
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:	**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.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	GS01	479	**Functional Identifier Code**	M	ID 2/2

Code identifying a group of application related transaction sets
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 trading partners

Must Use	GS03	124	**Application Receiver's Code**	M	AN 2/15

Code identifying party receiving transmission; codes agreed to 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 are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Must Use	GS06	28	**Group Control Number**	M	N0 1/9

Assigned number originated and maintained by the sender

Must Use	GS07	455	**Responsible Agency Code**	M	ID 1/2

Code used in conjunction with Data Element 480 to identify the issuer of the standard
X Accredited Standards Committee X12

Must Use	GS08	480	**Version / Release / Industry Identifier Code**	M	AN 1/12

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
004010VICS Draft Standards Approved for Publication by ASC X12 procedures Review Board through October 1997, Version 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 Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	ST01	143	**Transaction Set Identifier Code**	**M**	**ID 3/3**
			Code uniquely identifying a Transaction Set		
			856 Ship Notice/Manifest		
Must Use	ST02	329	**Transaction Set Control Number**	**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 with one within each functional group. For each functional group, the first transaction set control number will be 0001 and incremented by one for each additional transaction set within the group.		

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.
	3	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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	BSN01	353	**Transaction Set Purpose Code**	M	ID 2/2
			Code identifying purpose of transaction set		
			00 Original		
Must Use	BSN02	396	**Shipment Identification**	M	AN 2/30
			A unique control number assigned by the original shipper to identify a specific shipment		
Must Use	BSN03	373	**Date**	M	DT 8/8
			Date expressed as CCYYMMDD		
Must Use	BSN04	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 are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		
Must Use	BSN05	1005	**Hierarchical Structure Code**	O	ID 4/4
			Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set		
			0001 Shipment, Order, Packaging, Item		
			Pick and Pack Structure		

Segment:	**HL** Hierarchical Level - Shipment
Position:	010
Loop:	HL Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
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	
			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 structure	
			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*CTN25*24****G*147*LB~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**TD101**	**103**	**Packaging Code**	O AN 3/5

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

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
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 unit load by placing a large "bag" of plastic film over the components and applying heat to induce shrinkage and cause the bag to tighten around the contents
01	Aluminum
25	Corrugated or Solid
31	Fibre
58	Metal
71	Not Otherwise Specified
76	Paper
79	Plastic
91	Stainless Steel
94	Wood

	Ref. Des.	Data Element	Name	Attributes
Must Use	**TD102**	**80**	**Lading Quantity**	X N0 1/7

Number of units (pieces) of the lading commodity
The number of packages in the shipment as described in TD101

	Ref. Des.	Data Element	Name	Attributes
Must Use	**TD106**	**187**	**Weight Qualifier**	O ID 1/2

Code defining the type of weight

G	Gross Weight

	Ref. Des.	Data Element	Name	Attributes
Must Use	**TD107**	**81**	**Weight**	X R 1/10

Numeric value of weight

| Must Use | TD108 | 355 | **Unit or Basis for Measurement Code** | **X** | **ID 2/2** |

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

See Section III for 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.
	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:	**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.

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 pre-established 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***CC~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	TD501	133	**Routing Sequence Code**	**O**	**ID 1/2**
			Code describing the relationship of a carrier to a specific shipment movement		
			O Origin Carrier (Air, Motor, or Ocean)		
Must Use	TD502	66	**Identification Code Qualifier**	**X**	**ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)		
			2 Standard Carrier Alpha Code (SCAC)		
Must Use	TD503	67	**Identification Code**	**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 shipment, 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 disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction		
			BK Back Ordered from Previous Order		
			BP Shipment Partial, Back Order to Ship on (Date)		
			CC Shipment Complete on (Date)		
			CM Shipment Complete with Additional Quantity		
			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

Segment:	**TD3** 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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	TD301	40	**Equipment Description Code**	X	ID 2/2
			Code identifying type of equipment used for shipment		
			CV Closed Van		
			FT Flat Bed Trailer		
			RT Controlled Temperature Trailer (Reefer)		
			TL Trailer (not otherwise specified)		
Must Use	TD303	207	**Equipment Number**	X	AN 1/10
			Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)		

Segment: **REF** Reference Identification

Position:	150
Loop:	HL Mandatory
Level:	Detail
Usage:	Optional (Must Use)
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.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier**	**M**	**ID 2/3**
			Code qualifying the Reference Identification		
			BM Bill of Lading Number		
Must Use	REF02	127	**Reference Identification**	**X**	**AN 1/30**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

Segment:REF Reference Identification

Position:	150
Loop:	HL Mandatory
Level:	Detail
Usage:	Optional (Must Use)
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.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	Shipping Routing Request (SRR) is generated from Boscov's TMS System to route all our inbound shipments.

Example:
REF*LO*123456~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**REF01**	**128**	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			LO Shipping Routing Request		
Must Use	**REF02**	**127**	**Reference Identification**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

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.	
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.	
Comments:		
Notes:		

Example:
REF*CN*13828700000A~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			CN Carrier's Reference Number (PRO/Invoice)		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

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~

<div align="center">

Data Element Summary

</div>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier**	M	ID 3/3
			Code specifying type of date or time, or both date and time		
			011 Shipped		
Must Use	DTM02	373	**Date**	X	DT 8/8
			Date expressed as CCYYMMDD		

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*067*20000202~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	DTM01	374	**Date/Time Qualifier**	M	ID 3/3
			Code specifying type of date or time, or both date and time		
			067 Current Schedule Delivery		
Must Use	DTM02	373	**Date**	X	DT 8/8
			Date expressed as CCYYMMDD		

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 Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	FOB01	146	**Shipment Method of Payment**	M	ID 2/2
			Code identifying payment terms for transportation charges		
			CC Collect		
			CF Collect, Freight Credited Back to Customer		
			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 type of location		
			OR Origin (Shipping Point)		
	FOB04	334	**Transportation Terms Qualifier Code**	O	ID 2/2
			Code identifying the source of the transportation terms		
			01 Incoterms		
			See External Code Source 35 in Section III for the source reference document of INCOTERMS codes, which will appear in FOB05.		
	FOB05	335	**Transportation Terms Code**	X	ID 3/3
			Code identifying the trade terms which apply to the shipment transportation responsibility		
			Refer 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*SF**1*123456789~

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	N101	98	**Entity Identifier Code**	M	ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual		
			SF Ship From		
Must Use	N102	93	**Name**	X	AN 1/60
			Free-form name		
	N103	66	**Identification Code Qualifier**	X	ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			1 lD-U-N-S Number, Dun & Bradstreet		
			91 Assigned by Seller		
	N104	67	**Identification Code**	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:	**N3** Address Information
	Position:	240
	Loop:	N1 Optional
	Level:	Detail
	Usage:	Optional
	Max Use:	2
	Purpose:	To specify the location of the named party
	Syntax Notes:	
	Semantic Notes:	
	Comments:	

Example:
N3*100 MAIN ST~

<div align="center">Data Element Summary</div>

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N301	166	**Address Information**	**M**	**AN 1/55**
			Address information		
	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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N401	19	**City Name**	O	AN 2/30
			Free-form text for city name		
Must Use	N402	156	**State or Province Code**	O	ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency		
Must Use	N403	116	**Postal Code**	O	ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)		
	N404	26	**Country Code**	O	ID 2/3
			Code identifying the country		

Segment:N1 **Name**

Position:	220
Loop:	N1 Optional
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:	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*00015~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N101	98	**Entity Identifier Code**	M	ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual		
			ST Ship To		
	N102	93	**Name**	X	AN 1/60
			Free-form name		
Must Use	N103	66	**Identification Code Qualifier**	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**	X	AN 2/80
			Code identifying a party or other code		
			Boscov's five digit store number (may have leading zeroes).		

	Segment:	**N3** Address Information
	Position:	240
	Loop:	N1 Optional
	Level:	Detail
	Usage:	Optional
	Max Use:	2
	Purpose:	To specify the location of the named party
	Syntax Notes:	
	Semantic Notes:	
	Comments:	

Example:
N3*100 MAIN ST~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N301	166	**Address Information**	M AN 1/55
			Address information	
	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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**N401**	**19**	**City Name**	**O**	**AN 2/30**
			Free-form text for city name		
Must Use	**N402**	**156**	**State or Province Code**	**O**	**ID 2/2**
			Code (Standard State/Province) as defined by appropriate government agency		
Must Use	**N403**	**116**	**Postal Code**	**O**	**ID 3/15**
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)		
	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:	1	
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*2*1*O~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**HL01**	**628**	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
Must Use	**HL02**	**734**	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12
Must Use	**HL03**	**735**	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure O Order	M ID 1/2
	HL04	**736**	**Hierarchical Child Code** 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.	O ID 1/1

Segment: **PRF** Purchase Order Reference

Position:	050
Loop:	HL Mandatory
Level:	Detail
Usage:	Optional (Must Use)
Max Use:	1
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***20000114~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PRF01	324	**Purchase Order Number**	M AN 1/22
			Identifying number for Purchase Order assigned by the orderer/purchaser	
			Boscov's 6-digit purchase order number (may use leading zeros)	
	PRF04	373	**Date**	O DT 8/8
			Date expressed as CCYYMMDD	
			Retailer's original purchase order date	

Segment: **REF** Reference Identification

Position:	150
Loop:	HL Mandatory
Level:	Detail
Usage:	Optional (Must Use)
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.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	

Example:
REF*DP*00131~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			DP Department Number		
Must Use	REF02	127	**Reference Identification**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Boscov's 5 digit Department Number (must use leading zeroes).		

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.
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.
Comments:	

Example:
REF*IV*807764626~

<div align="center">

Data Element Summary

</div>

	Ref. Des.	Data Element	Name	Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier**	**M ID 2/3**
			Code qualifying the Reference Identification	
			IV Seller's Invoice Number	
Must Use	**REF02**	**127**	**Reference Identification**	**X AN 1/30**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

Segment:	**N1** Name
Position:	220
Loop:	N1 Optional
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*00014~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**N101**	**98**	**Entity Identifier Code**	**M**	**ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual		
			BY Buying Party (Purchaser)		
	N102	**93**	**Name**	**X**	**AN 1/60**
			Free-form name		
Must Use	**N103**	**66**	**Identification Code Qualifier**	**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**	**X**	**AN 2/80**
			Code identifying a party or other code		
			Boscov's five digit store # (must use leading zeroes).		

Segment:	**HL** Hierarchical Level - Tare
Position:	010
Loop:	HL Mandatory
Level:	Detail
Usage:	Optional
Max Use:	1
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*3*2*T~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
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 segment 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 structure		
			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

Data Element Summary

Ref. Des.	Data Element	Name	Attributes	
TSD01	**350**	**Assigned Identification**	**O**	**AN 1/20**
		Alphanumeric characters assigned for differentiation within a transaction set		
		Indicates the loading sequence		
Must Use **TSD02**	**219**	**Position**	**O**	**AN 1/3**
		Relative position of shipment in car, trailer, or container (mutually 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		

01/20/06

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:
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*0010700032000011390~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	MAN01	88	**Marks and Numbers Qualifier**	M ID 1/2

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

GM   SSCC-18 and Application Identifier

This is a twenty-character UCC/EAN-128 Serial Shipping Container Code (SSCC-18) that includes the two digit application identifier. The symbology code and the modulo 103 check digit are not included.

	Ref. Des.	Data Element	Name	Attributes
Must Use	MAN02	87	**Marks and Numbers**	M AN 1/48

Marks and numbers used to identify a shipment or parts of a shipment

BC8564104 Pick Pack.doc   36

Segment:	**PAL** Pallet Information	
Position:	215	
Loop:	HL	Mandatory
Level:	Detail	
Usage:	Optional	
Max Use:	1	
Purpose:	To identify the type and physical attributes of the pallet, and, gross weight, gross volume, and height of the load and the pallet	

Syntax Notes:
1. If either PAL05 or PAL06 is present, then the other is required.
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.
6. 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.

Semantic Notes:
1. PAL04 (Pack) is the number of pieces on the pallet.
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 loading.
4. PAL09 (Height) is the height of the pallet and load.
5. 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. Des.	Data Element	Name	Attributes	
Must Use	PAL01	883	**Pallet Type Code** Code indicating the type of pallet 4 Standard	O	ID 1/2
	PAL02	884	**Pallet Tiers** The number of layers per pallet	O	N0 1/3
	PAL03	885	**Pallet Blocks** The number of pieces (cartons) per layer on the pallet	O	N0 1/3
Must Use	PAL04	356	**Pack** The number of inner containers, or number of eaches if there are no inner containers, per outer container Number of cartons on pallet	O	N0 1/6

Segment:	**HL** Hierarchical Level - Pack
Position:	010
Loop:	HL Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
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*4*3*P~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
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 segment 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 structure		
			P Pack		
	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:	**MAN** Marks and Numbers	
Position:	190	
Loop:	HL	Mandatory
Level:	Detail	
Usage:	Optional (Must Use)	
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:	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:	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~

<div align="center">

Data Element Summary

</div>

	Ref. Des.	Data Element	Name	Attributes
Must Use	MAN01	88	**Marks and Numbers Qualifier**	M ID 1/2
			Code specifying the application or source of Marks and Numbers (87)	
			GM SSCC-18 and Application Identifier	
			This is a twenty-character UCC/EAN-128 Serial Shipping Container Code (SSCC-18) that includes the two digit application identifier. The symbology code and the modulo 103 check digit are not included.	
Must Use	MAN02	87	**Marks and Numbers**	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:	1	
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*5*4*I~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
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 segment 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 structure		
			I Item		
	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:	**LIN** Item Identification		

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.
2   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:
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.

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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	LIN02	235	Product/Service ID Qualifier	M	ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
			EN European Article Number (EAN) (2-5-5-1)		
			SZ Vendor Alphanumeric Size Code (NRMA)		
			This is the code assigned by the vendor.		
			UP U.P.C. Consumer Package Code (1-5-5-1)		
			VA Vendor's Style Number		
			VE Vendor Color		
Must Use	LIN03	234	Product/Service ID	M	AN 1/48
			Identifying number for a product or service		
	LIN04	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 Article Number (EAN) (2-5-5-1)		
			SZ Vendor Alphanumeric Size Code (NRMA)		
			UP U.P.C. Consumer Package Code (1-5-5-1)		
			VA Vendor's Style Number		
			VE Vendor Color		
	LIN05	234	Product/Service ID	X	AN 1/48
			Identifying number for a product or service		
	LIN06	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 Article Number (EAN) (2-5-5-1)	
SZ	Vendor Alphanumeric Size Code (NRMA)	
UP	U.P.C. Consumer Package Code (1-5-5-1)	
VA	Vendor's Style 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 Article Number (EAN) (2-5-5-1)	
SZ	Vendor Alphanumeric Size Code (NRMA)	
UP	U.P.C. Consumer Package Code (1-5-5-1)	
VA	Vendor's Style 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)

EN	European Article Number (EAN) (2-5-5-1)	
SZ	Vendor Alphanumeric Size Code (NRMA)	
UP	U.P.C. Consumer Package Code (1-5-5-1)	
VA	Vendor's Style Number	
VE	Vendor Color	

LIN11	**234**	**Product/Service ID**	**X**	**AN 1/48**

Identifying number for a product or service

Segment:	**SN1** Item Detail (Shipment)	
Position:	030	
Loop:	HL	Mandatory
Level:	Detail	
Usage:	Optional (Must Use)	
Max Use:	1	
Purpose:	To specify line-item detail relative to shipment	
Syntax Notes:	**1**	If either SN105 or SN106 is present, then the other is required.
Semantic Notes:	**1**	SN101 is the ship notice line-item identification.
Comments:	**1**	SN103 defines the unit of measurement for both SN102 and SN104.
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~

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
	SN101	350	**Assigned Identification**	**O**	**AN 1/20**
			Alphanumeric characters assigned for differentiation within a transaction set		
Must Use	**SN102**	382	**Number of Units Shipped**	**M**	**R 1/10**
			Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set		
Must Use	**SN103**	355	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		

See Section III for code list.

CA	Case
DZ	Dozens
EA	Each
PK	Pack
PR	Pair

Segment:	**CTT** Transaction Totals
Position:	010
Loop:	
Level:	Summary
Usage:	Optional (Must Use)
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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
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~

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	SE01	96	**Number of Included Segments**	M	N0 1/10
			Total number of segments included in a transaction set including ST and SE segments		
Must Use	SE02	329	**Transaction Set Control Number**	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		
			This must be the same number as is in the ST segment (ST02) for the transaction set.		

Segment:	**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 and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
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 containing this data element	
Must Use	GE02	28	**Group Control Number**	M N0 1/9
			Assigned number originated and maintained by the sender	

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:			

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**IEA01**	**I16**	**Number of Included Functional Groups**	**M N0 1/5**
			A count of the number of functional groups included in an interchange	
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~
REF*LO*123456~
DTM*011*20000202~
DTM*067*20000202~
FOB*PP~
N1*ST*BOSCOV*92*00015~
HL*2*1*O~
PRF*835490***20000114~
REF*DP*00482~
REF*IV*807764626~
N1*BY**92*00014~
HL*3*2*T~
TSD*001*1~
MAN*GM*00107000320000113901~
PAL*4*4*9*36~
HL*4*3*P~
MAN*GM*00007000320000113906~
HL*5*4*I~
LIN**UP*700032591261*VA*20191~
SN1**1*EA~
HL*6*2*T~
MAN*GM*00107000320000113831~
HL*7*6*P~
MAN*GM*00007000320000113838~
HL*8*7*I~
LIN**UP*700032591285*VA*20195~
SN1**2*EA~
HL*9*7*I~
LIN**UP*700032591339*VA*20205~
SN1**1*EA~
CTT*9~
SE*40*856000706~
```