

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

This Implementation Guide contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	0100	ST	Transaction Set Header	M	1		
M	0200	BSN	Beginning Segment for Ship Notice	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
						200000	
						LOOP ID – HL (SHIPMENT DETAILS)	
M	0100	HL	Hierarchical Level	M	1		c1
Must Use	1100	TD1	Carrier Details (Quantity and Weight)	O	20		
Must Use	1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
						12	
						LOOP ID - TD3	
Must Use	1300	TD3	Carrier Details (Equipment)	O	1		
Must Use	1500	REF	Reference Identification	O	>1		
Must Use	2000	DTM	Date/Time Reference	O	10		
Must Use	2100	FOB	F.O.B. Related Instructions	O	1		
						200	
						LOOP ID - N1	
Must Use	2200	N1	Name	O	1		
	2400	N3	Address Information	O	2		
Must Use	2500	N4	Geographic Location	O	1		
						200000	
						LOOP ID – HL (ORDER DETAILS)	
M	0100	HL	Hierarchical Level	M	1		
Must Use	0500	PRF	Purchase Order Reference	O	1		
Must Use	1100	TD1	Carrier Details (Quantity and Weight)	O	20		
Must Use	1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
	1500	REF	Reference Identification	O	>1		
						200000	
						LOOP ID – HL (TARE DETAILS) - Optional	
M	0100	HL	Hierarchical Level	M	1		
Must Use	1900	MAN	Marks and Numbers	O	>1		

			LOOP ID – HL (ITEM DETAILS)			200000
M	0100	HL	Hierarchical Level	M	1	
Must Use	0200	LIN	Item Identification	O	1	
Must Use	0300	SN1	Item Detail (Shipment)	O	1	
Must Use	0600	PO4	Item Physical Details	O	1	
			LOOP ID – HL (PACK DETAILS)			200000
M	0100	HL	Hierarchical Level	M	1	
	0600	PO4	Item Physical Details	O	1	
Must Use	1900	MAN	Marks and Numbers	O	>1	
	2000	DTM	Date/Time Reference	O	10	

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	0100	CTT	Transaction Totals	O	1		n1
M	0200	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Each Transaction Set Shipment ID (BSN-02) must be unique. Shipments must also be from one Ship-from location to one Ship-to location.
2. Do not include Purchas Orders for different locations within the same shipment.
3. 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: **ST** Transaction Set Header
Position: 0100
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:
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST-01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	M 1 ID 3/3
Must Use	ST-02	329	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	M 1 AN 4/9

Segment: **BSN** Beginning Segment for Ship Notice
Position: 0200
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Semantic Notes: 1 BSN-03 is the date the shipment transaction set is created.
 2 BSN-04 is the time the shipment transaction set is created.
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BSN-01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original	M 1 ID 2/2
Must Use	BSN-02	396	Shipment Identification A unique control number assigned by the original shipper to identify a specific shipment	M 1 AN 2/30
Must Use	BSN-03	373	Date Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	M 1 DT 8/8
Must Use	BSN-04	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M 1 TM 4/8
Must Use	BSN-05	1005	Hierarchical Structure Code Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set The BSN-05 must be sent and must include the value '0002'. 0002 Shipment, Order, Item, Packaging (Standard Pack)	O 1 ID 4/4

Segment: **HL Hierarchical Level - SHIPMENT DETAILS**
Position: 0100
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

- 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 HL-01 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 HL-01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
 - 3 HL-02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 HL-03 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, HL-03 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.

Notes: This hierarchical level must be sent, and it should contain Shipment details.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	HL-01	628 Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL-02	734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
Must Use	HL-03	735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M 1 ID 1/2

S Shipment

Segment: **TD1** **Carrier Details (Quantity and Weight)**
Position: 1100
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 20
Purpose: To specify the transportation details relative to commodity, weight, and quantity
Syntax Notes:

- 1 If TD1-01 is present, then TD1-02 is required.
- 2 If TD1-03 is present, then TD1-04 is required.
- 3 If TD1-06 is present, then TD1-07 is required.
- 4 If either TD1-07 or TD1-08 is present, then the other is required.
- 5 If either TD1-09 or TD1-10 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

This segment must be sent. Multiple shipment-level TD1 segments should NOT be sent.

If the Shipment Payment Method is Collect (FOB-01 = "CC"), then the shipment-level TD1-06, -07, -08, -09, and -10 must be sent.

Data Element Summary

Ref.	Data	Attributes		
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
Must Use	TD1-01	103	Packaging Code	O 1 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 The TD1-01 must be sent.	
			CTN	Carton
			25	Corrugated or Solid
Must Use	TD1-02	80	Lading Quantity	X 1 N0 1/7
			Number of units (pieces) of the lading commodity Total number of cartons in shipment. The TD1-02 must be sent.	
	TD1-06	187	Weight Qualifier	O 1 ID 1/2
			Code defining the type of weight The TD1-06 must be sent for Collect shipments.	
			G	Gross Weight
	TD1-07	81	Weight	X 1 R 1/10
			Numeric value of weight Total shipment gross weight. The TD1-07 must be sent for Collect shipments.	
	TD1-08	355	Unit or Basis for Measurement Code	X 1 ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken The TD1-08 must be sent for Collect shipments.	
			LB	Pound
	TD1-09	183	Volume	X 1 R 1/8
			Value of volumetric measure Total shipment cubic feet. The TD1-09 must be sent for Collect shipments.	
			NOTE: The sum of the individual carton volumes (PO4-08's) could be less than the total shipment volume when accounting for pallets.	
	TD1-10	355	Unit or Basis for Measurement Code	X 1 ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken The TD1-10 must be sent for Collect shipments.	
			CF	Cubic Feet

Segment: **TD5** **Carrier Details (Routing Sequence/Transit Time)**
Position: 1200
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:

- 1 At least one of TD5-02, TD5-04, TD5-05, TD5-06 or TD5-12 is required.
- 2 If TD502 is present, then TD503 is required.

Comments:

- 1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD5-02 to identify the party responsible for defining the routing sequence, and use TD5-03 to identify the actual routing sequence, specified by the party identified in TD5-02.

Notes: This segment must be sent. Multiple shipment-level TD5 segments should NOT be sent.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TD5-02	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) The TD5-02 must be sent.	X 1 ID 1/2
			2 Standard Carrier Alpha Code (SCAC)	
Must Use	TD5-03	67	Identification Code Code identifying a party or other code Carrier's SCAC. The TD5-03 must be sent.	X 1 AN 2/80

Segment: **TD3** **Carrier Details (Equipment)**
Position: 1300
Loop: TD3 Optional (Must Use)
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To specify transportation details relating to the equipment used by the carrier
Syntax Notes: 1 Only one of TD3-01 or TD3-10 may be present.
 2 If TD3-02 is present, then TD3-03 is required.

Comments:

Notes: This segment must be sent.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TD3-01	40	Equipment Description Code Code identifying type of equipment used for shipment The TD3-01 must be sent.	X 1 ID 2/2
			TL Trailer (not otherwise specified)	
Must Use	TD3-02	206	Equipment Initial Prefix or alphabetic part of an equipment unit's identifying number The TD3-02 must be sent.	O 1 AN 1/4
Must Use	TD3-03	207	Equipment Number Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred) The TD3-03 must be sent.	X 1 AN 1/10

Segment: **REF** Reference Identification
Position: 1500
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF-02 or REF-03 is required.

Comments:

Notes: TRU-assigned Routing Number is required for collect shipments only. (when FOB-01 = "CC")

Additionally, separate REF segments must be sent for Bill of Lading Number and for PRO Number for all shipments. Only 1 of each number should be sent.

Do NOT send multiple Bill of Lading, PRO or Routing Numbers.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF-01	128	Reference Identification Qualifier Code qualifying the Reference Identification For the Bill of Lading Number, either qualifier ("BL" or "BM") will be acceptable. Do NOT use both. BL or BM Government Bill of Lading or Bill of Lading Number CN Carrier's Reference Number (PRO/Invoice) RU Route Number	M 1 ID 2/3
Must Use	REF-02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier The REF-02 must be sent for each REF segment.	X 1 AN 1/50

Segment: **DTM** **Date/Time Reference**
Position: 2000
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 DTM-02, DTM-03 or DTM-05 is required.

Comments:

Notes: Two separate DTM segments must be sent: one for the Ship Date and one for the Delivery Date.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	DTM-01	374	Date/Time Qualifier	M 1 ID 3/3
			Code specifying type of date or time, or both date and time	
			The DTM-01 must be sent.	
			011 Shipped	
			067 Current Schedule Delivery	
Must Use	DTM-02	373	Date	X 1 DT 8/8
			Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	
			The DTM-02 must be sent.	

Segment: **FOB** **F.O.B. Related Instructions**
Position: 2100
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To specify transportation instructions relating to shipment

Comments:

Notes: This segment must be sent.

Data Element Summary

Ref.	Data Element	Name	Attributes
M	FOB-01	146 Shipment Method of Payment	M 1 ID 2/2
		Code identifying payment terms for transportation charges	
		The FOB-01 must be sent.	
		CC	Collect
		PP	Prepaid (by Seller)

Segment: **N1** Name
Position: 2200
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 N1-02 or N1-03 is required.
 2 If either N1-03 or N1-04 is present, then the other is required.

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N1-04) must provide a key to the table maintained by the transaction processing party.

Notes: Two separate N1 loops must be sent: one for the Ship-from location and one for the Ship-to location.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use N1-01	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual The N1-01 must be sent. SF Ship From ST Ship To	M 1 ID 2/3
Must Use N1-02	93	Name Free-form name The N1-02 must be sent. When for the Ship-from location, this will be a free-form name. When for the Ship-to location, this should be the TRU location number.	X 1 AN 1/60
Must Use N1-03	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) The N1-03 must be sent. 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	X 1 ID 1/2
Must Use N1-04	67	Identification Code Code identifying a party or other code The N1-04 must be sent. When for the Ship-from location, this should be the D-U-N-S Number followed by 4-character suffix. When for the Ship-to location, this must be the TRU D-U-N-S Number followed by the 4-digit TRU location number.	X 1 AN 2/80

Segment: **N3** **Address Information**
Position: 2400
Loop: N1 Optional (Must Use)
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party

Comments:

Notes: Only one N3 segment should be sent per N1 segment. Do NOT send multiple N3 segments per N1.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N3-01	166	Address Information Address information	M 1 AN 1/55
	N3-02	166	Address Information Address information	O 1 AN 1/55

Segment: **N4 Geographic Location**
Position: 2500
Loop: N1 Optional (Must Use)
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1 Only one of N4-02 or N4-07 may be present.

Comments: 1 A combination of either N4-01 through N4-04, or N4-05 and N4-06 may be adequate to specify a location.
 2 N4-02 is required only if city name (N4-01) is in the U.S. or Canada.

Notes: An N4 segment must be sent with both the Ship-from N1 segment and the Ship-to N1 segment.

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
Must Use	N4-01	19	City Name Free-form text for city name	O 1 AN 2/30
Must Use	N4-02	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	X 1 ID 2/2
Must Use	N4-03	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O 1 ID 3/15

Segment: **HL** Hierarchical Level - ORDER DETAILS
Position: 0100
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

- 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 HL-01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL-01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL-01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
 - 3 HL-02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 HL-03 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, HL-03 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.

Notes: This hierarchical level must be sent, and it should contain Order details.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	HL-01	628 Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL-02	734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
Must Use	HL-03	735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M 1 ID 1/2

O Order

Segment: **PRF** Purchase Order Reference
Position: 0500
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To provide reference to a specific purchase order

Comments:

Notes: This segment must be sent.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PRF01	324	Purchase Order Number Identifying number for Purchase Order assigned by the orderer/purchaser The PRF-01 must be sent. This should be the PO Number as sent in the BEG-03 of the Purchase Order.	M 1 AN 1/22
Must Use	PRF04	373	Date Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year Purchase Order date. The PRF-04 must be sent. This should be the PO Date as sent in the BEG-05 of the Purchase Order.	O 1 DT 8/8

Segment: **TD1** Carrier Details (Quantity and Weight)
Position: 1100
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 20
Purpose: To specify the transportation details relative to commodity, weight, and quantity
Syntax Notes: 1 If TD1-01 is present, then TD1-02 is required.

Comments:

Notes: This segment must be sent. Multiple order-level TD1 segments should NOT be sent for an order.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	TD1-01	103	Packaging Code 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 The TD1-01 must be sent.	O 1 AN 3/5
			CTN Carton	
			25 Corrugated or Solid	
Must Use	TD1-02	80	Lading Quantity Number of units (pieces) of the lading commodity Number of cartons for this order. The TD1-02 must be sent.	X 1 N0 1/7

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)
Position: 1200
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:

- 1 At least one of TD5-02, TD5-04, TD5-05, TD5-06 or TD5-12 is required.
- 2 If TD5-02 is present, then TD5-03 is required.

Comments:

- 1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD5-02 to identify the party responsible for defining the routing sequence, and use TD5-03 to identify the actual routing sequence, specified by the party identified in TD5-02.

Notes: This segment must be sent. Multiple order-level TD5 segments should NOT be sent for an order.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
Must Use	TD5-06	368 Shipment/Order Status Code	X 1 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	
		The TD5-06 must be sent.	
		BP	Shipment Partial, Back Order to Ship on (Date)
		CC	Shipment Complete on (Date)
		CP	Partial Shipment on (Date), Considered No Backorder

Segment: **REF** Reference Identification
Position: 1500
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF-02 or REF-03 is required.

Comments:

Notes: Only 1 REF segment containing the Invoice Number should be sent. Do NOT send multiple Invoice Numbers in multiple REF segments for an order.

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
REF-01	128	Reference Identification Qualifier Code qualifying the Reference Identification IV Seller's Invoice Number	M 1 ID 2/3
REF-02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Your Invoice Number.	X 1 AN 1/50

Segment: **HL Hierarchical Level - TARE DETAILS**
Position: 0100
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

- Comments:**
- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
 - 2 HL-01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL-01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL-01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
 - 3 HL-02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 HL-03 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, HL-03 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.

Notes: The tare-level loop is used to convey pallet information and is optional. If sent, this loop should contain an HL segment and one MAN segment.

One tare-level HL segment should be sent per pallet.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	HL-01	628 Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL-02	734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
Must Use	HL-03	735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M 1 ID 1/2

T Shipping Tare

Segment: **MAN** Marks and Numbers
Position: 1900
Loop: HL Optional
Level: Detail
Usage: Mandatory (Must Use if sending Tare data)
Max Use: >1
Purpose: To indicate identifying marks and numbers for shipping containers

Comments: 1 When MAN-01 contains code "UC" (U.P.C. Shipping Container Code) and MAN-05/MAN-06 contain a range of ID numbers, MAN-03 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 MAN-05/MAN-06.

Notes: If sending Tare (pallet) details, this segment must be sent. Only 1 MAN segment should be sent per tare-level HL segment.

Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
Must Use	MAN01	88	Marks and Numbers Qualifier	M 1 ID 1/2
			Code specifying the application or source of Marks and Numbers (87)	
			If sending Tare details, the MAN-01 must be sent.	
			W	Pallet Number
Must Use	MAN02	87	Marks and Numbers	M 1 AN 1/48
			Marks and numbers used to identify a shipment or parts of a shipment	
			A number UNIQUELY identifying each pallet. If sending Tare details, the MAN-02 must be sent.	

Segment: **HL Hierarchical Level - ITEM DETAILS**
Position: 0100
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segment.

- 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 HL-01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL-01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL-01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
 - 3 HL-02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 HL-03 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, HL-03 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.

Notes: This hierarchical level must be sent, and it should contain Item details.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
Must Use	HL-01	628 Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL-02	734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
Must Use	HL-03	735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M 1 ID 1/2
		I Item	

Segment: **LIN** Item Identification
Position: 0200
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes: 1 If either LIN-04 or LIN-05 is present, then the other is required.

Comments: 1 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: This segment must be sent and it must contain both a valid TRU SKN and a valid UPC/EAN number.

Data Element Summary

Ref.	Data				
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>		
Must Use	LIN-02	235	Product/Service ID Qualifier	M	1 ID 2/2
Code identifying the type/source of the descriptive number used in Product/Service ID (234)					
The LIN-02 must be sent. It should contain either the "EN" or the "UP" qualifier.					
		EN	EAN/UCC - 13		
			Data structure for the 13 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN)		
		UP	UCC - 12		
			Data structure for the 12 digit EAN.UCC (EAN International.Uniform Code Council) Global Trade Identification Number (GTIN). Also known as the Universal Product Code (U.P.C.)		
Must Use	LIN-03	234	Product/Service ID	M	1 AN 1/48
Identifying number for a product or service					
The LIN-03 must be sent and it should contain either the EAN/UCC-13 or UPC Case Code with Check Digit. (1-5-5-1)					
If sending the UPC, this should be the value that was sent with the "UP" qualifier within the PO1 segment of the Purchase Order.					
Must Use	LIN-04	235	Product/Service ID Qualifier	X	1 ID 2/2
Code identifying the type/source of the descriptive number used in Product/Service ID (234)					
The LIN-04 must be sent and it should contain the "IT" qualifier.					
		IT	Buyer's Style Number		
Must Use	LIN-05	234	Product/Service ID	X	1 AN 1/48
Identifying number for a product or service					
The LIN-05 must be sent and it should contain the TRU SKN.					
This should be the value that was sent with the "IT" qualifier within the PO1 segment of the Purchase Order.					

Segment: **SN1** Item Detail
Position: 0300
Loop: HL Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To specify line-item detail relative to shipment

Comments: 1 SN1-03 defines the unit of measurement for both SN1-02 and SN1-04.
Notes: This segment must be sent.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SN1-02	382	Number of Units Shipped Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set Total pieces for this item. The SN1-02 must be sent.	M 1 R 1/10
Must Use	SN1-03	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken The SN1-03 must be sent. EA Each	M 1 ID 2/2

Segment: **PO4** **Item Physical Details**
Position: 0600
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 PO4-02 or PO4-03 is present, then the other is required.
- 2 If PO4-05 is present, then PO4-06 is required.
- 3 If either PO4-06 or PO4-07 is present, then the other is required.
- 4 If either PO4-08 or PO4-09 is present, then the other is required.
- 5 If either PO4-10, PO4-11 or PO4-12 is present, then PO413 is required.
- 6 If PO4-13 is present, then at least one of PO4-10, PO4-11 or PO4-12 is required.
- 9 If PO4-17 is present, then PO4-16 is required.

Comments: 1 PO4-13 defines the unit of measure for PO4-10, PO4-11 and PO4-12.

Notes: This segment must be sent.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use PO4-01	356	Pack	O 1 N0 1/6
The number of inner containers, or number of eaches if there are no inner containers, per outer container			
The PO4-01 must be sent.			
Must Use PO4-04	103	Packaging Code	X 1 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			
The PO4-04 must be sent.			
		CTN Carton	
		25 Corrugated or Solid	
PO4-05	187	Weight Qualifier	O 1 ID 1/2
Code defining the type of weight			
		G Gross Weight	
Must Use PO4-06	384	Gross Weight per Pack	X 1 R 1/9
Numeric value of gross weight per pack			
The PO4-06 must be sent.			
Must Use PO4-07	355	Unit or Basis for Measurement Code	X 1 ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken			
The PO4-07 must be sent.			
		LB Pound	
Must Use PO4-08	385	Gross Volume per Pack	X 1 R 1/9
Numeric value of gross volume per pack			
The PO4-08 must be sent.			
Must Use PO4-09	355	Unit or Basis for Measurement Code	X 1 ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken			
The PO4-09 must be sent.			
		CF Cubic Feet	
PO4-10	82	Length	X 1 R 1/8
Largest horizontal dimension of an object measured when the object is in the upright position			

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PO4-11	189	Width	X	1 R 1/8
		Shorter measurement of the two horizontal dimensions measured with the object in the upright position		
PO4-12	65	Height	X	1 R 1/8
		Vertical dimension of an object measured when the object is in the upright position		
PO4-13	355	Unit or Basis for Measurement Code	X	1 ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
PO4-14	810	Inner Pack	O	1 N0 1/6
		The number of eaches per inner container		
		If inner packs are being sent, this is the number of selling units within one of the inner packs.		
		This should be the value from the PO4-14 in the Purchase Order.		
PO4-18	1470	Number	O	1 N0 1/9
		A generic number		
		Total number of cartons for this item.		

Segment: **HL Hierarchical Level - PACK DETAILS**
Position: 0100
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 HL-01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL-01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL-01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL-02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL-03 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, HL-03 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.

Notes: This hierarchical level must be sent, and it should contain Pack (carton) details.

Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
Must Use	HL-01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M 1 AN 1/12
	HL-02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O 1 AN 1/12
Must Use	HL-03	735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M 1 ID 1/2
			P Pack	

Segment: **PO4** Item Physical Details
Position: 0600
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the physical qualities, packaging, weights, and dimensions relating to the item

Comments:

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>	<u>Pack</u>	
PO4-01	356	Pack	O 1 N0 1/6
The number of inner containers, or number of eaches if there are no inner containers, per outer container			

Segment: **MAN** Marks and Numbers
Position: 1900
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 MAN-04 or MAN-05 is present, then the other is required.

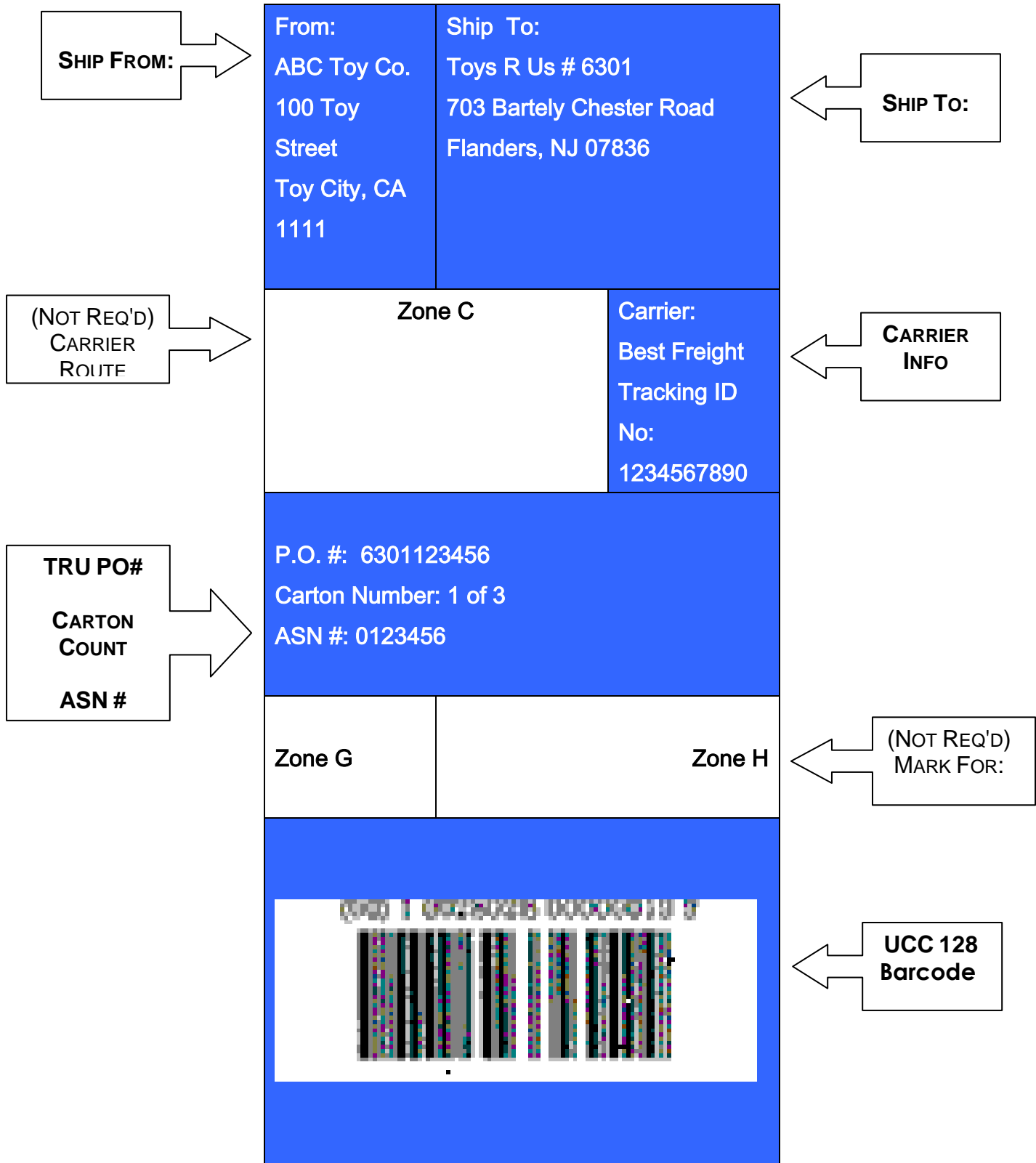
Comments:

Notes: This segment must be sent. Only 1 MAN segment should be sent per pack-level HL segment.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MAN-01	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) The MAN-01 must be sent.	M 1 ID 1/2
			CP Carrier-Assigned Package ID Number	
Must Use	MAN-02	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment Carrier-assigned code. Must be unique number for each carton. The MAN-02 must be sent.	M 1 AN 1/48
Must Use	MAN-04	88	Marks and Numbers Qualifier Code specifying the application or source of Marks and Numbers (87) The MAN-04 must be sent. Either qualifier ("GM" or "SM") will be acceptable. Do NOT send both. GM or SM SSCC-18 & Application Identifier or Shipper Assigned	X 1 ID 1/2
Must Use	MAN-05	87	Marks and Numbers Marks and numbers used to identify a shipment or parts of a shipment Shipper-assigned code. Must be unique number for each carton. The MAN-05 must be sent.	X 1 AN 1/48

UCC-128 SHIPPING CONTAINER LABEL FORMAT



Segment: **DTM** Date/Time Reference
Position: 2000
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes: 1 At least one of DTM-02, DTM-03 or DTM-05 is required.

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM-01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 036 Expiration - Date coverage expires	M 1 ID 3/3
Must Use	DTM-02	373	Date Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	X 1 DT 8/8

Segment: **CTT** Transaction Totals
Position: 0100
Loop:
Level: Summary
Usage: Optional (Must Use)
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set

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

Notes: This segment MUST be sent.

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	CTT-01	354	Number of Line Items Total number of line items in the transaction set	M 1 N0 1/6
			The CTT-01 should contain the total number of hierarchical levels (HL segments) within the transaction set.	

Segment: **SE** Transaction Set Trailer
Position: 0200
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)

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

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SE-01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M 1 N0 1/10
Must Use	SE-02	329	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	M 1 AN 4/9

ISA*00* *00* *ZZ*YOUR-ID-HERE *12*6063711145 *070910*0917*U*00200*000003549*0*P*>
GS*SH*YOUR-ID-HERE*6063711145*20070910*0917*3549*X*004030
ST*856*0001
BSN*00*379913565*20070910*0916*0002
HL*1S**
TD1*CTN25*6***G*96.04*LB*12.908*CF
TD5**2*SCAC
TD3*TL*SCAC*53285725
REF*BM*00454860310576360
REF*CN*8913448
REF*RU* DST123456790
DTM*011*20071109
DTM*067*20071112
FOB*CC
N1*SF*YOUR COMPANY*9*123456789
N4*SANTA FE SPRING*CA*90670
N1*ST*6301*9*0643364726301
N3*703 BARTLEY CHESTER RD
N4*FLANDERS*NJ*07836
HL*2*1*O
PRF*6301693412***20071021
TD1*CTN25*6
TD5*****CC
REF*IV*3033029792
HL*3*2*I
LIN**UP*076930423678*IT*023149
SN1**16*EA
PO4*4***CTN25*G*16.7*LB*2.059*CF
HL*4*3*P
MAN*SM*00000389760479369701
HL*5*3*P
MAN*SM*00000389760479369702
HL*6*3*P
MAN*SM*00000389760479369703
HL*7*3*P
MAN*SM*00000389760479369704
HL*8*2*I
LIN**UP*032244027923*IT*122712
SN1**8*EA
PO4*4***CTN25*G*14.62*LB*2.336*CF
HL*9*8*P
MAN*SM*00000389760479369821
HL*10*8*P
MAN*SM*00000389760479369822
CTT*10
SE*44*0001
GE*1*3549
IEA*1*000003549