



# **856 HC Ship Notice/Manifest - Canada**

Healthcare EDI

**Version: 006020HC2012**

<b>Author:</b>	<b>GS1 Canada Healthcare Technical Standards Work Group</b>
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# 856 HC Ship Notice/Manifest - Canada

## Functional Group=SH

**Purpose:** This X12 Transaction Set 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</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
0100	ST	Transaction Set Header	M	1			Must use
0200	BSN	Beginning Segment for Ship Notice	M	1			Must use

### Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
<b><u>LOOP ID - HL</u></b>					<b><u>200000</u></b>	<b><u>C2/0100L</u></b>	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
1100	TD1	Carrier Details (Quantity and Weight)	O	20			Used
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
1400	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5			Used
1500	REF	Reference Information	O	>1			Used
1510	PER	Administrative Communications Contact	O	3			Used
1900	MAN	Marks and Numbers Information	O	>1			Used
2000	DTM	Date/Time Reference	O	10			Used
<b><u>LOOP ID - N1</u></b>					<b><u>200</u></b>		
2200	N1	Party Identification	O	1			Must use
2300	N2	Additional Name Information	O	2			Used
2400	N3	Party Location	O	2			Used
2500	N4	Geographic Location	O	1			Used
<b><u>LOOP ID - HL</u></b>					<b><u>200000</u></b>	<b><u>C2/0100L</u></b>	
0100	HL	Hierarchical Level	M	1		C2/0100	Must use
0500	PRF	Purchase Order Reference	O	1			Used
1100	TD1	Carrier Details (Quantity and Weight)	O	20			Used
1500	REF	Reference Information	O	>1			Used
<b><u>LOOP ID - N1</u></b>					<b><u>200</u></b>		

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
2200	N1	Party Identification	O	1			Used
2300	N2	Additional Name Information	O	2			Used
2400	N3	Party Location	O	2			Used
2500	N4	Geographic Location	O	1			Used

<u>LOOP ID - HL</u>			<u>200000</u>	<u>C2/0100L</u>		
0100	HL	Hierarchical Level	O	1	C2/0100	Used
1900	MAN	Marks and Numbers Information	O	>1		Used
2150	PAL	Pallet Type and Load Characteristics	O	1		Used

<u>LOOP ID - HL</u>			<u>200000</u>	<u>C2/0100L</u>		
0100	HL	Hierarchical Level	M	1	C2/0100	Must use
0200	LIN	Item Identification	O	1		Used
0300	SN1	Item Detail (Shipment)	O	1		Used
0500	PRF	Purchase Order Reference	O	1		Used
1500	REF	Reference Information	O	>1		Used
1900	MAN	Marks and Numbers Information	O	>1		Used
2000	DTM	Date/Time Reference	O	10		Used

<u>LOOP ID - HL</u>			<u>200000</u>	<u>C2/0100L</u>		
0100	HL	Hierarchical Level	M	1	C2/0100	Must use
0200	LIN	Item Identification	O	1		Used
0300	SN1	Item Detail (Shipment)	O	1		Used
0500	PRF	Purchase Order Reference	O	1		Used
0700	PID	Product/Item Description	O	200		Used
1400	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		Used
1500	REF	Reference Information	O	>1		Used
2000	DTM	Date/Time Reference	O	10		Used

**Summary:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
0100	CTT	Transaction Totals	O	1		N3/0100	Used
0200	SE	Transaction Set Trailer	M	1			Must use

**Notes:**

3/0100 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

**Comments:**

- 2/0100L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
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# ST Transaction Set Header

Pos: 0100	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Must use

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b>	M	ID	3/3	Must use

**Description:** Code uniquely identifying a Transaction Set

**CodeList Summary** (Total Codes: 320, Included: 1)

**Code Name**

856 Ship Notice/Manifest

ST02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Must use
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**Description:** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

**Note 1:** *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.*

## Semantics:

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).
2. The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition. When used, this implementation convention reference takes precedence over the implementation reference specified in the GS08.

# BSN Beginning Segment for Ship Notice

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 5

**User Option (Usage):** Must use

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

**Note 1:**

*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.*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BSN01	353	Transaction Set Purpose Code	M	ID	2/2	Must use

**Description:** Code identifying purpose of transaction set

**CodeList Summary** (Total Codes: 67, Included: 4)

**Code Name**

00 Original

**Note 1:**

*A full refresh of a previously transmitted transaction. This is an updated / corrected version.*

03 Delete

**Note 1:**

*Removes a previously sent 856 Ship Notice / Manifest transaction.*

05 Replace

**Note 1:**

*Full replacement of information with value from BSN02*

07 Duplicate

BSN02	396	Shipment Identification	M	AN	2/30	Must use
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**Description:** A unique control number assigned by the original shipper to identify a specific shipment

**Note 1:** *Shipment Identification is a unique control number, assigned by the original shipper, to identify the original shipment transaction.*

**Note 2:** *When the 03-Delete code is used in BSN01, the value in BSN02 shall be the 00-Original shipment identification number from a prior 856 transaction.*

BSN03	373	Date	M	DT	8/8	Must use
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**Description:** Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year



<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BSN04	337	<b>Time</b>	M	TM	4/8	Must use

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

BSN05	1005	<b>Hierarchical Structure Code</b>	O	ID	4/4	Must use
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**Description:** Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set

**Note 1:** *To avoid potential confusion about an order, for any Hierarchical Structure Code chosen, if the Order Hierarchy (HL) is used, the PRF segment shall not be used in any other level of the 856 Ship Notice/Manifest.*

**CodeList Summary** (Total Codes: 82, Included: 4)

**Code Name**

0001 Shipment, Order, Packaging, Item

**Note 1:**

*Pick and Pack Structure*

**Note 2:**

*The hierarchical structure that is used within the ASN (Advanced Ship Notice). First level = Shipment, Second level = Order, Third level = Packaging and Fourth level = Item - in this order.*

0002 Shipment, Order, Item, Packaging

**Note 1:**

*Standard Carton Pack Structure*

**Note 2:**

*The hierarchical structure that is used within the ASN (Advanced Ship Notice). First level = Shipment, Second level = Order, Third level = Item, Fourth level = Packaging in this order.*

0003 Shipment, Packaging, Order, Item

**Note 1:**

*This hierarchy shall be used when a carton contains more than one order. Since the Order Hierarchy (HL) is used, the PRF segment at the Item level shall not be used.*

**Note 2:**

*The hierarchical structure that is used within the ASN (Advanced Ship Notice). First level = Shipment, Second level = Packaging, Third level = Item and Fourth level = Order.*

0004 Shipment, Order, Item

**Note 1:**

*The hierarchical structure that is used within the ASN (Advanced Ship Notice). First level = Shipment, Second level = Order, Third level = Item - in this order*

**Syntax Rules:**

1. C0706 - If BSN07 is present, then BSN06 is required.

**Semantics:**

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.
3. BSN06 is limited to shipment related codes.

**Comments:**

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

# Loop Hierarchical Level

Pos: 0100	Repeat: 200000
Mandatory	
Loop: HL	Elements: N/A

**User Option (Usage):** Must use

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

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	M	1		Must use
1100	TD1	Carrier Details (Quantity and Weight)	O	20		Used
1200	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
1400	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		Used
1500	REF	Reference Information	O	>1		Used
1510	PER	Administrative Communications Contact	O	3		Used
1900	MAN	Marks and Numbers Information	O	>1		Used
2000	DTM	Date/Time Reference	O	10		Used
2200		Loop N1	O		200	Must use

# HL Hierarchical Level

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

**User Option (Usage):** Must use

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

## Note 1:

*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.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use				
		<p><b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure</p> <p><b>Note 1:</b> <i>The value for this level (shipment) is 1.</i></p>								
HL02	734	<b>Hierarchical Parent ID Number</b>	O	AN	1/12	Used				
		<p><b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to</p>								
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use				
		<p><b>Description:</b> Code defining the characteristic of a level in a hierarchical structure</p> <p><b>CodeList Summary</b> (Total Codes: 250, Included: 1)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>S</td> <td>Shipment</td> </tr> </tbody> </table>					<u>Code</u>	<u>Name</u>	S	Shipment
<u>Code</u>	<u>Name</u>									
S	Shipment									

## Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent

segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

6. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

# TD1 Carrier Details (Quantity and Weight)

Pos: 1100	Max: 20
Detail - Optional	
Loop: HL	Elements: 5

**User Option (Usage):** Used

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

## Note 1:

*This segment, at the shipment level, is used to specify total containers and gross weight of the shipment as specified on the bill of lading.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD101	103	<b>Packaging Code</b>	O	AN	3/5	Used

**Description:** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

**CodeList Summary** (Total Codes: 157, Included: 9)

### Code Name

AAA Pallet, Returnable  
 BAG Bag  
 CAG Cage  
 CAS Case  
 CTN Carton  
 CYL Cylinder  
 DRM Drum  
 PLT Pallet  
 SRW Shrink Wrap

**Description:** *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*

**CodeList Summary** (Total Codes: 58, Included: 11)

### Code Name

01 Aluminum  
 03 Hard Wood  
 05 Soft Wood  
 25 Corrugated or Solid

### Note 1:

*Corrugated or solid packaging does not require repackaging for shipment*

43 Glass  
 58 Metal  
 76 Paper  
 79 Plastic  
 84 Polystyrene

**Description:** *A polymer prepared by the polymerization of styrene as the sole monomer*

91 Stainless Steel

		<u>Code</u>	<u>Name</u>				
		94	Wood				
TD102	80	<b>Lading Quantity</b>		X	N0	1/7	Used
		<b>Description:</b> Number of units (pieces) of the lading commodity					
		<b>Note 1:</b> <i>The number of packages in the shipment as described in TD101</i>					
TD106	187	<b>Weight Qualifier</b>		O	ID	1/2	Used
		<b>Description:</b> Code defining the type of weight					
		<b>CodeList Summary</b> (Total Codes: 53, Included: 1)					
		<u>Code</u>	<u>Name</u>				
		G	Gross Weight				
TD107	81	<b>Weight</b>		X	R	1/10	Used
		<b>Description:</b> Numeric value of weight					
TD108	355	<b>Unit or Basis for Measurement Code</b>		X	ID	2/2	Used
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken					
		<b>CodeList Summary</b> (Total Codes: 903, Included: 4)					
		<u>Code</u>	<u>Name</u>				
		GR	Gram				
		KG	Kilogram				
		LB	Pound				
		OZ	Ounce - Av				

**Syntax Rules:**

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.
5. P0910 - If either TD109 or TD110 is present, then the other is required.

# TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 1200	Max: 12
Detail - Optional	
Loop: HL	Elements: 5

**User Option (Usage):** Used

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

## Note 1:

*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.*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD502	66	Identification Code Qualifier	X	ID	1/2	Used

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

**CodeList Summary** (Total Codes: 254, Included: 4)

### Code Name

2 Standard Carrier Alpha Code (SCAC)

#### Note 1:

*See External Code Source 17*

91 Assigned by Seller or Seller's Agent

92 Assigned by Buyer or Buyer's Agent

UL Global Location Number (GLN)

**Description:** A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system

#### Note 1:

*See External Code Source 583*

TD503	67	Identification Code	X	AN	2/80	Used
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**Description:** Code identifying a party or other code

TD504	91	Transportation Method/Type Code	X	ID	1/2	Used
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**Description:** Code specifying the method or type of transportation for the shipment

**CodeList Summary** (Total Codes: 81, Included: 10)

### Code Name

7 Mail



**Code Name**

**Description:** *Type of transportation provided by the U.S. Postal Service*

- A Air
- E Expedited Truck
- H Customer Pickup
- M Motor (Common Carrier)
- R Rail
- U Private Parcel Service

**Note 1:**

*Courier, Taxi or other delivery service.*

- AE Air Express
- SB Shipper Agent

**Description:** *Agent for piggyback code consolidation*

- SR Supplier Truck

**Note 1:**

*Sender's private fleet.*

TD505	387	<b>Routing</b>	X	AN	1/35	Used
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**Description:** Free-form description of the routing or requested routing for shipment, or the originating carrier's identity

TD506	368	<b>Shipment/Order Status Code</b>	X	ID	2/2	Used
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**Description:** Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction

**CodeList Summary** (Total Codes: 102, Included: 2)

**Code Name**

- CC Shipment Complete on (Date)
- PR Partial Shipment

**Syntax Rules:**

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

**Semantics:**

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

**Comments:**

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

# TD4 Carrier Details (Special Handling, or Hazardous Materials, or Both)

Pos: 1400	Max: 5
Detail - Optional	
Loop: HL	Elements: 1

**User Option (Usage):** Used

**Purpose:** To specify transportation special handling requirements, or hazardous materials information, or both

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD401	152	Special Handling Code	X	ID	2/3	Must use

**Description:** Code specifying special transportation handling instructions

**CodeList Summary** (Total Codes: 579, Included: 3)

**Code Name**

FR Fragile - Handle with Care

DNF Do Not Freeze

**Description:** *Specifies that the temperature of a shipment must not go below the freezing point during transit*

HAZ Hazardous Cargo

## Syntax Rules:

1. R010204 - At least one of TD401, TD402 or TD404 is required.
2. C0203 - If TD402 is present, then TD403 is required.

## Semantics:

1. TD405 identifies if a Material Safety Data Sheet (MSDS) exists for this product. A "Y" indicates an MSDS exists for this product; an "N" indicates an MSDS does not exist for this product.

# REF Reference Information

Pos: 1500	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify identifying information

## Note 1:

*In some cases, individual shipments with bill of lading may be grouped under a VICS Master Bill of Lading. Under this circumstance, specifying both the bill of lading and the associated VICS Master Bill of Lading Number will facilitate tracking.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
<b>Description:</b> Code qualifying the Reference Identification						
<b>CodeList Summary</b> (Total Codes: 1813, Included: 3)						
<b><u>Code</u> <u>Name</u></b>						
BM Bill of Lading Number						
CN Carrier's Reference Number (PRO/Invoice)						
PK Packing List Number						
REF02	127	<b>Reference Identification</b>	X	AN	1/80	Must use
<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier						

## Syntax Rules:

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

## Semantics:

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

# PER Administrative Communications Contact

Pos: 1510	Max: 3
Detail - Optional	
Loop: HL	Elements: 8

**User Option (Usage):** Used

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PER01	366	Contact Function Code	M	ID	2/2	Must use

**Description:** Code identifying the major duty or responsibility of the person or group named

**CodeList Summary** (Total Codes: 241, Included: 3)

**Code Name**

BD Buyer Name or Department  
DI Delivery Instructions Contact  
HM Hazardous Material Contact

PER02	93	Name	O	AN	1/60	Used
-------	----	------	---	----	------	------

**Description:** Free-form name

PER03	365	Communication Number Qualifier	X	ID	2/2	Used
-------	-----	--------------------------------	---	----	-----	------

**Description:** Code identifying the type of communication number

**CodeList Summary** (Total Codes: 43, Included: 5)

**Code Name**

EM Electronic Mail  
FX Facsimile  
TE Telephone  
TS Text Message Address

**Description:** A communication protocol allowing for instant communication between parties using a text messaging service, such as Short Message Service (SMS)

**Note 1:**

*Defines the text message address where the contact person/group can be contacted.*

UR Uniform Resource Locator (URL)

PER04	364	Communication Number	X	AN	1/256	Used
-------	-----	----------------------	---	----	-------	------

**Description:** Complete communications number including country or area code when applicable

PER05	365	Communication Number Qualifier	X	ID	2/2	Used
-------	-----	--------------------------------	---	----	-----	------

**Description:** Code identifying the type of communication number

**CodeList Summary** (Total Codes: 43, Included: 5)

**Code Name**

EM Electronic Mail

FX Facsimile

TE Telephone

TS Text Message Address

**Description:** *A communication protocol allowing for instant communication between parties using a text messaging service, such as Short Message Service (SMS)*

UR Uniform Resource Locator (URL)

PER06	364	<b>Communication Number</b>	X	AN	1/256	Used
-------	-----	-----------------------------	---	----	-------	------

**Description:** Complete communications number including country or area code when applicable

PER07	365	<b>Communication Number Qualifier</b>	X	ID	2/2	Used
-------	-----	---------------------------------------	---	----	-----	------

**Description:** Code identifying the type of communication number

**CodeList Summary** (Total Codes: 43, Included: 5)

**Code Name**

EM Electronic Mail

FX Facsimile

TE Telephone

TS Text Message Address

**Description:** *A communication protocol allowing for instant communication between parties using a text messaging service, such as Short Message Service (SMS)*

UR Uniform Resource Locator (URL)

PER08	364	<b>Communication Number</b>	X	AN	1/256	Used
-------	-----	-----------------------------	---	----	-------	------

**Description:** Complete communications number including country or area code when applicable

**Syntax Rules:**

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.
3. P0708 - If either PER07 or PER08 is present, then the other is required.

# MAN Marks and Numbers Information

Pos: 1900	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## Note 1:

*This segment, at the shipment level, is used to specify a single GS1 128 Serial Shipping Container Code (SSCC-18) to identify an entire shipment (full trailer).*

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 30, Included: 5)

### Code Name

AA EAN.UCC Serial Shipping Container Code (SSCC)

#### Note 1:

*This is an eighteen-character GS1 128 Serial Shipping Container Code (SSCC-18) that does not include the two digit application identifier, the symbology code, or the modulo 103 check character.*

*See External Code Source 98*

E1 Electronic Product Code (ePC) Serial Shipping Container Code (SSCC)

**Description:** Trade Item with ePC tag marked with SSCC value

E2 Electronic Product Code (ePC) and Bar Code Serial Shipping Container Code (SSCC)

**Description:** Trade Item with dual marking for barcode and ePC, with SSCC value

E3 Electronic Product Code (ePC) and Bar Code Serial Shipping Container Code (SSCC) with Application Identifier (AI)

**Description:** Trade Item with dual marking for barcode and ePC, with SSCC and AI value

GM EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier

#### Note 1:

*This is a twenty-character GS1-128 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.*

*See External Code Source 98*

MAN02	87	Marks and Numbers	M	AN	1/48	Must use
-------	----	-------------------	---	----	------	----------

**Description:** Marks and numbers used to identify a shipment or parts of a shipment

## Syntax Rules:

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

## Semantics:

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

## Comments:

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

# DTM Date/Time Reference

Pos: 2000	Max: 10
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To specify pertinent dates and times

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 1307, Included: 2)

**Code Name**

011 Shipped

067 Current Schedule Delivery

DTM02	373	<b>Date</b>	X	DT	8/8	Must use
-------	-----	-------------	---	----	-----	----------

**Description:** Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

DTM03	337	<b>Time</b>	X	TM	4/8	Used
-------	-----	-------------	---	----	-----	------

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

## Syntax Rules:

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



# Loop Party Identification

Pos: 2200	Repeat: 200
Optional	
Loop: N1	Elements: N/A

**User Option (Usage):** Must use

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

**Note 1:**

*For N101 Codes ST - Ship To and VN - Vendor are mandatory*

**Loop Summary:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
2200	N1	Party Identification	O	1		Must use
2300	N2	Additional Name Information	O	2		Used
2400	N3	Party Location	O	2		Used
2500	N4	Geographic Location	O	1		Used

# N1 Party Identification

Pos: 2200	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Must use

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

**Note 1:**

*For N101 Codes ST - Ship To and VN - Vendor are mandatory*

**Element Summary:**

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

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

**CodeList Summary** (Total Codes: 1524, Included: 3)

**Code Name**

- SF Ship From
- ST Ship To
- VN Vendor

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

**Description:** Free-form name

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

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

**CodeList Summary** (Total Codes: 254, Included: 3)

**Code Name**

- 91 Assigned by Seller or Seller's Agent
- 92 Assigned by Buyer or Buyer's Agent
- UL Global Location Number (GLN)

**Description:** A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system

**Note 1:**

*See External Code Source 583*

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

**Description:** Code identifying a party or other code

**Note 1:** *This is the location code as defined by N103. The location code may be a formal number, e.g., GLN, or it may be assigned by either the buyer or seller. The location refers to a hospital, warehouse, distribution center, plant, etc. Location codes are used to alleviate*

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<i>the need to send complete names and addresses.</i>				

### Syntax Rules:

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

### Comments:

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

# N2 Additional Name Information

Pos: 2300	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify additional names

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N201	93	<b>Name</b>	M	AN	1/60	Must use
		<b>Description:</b> Free-form name				
N202	93	<b>Name</b>	O	AN	1/60	Used
		<b>Description:</b> Free-form name				

# N3 Party Location

Pos: 2400	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify the location of the named party

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	<b>Address Information</b>	M	AN	1/55	Must use
		<b>Description:</b> Address information				
N302	166	<b>Address Information</b>	O	AN	1/55	Used
		<b>Description:</b> Address information				

# N4 Geographic Location

<b>Pos: 2500</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: N1</b>	<b>Elements: 4</b>

**User Option (Usage):** Used

**Purpose:** To specify the geographic place of the named party

## Note 1:

*N401 and N402 are required unless N405 and N406 are used.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	<b>City Name</b>	O	AN	2/30	Used
		<b>Description:</b> Free-form text for city name				
N402	156	<b>State or Province Code</b>	X	ID	2/2	Used
		<b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency				
		<b>Note 1:</b> <i>See External Code Source 22</i>				
N403	116	<b>Postal Code</b>	O	ID	3/15	Used
		<b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
		<b>Note 1:</b> <i>See External Code Source 51</i>				
N404	26	<b>Country Code</b>	X	ID	2/3	Used
		<b>Description:</b> Code identifying the country				
		<b>Note 1:</b> <i>See External Code Source 5</i>				

## Syntax Rules:

1. E0207 - Only one of N402 or N407 may be present.
2. C0605 - If N406 is present, then N405 is required.
3. C0704 - If N407 is present, then N404 is required.

## Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.

# Loop Order

<b>Pos: 0100</b>	<b>Repeat: 200000</b>
<b>Mandatory</b>	
<b>Loop: HL</b>	<b>Elements: N/A</b>

**User Option (Usage):** Must use

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

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	M	1		Must use
0500	PRF	Purchase Order Reference	O	1		Used
1100	TD1	Carrier Details (Quantity and Weight)	O	20		Used
1500	REF	Reference Information	O	>1		Used
2200		Loop N1	O		200	Used

# HL Hierarchical Level

<b>Pos: 0100</b>	<b>Max: 1</b>
<b>Detail - Mandatory</b>	
<b>Loop: HL</b>	<b>Elements: 3</b>

**User Option (Usage):** Must use

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

## Note 1:

*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.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	O	AN	1/12	Must use
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 250, Included: 1)				
		<b>Code</b> <b>Name</b>				
		O Order				



# PRF Purchase Order Reference

Pos: 0500	Max: 1
Detail - Optional	
Loop: HL	Elements: 1

**User Option (Usage):** Used

**Purpose:** To provide reference to a specific purchase order

## Element Summary:

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

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

**Note 1:** *Original purchase order number*

## Semantics:

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

# TD1 Carrier Details (Quantity and Weight)

Pos: 1100	Max: 20
Detail - Optional	
Loop: HL	Elements: 5

**User Option (Usage):** Used

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

**Note 1:**

*This segment, at the order level, is used to specify the number and type of shipping containers in the order.*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD101	103	<b>Packaging Code</b>	O	AN	3/5	Used

**Description:** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

**CodeList Summary** (Total Codes: 157, Included: 9)

**Code Name**

- AAA Pallet, Returnable
- BAG Bag
- CAG Cage
- CAS Case
- CTN Carton
- CYL Cylinder
- DRM Drum
- PLT Pallet
- SRW Shrink Wrap

**Description:** *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*

**CodeList Summary** (Total Codes: 58, Included: 11)

**Code Name**

- 01 Aluminum
- 03 Hard Wood
- 05 Soft Wood
- 25 Corrugated or Solid

**Note 1:**

*Corrugated or solid packaging does not require repackaging for shipment*

- 43 Glass
- 58 Metal
- 76 Paper
- 79 Plastic
- 84 Polystyrene

**Description:** *A polymer prepared by the polymerization of styrene as the sole monomer*

- 91 Stainless Steel
- 94 Wood

TD102	80	<b>Lading Quantity</b>	X	N0	1/7	Used
		<b>Description:</b> Number of units (pieces) of the lading commodity				
TD106	187	<b>Weight Qualifier</b>	O	ID	1/2	Used
		<b>Description:</b> Code defining the type of weight				
		<b>CodeList Summary</b> (Total Codes: 53, Included: 1)				
		<b>Code Name</b>				
		G Gross Weight				
		<b>Note 1:</b>				
		<i>This is the gross weight of the order</i>				
TD107	81	<b>Weight</b>	X	R	1/10	Used
		<b>Description:</b> Numeric value of weight				
TD108	355	<b>Unit or Basis for Measurement Code</b>	X	ID	2/2	Used
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		<b>CodeList Summary</b> (Total Codes: 903, Included: 4)				
		<b>Code Name</b>				
		GR Gram				
		KG Kilogram				
		LB Pound				
		OZ Ounce - Av				

**Syntax Rules:**

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.
5. P0910 - If either TD109 or TD110 is present, then the other is required.

# REF Reference Information

Pos: 1500	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify identifying information

## Element Summary:

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

**Description:** Code qualifying the Reference Identification

**CodeList Summary** (Total Codes: 1813, Included: 7)

**Code Name**

- BM Bill of Lading Number
- DP Department Number
- HB Bill & Hold Invoice Number
- IV Seller's Invoice Number
- OQ Order Number

**Description:** *Qualifies a code that identifies the authorizing documentation for a household goods*

**Note 1:**

*Internal tracking number issued by third party service provider*

- PK Packing List Number
- VN Vendor Order Number

REF02	127	Reference Identification	X	AN	1/80	Must use
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**Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

## Syntax Rules:

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

## Semantics:

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

# Loop Party Identification

Pos: 2200	Repeat: 200
Optional	
Loop: N1	Elements: N/A

**User Option (Usage):** Used

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

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
2200	N1	Party Identification	O	1		Used
2300	N2	Additional Name Information	O	2		Used
2400	N3	Party Location	O	2		Used
2500	N4	Geographic Location	O	1		Used

# N1 Party Identification

Pos: 2200	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Used

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

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 1524, Included: 6)

**Code Name**

- BY Buying Party (Purchaser)
- MA Party for whom Item is Ultimately Intended

**Note 1:**

*Ultimate receiver*

- SF Ship From
- ST Ship To
- VN Vendor
- Z7 Mark-for Party

**Note 1:**

*This is the ultimate destination for the order when the location is not the ship to and the mark for party is specified on the shipping label.*

N102	93	Name	X	AN	1/60	Used
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**Description:** Free-form name

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

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

**CodeList Summary** (Total Codes: 254, Included: 3)

**Code Name**

- 91 Assigned by Seller or Seller's Agent
- 92 Assigned by Buyer or Buyer's Agent
- UL Global Location Number (GLN)

**Description:** *A globally unique 13 digit code for the identification of a legal, functional or physical location within the Uniform Code Council (UCC) and International Article Number Association (EAN) numbering system*

**Note 1:**

*See External Code Source 583*

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

**Description:** Code identifying a party or other code

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
------------	-----------	---------------------	------------	-------------	----------------	--------------

**Note 1:** *This is the location code as defined by N103. The location code may be a formal number, e.g., GLN, or it may be assigned by either the buyer or seller. The location refers to a hospital, warehouse, distribution center, plant, etc. Location codes are used to alleviate the need to send complete names and addresses.*

### Syntax Rules:

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

# N2 Additional Name Information

Pos: 2300	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify additional names

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N201	93	<b>Name</b>	M	AN	1/60	Must use
		<b>Description:</b> Free-form name				
N202	93	<b>Name</b>	O	AN	1/60	Used
		<b>Description:</b> Free-form name				



# N3 Party Location

Pos: 2400	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify the location of the named party

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	<b>Address Information</b>	M	AN	1/55	Must use
		<b>Description:</b> Address information				
N302	166	<b>Address Information</b>	O	AN	1/55	Used
		<b>Description:</b> Address information				

# N4 Geographic Location

Pos: 2500	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Used

**Purpose:** To specify the geographic place of the named party

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	<b>City Name</b>  <b>Description:</b> Free-form text for city name	O	AN	2/30	Used
N402	156	<b>State or Province Code</b>  <b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency <b>Note 1:</b> <i>See External Code Source 22</i>	X	ID	2/2	Used
N403	116	<b>Postal Code</b>  <b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States) <b>Note 1:</b> <i>See External Code Source 51</i>	O	ID	3/15	Used
N404	26	<b>Country Code</b>  <b>Description:</b> Code identifying the country <b>Note 1:</b> <i>See External Code Source 5</i>	X	ID	2/3	Used

## Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.
2. C0704 - If N407 is present, then N404 is required.
3. E0207 - Only one of N402 or N407 may be present.

# Loop Tare

Pos: 0100	Repeat: 200000
Optional	
Loop: HL	Elements: N/A

**User Option (Usage):** Used

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

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	O	1		Used
1900	MAN	Marks and Numbers Information	O	>1		Used
2150	PAL	Pallet Type and Load Characteristics	O	1		Used

# HL Hierarchical Level

<b>Pos: 0100</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: HL</b>	<b>Elements: 3</b>

**User Option (Usage):** Used

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

## Note 1:

*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.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	O	AN	1/12	Must use
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 250, Included: 1)				
		<b>Code</b> <b>Name</b>				
		T Shipping Tare				

# MAN Marks and Numbers Information

Pos: 1900	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## Note 1:

*This segment, at the tare level, is used to specify the identification numbers for the pallet.*

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 30, Included: 6)

### Code Name

AA EAN.UCC Serial Shipping Container Code (SSCC)

#### Note 1:

*This is an eighteen-character GS1-128 Serial Shipping Container Code (SSCC-18) that does not include the two digit application identifier, the symbology code, or the modulo 103 check character.  
See External Code Source 98*

E1 Electronic Product Code (ePC) Serial Shipping Container Code (SSCC)

**Description:** Trade Item with ePC tag marked with SSCC value

E2 Electronic Product Code (ePC) and Bar Code Serial Shipping Container Code (SSCC)

**Description:** Trade Item with dual marking for barcode and ePC, with SSCC value

E3 Electronic Product Code (ePC) and Bar Code Serial Shipping Container Code (SSCC) with Application Identifier (AI)

**Description:** Trade Item with dual marking for barcode and ePC, with SSCC and AI value

GM EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier

#### Note 1:

*This is a twenty-character GS1-128 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.  
See External Code Source 98*

S1 Serialized Number

**Description:** Serial number for trade item

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

## Syntax Rules:

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

## **Semantics:**

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

# PAL Pallet Type and Load Characteristics

Pos: 2150	Max: 1
Detail - Optional	
Loop: HL	Elements: 5

**User Option (Usage):** Used

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PAL01	883	<b>Pallet Type Code</b>	O	ID	1/2	Used

**Description:** Code indicating the type of pallet

**CodeList Summary** (Total Codes: 19, Included: 7)

**Code Name**

- 1 Aluminum
- 2 As Specified by the Department of Transportation (DOT)
- 3 Metal
- 4 Standard
- 5 Steel
- 6 Wood
- 7 Slip sheet

**Description:** *Typically cardboard or plastic sheets used to hold product for storage or transportation*

**Note 1:**

*Typically cardboard or plastic sheets used to hold products for storage or shipment*

PAL02	884	<b>Pallet Tiers</b>	O	N0	1/3	Used
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**Description:** The number of layers per pallet

PAL03	885	<b>Pallet Blocks</b>	O	N0	1/3	Used
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**Description:** The number of pieces (cartons) per layer on the pallet

PAL15	399	<b>Pallet Exchange Code</b>	O	ID	1/1	Used
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**Description:** Code specifying pallet exchange instructions

**CodeList Summary** (Total Codes: 5, Included: 5)

**Code Name**

- 1 No Exchange/No Return
- 2 Exchange Pallets
- 3 Return Pallets
- 4 Pallets to be Purchased by Customer
- 5 Third-Party Pallet Exchange

**Description:** *A pallet exchange program where a third party rents pallets for internal or external use*

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PAL18	380	<b>Quantity</b>	O	R	1/15	Used

**Description:** Numeric value of quantity

### Syntax Rules:

1. C0710 - If PAL07 is present, then PAL10 is required.
2. C0810 - If PAL08 is present, then PAL10 is required.
3. C0910 - If PAL09 is present, then PAL10 is required.
4. L10070809 - If PAL10 is present, then at least one of PAL07, PAL08 or PAL09 is required.
5. P0506 - If either PAL05 or PAL06 is present, then the other is required.
6. P1112 - If either PAL11 or PAL12 is present, then the other is required.
7. P1314 - If either PAL13 or PAL14 is present, then the other is required.

### Semantics:

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.
6. PAL18 is the maximum quantity of stackable pallets.



# Loop Pack

Pos: 0100      Repeat:  
                                         200000  
  
                                         Mandatory  
Loop: HL      Elements: N/A

**User Option (Usage):** Must use

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

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	M	1		Must use
0200	LIN	Item Identification	O	1		Used
0300	SN1	Item Detail (Shipment)	O	1		Used
0500	PRF	Purchase Order Reference	O	1		Used
1500	REF	Reference Information	O	>1		Used
1900	MAN	Marks and Numbers Information	O	>1		Used
2000	DTM	Date/Time Reference	O	10		Used

# HL Hierarchical Level

<b>Pos: 0100</b>	<b>Max: 1</b>
<b>Detail - Mandatory</b>	
<b>Loop: HL</b>	<b>Elements: 3</b>

**User Option (Usage):** Must use

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

## Note 1:

*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.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	O	AN	1/12	Must use
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 250, Included: 1)				
		<b>Code</b> <b>Name</b>				
		P Pack				

# LIN Item Identification

<b>Pos: 0200</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: HL</b>	<b>Elements: 9</b>

**User Option (Usage):** Used

**Purpose:** To specify basic item identification data

## Note 1:

*This segment, at the pack level, is used to specify the GTIN case and product information. The SN1 segment that follows is used to specify the number of cases identified in the LIN segment. The LIN segment, at the HL Item Level, is used to indicate the individual consumer units for the case.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN01	350	<b>Assigned Identification</b>	O	AN	1/20	Used
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
LIN02	235	<b>Product/Service ID Qualifier</b>	M	ID	2/2	Must use
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				

**CodeList Summary** (Total Codes: 537, Included: 7)

### Code Name

CH Country of Origin Code

#### Note 1:

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** Data structure for the 13 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** Data structure for the 8 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)

IN Buyer's Item Number

#### Note 1:

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

UK GTIN 14-digit Data Structure

**Description:** Data structure for the 14 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)

#### Note 1:

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** Data structure for the 12 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code

**Code Name**

*(U.P.C.)*

VN Vendor's (Seller's) Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

LIN03	234	<b>Product/Service ID</b>	M	AN	1/48	Must use
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**Description:** Identifying number for a product or service

LIN04	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 537, Included: 7)

**Code Name**

CH Country of Origin Code

**Note 1:**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** *Data structure for the 13 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** *Data structure for the 8 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

IN Buyer's Item Number

UK GTIN 14-digit Data Structure

**Description:** *Data structure for the 14 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** *Data structure for the 12 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)*

VN Vendor's (Seller's) Item Number

LIN05	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

LIN06	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary (Total Codes: 537, Included: 7)**

**Code Name**

CH Country of Origin Code

**Note 1:**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** Data structure for the 13 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** Data structure for the 8 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

IN Buyer's Item Number

UK GTIN 14-digit Data Structure

**Description:** Data structure for the 14 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** Data structure for the 12 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)

VN Vendor's (Seller's) Item Number

LIN07	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

LIN08	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary (Total Codes: 537, Included: 7)**

**Code Name**

CH Country of Origin Code

**Note 1:**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** Data structure for the 13 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** Data structure for the 8 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

IN Buyer's Item Number

UK GTIN 14-digit Data Structure

**Code Name**

**Description:** *Data structure for the 14 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** *Data structure for the 12 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)*

VN Vendor's (Seller's) Item Number

LIN09	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

**Syntax Rules:**

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

**Semantics:**

1. LIN01 is the line item identification

# SN1 Item Detail (Shipment)

Pos: 0300	Max: 1
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To specify line-item detail relative to shipment

**Note 1:**

*This segment, at the pack level, is used only to specify the number of cases identified by the GTIN case in the previous LIN segment. The LIN segment in the HL item level is used to indicate the individual consumer units for the case.*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SN101	350	<b>Assigned Identification</b>	O	AN	1/20	Used
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
SN102	382	<b>Number of Units Shipped</b>	M	R	1/10	Must use
		<b>Description:</b> Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
SN103	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

**CodeList Summary** (Total Codes: 903, Included: 37)

**Code Name**

- AM Ampoule
- BD Bundle
- BG Bag
- BO Bottle
- BX Box
- CA Case
- CL Cylinder
- CT Carton
- DR Drum
- DZ Dozen
- EA Each
- GA Gallon
- GR Gram
- KG Kilogram
- KT Kit
- LB Pound
- LT Liter
- MC Microgram
- ME Milligram

<b><u>Code</u></b>	<b><u>Name</u></b>
ML	Milliliter
MM	Millimeter
MR	Meter
OZ	Ounce - Av
PK	Package
PL	Pallet/Unit Load
PR	Pair
QT	Quart
RL	Roll
RM	Ream
SF	Square Foot
SH	Sheet
SL	Sleeve
SM	Square Meter
TB	Tube
TY	Tray
VI	Vial
YD	Yard

### **Syntax Rules:**

1. P0506 - If either SN105 or SN106 is present, then the other is required.

### **Semantics:**

1. SN101 is the ship notice line-item identification.
2. SN105 is quantity ordered.



# PRF Purchase Order Reference

Pos: 0500	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To provide reference to a specific purchase order

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PRF01	324	<b>Purchase Order Number</b>  <b>Description:</b> Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Must use
PRF02	328	<b>Release Number</b>  <b>Description:</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used
PRF04	373	<b>Date</b>  <b>Description:</b> Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year <b>Note 1:</b> <i>Buyer's original purchase order date</i>	O	DT	8/8	Used
PRF06	367	<b>Contract Number</b>  <b>Description:</b> Contract number	O	AN	1/30	Used

## Semantics:

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

# REF Reference Information

Pos: 1500	Max: >1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To specify identifying information

## Note 1:

*For a single lot number use REF01 and REF02 with LT Lot Number.*

*For a range of lot numbers use REF01 for the Beginning Lot Number and use REF0401 LT Lot Number with REF0402 for the Ending Lot Number.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
		<b>Description:</b> Code qualifying the Reference Identification				
		<b>CodeList Summary</b> (Total Codes: 1813, Included: 1)				
		<b>Code Name</b>				
		LT Lot Number				
REF02	127	<b>Reference Identification</b>	X	AN	1/80	Used
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
REF03	352	<b>Description</b>	X	AN	1/80	Used
		<b>Description:</b> A free-form description to clarify the related data elements and their content				
REF04	C040	<b>Reference Identifier</b>	O	Comp		Used
		<b>Description:</b> To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier				
REF04-01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
		<b>Description:</b> Code qualifying the Reference Identification				
		<b>CodeList Summary</b> (Total Codes: 1813, Included: 1)				
		<b>Code Name</b>				
		LT Lot Number				
REF04-02	127	<b>Reference Identification</b>	M	AN	1/80	Must use
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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**Syntax Rules:**

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

**Semantics:**

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

# MAN Marks and Numbers Information

Pos: 1900	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## Note 1:

*When the shipping container is the same as the consumer unit, the GTIN may be the only GS1 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 GTIN 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 HL item level.*

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 30, Included: 6)

### Code Name

AA EAN.UCC Serial Shipping Container Code (SSCC)

#### Note 1:

*This is an eighteen-character GS1-128 Serial Shipping Container Code (SSCC-18) that does not include the two digit application identifier, the symbology code, or the modulo 103 check character.  
See External Code Source 98*

E1 Electronic Product Code (ePC) Serial Shipping Container Code (SSCC)

**Description:** Trade Item with ePC tag marked with SSCC value

E2 Electronic Product Code (ePC) and Bar Code Serial Shipping Container Code (SSCC)

**Description:** Trade Item with dual marking for barcode and ePC, with SSCC value

E3 Electronic Product Code (ePC) and Bar Code Serial Shipping Container Code (SSCC) with Application Identifier (AI)

**Description:** Trade Item with dual marking for barcode and ePC, with SSCC and AI value

GM EAN.UCC Serial Shipping Container Code (SSCC) and Application Identifier

#### Note 1:

*This is a twenty-character GS1-128 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.  
See External Code Source 98*

SM Shipper Assigned

#### Note 1:

*Used only during a transition period. Recommend use of GS1 code.*

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

### Syntax Rules:

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

### Semantics:

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

# DTM Date/Time Reference

Pos: 2000	Max: 10
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify pertinent dates and times

## Note 1:

*This segment, at the pack level, is used to communicate production and expiration information.*

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 1307, Included: 1)

### Code Name

036 Expiration

**Description:** *Date coverage expires*

### Note 1:

*Date product is no longer consumable or usable*

DTM02	373	<b>Date</b>	X	DT	8/8	Must use
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**Description:** Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

## Syntax Rules:

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

# Loop Item

<b>Pos: 0100</b>	<b>Repeat: 200000</b>
<b>Mandatory</b>	
<b>Loop: HL</b>	<b>Elements: N/A</b>

**User Option (Usage):** Must use

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

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0100	HL	Hierarchical Level	M	1		Must use
0200	LIN	Item Identification	O	1		Used
0300	SN1	Item Detail (Shipment)	O	1		Used
0500	PRF	Purchase Order Reference	O	1		Used
0700	PID	Product/Item Description	O	200		Used
1400	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		Used
1500	REF	Reference Information	O	>1		Used
2000	DTM	Date/Time Reference	O	10		Used

# HL Hierarchical Level

<b>Pos: 0100</b>	<b>Max: 1</b>
<b>Detail - Mandatory</b>	
<b>Loop: HL</b>	<b>Elements: 3</b>

**User Option (Usage):** Must use

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

## Note 1:

*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.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
HL01	628	<b>Hierarchical ID Number</b>	M	AN	1/12	Must use
		<b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	<b>Hierarchical Parent ID Number</b>	O	AN	1/12	Must use
		<b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	<b>Hierarchical Level Code</b>	M	ID	1/2	Must use
		<b>Description:</b> Code defining the characteristic of a level in a hierarchical structure				
		<b>CodeList Summary</b> (Total Codes: 250, Included: 1)				
		<b>Code Name</b>				
		I Item				



# LIN Item Identification

Pos: 0200	Max: 1
Detail - Optional	
Loop: HL	Elements: 9

**User Option (Usage):** Used

**Purpose:** To specify basic item identification data

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN01	350	Assigned Identification	O	AN	1/20	Used

**Description:** Alphanumeric characters assigned for differentiation within a transaction set

LIN02	235	Product/Service ID Qualifier	M	ID	2/2	Must use
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 537, Included: 8)

**Code Name**

CH Country of Origin Code

**Note 1:**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

CR Contract Number

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** Data structure for the 13 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** Data structure for the 8 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)

IN Buyer's Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

UK GTIN 14-digit Data Structure

**Description:** Data structure for the 14 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** Data structure for the 12 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)

VN Vendor's (Seller's) Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade*

**Code Name**

*(Item Number)*

LIN03	234	<b>Product/Service ID</b>	M	AN	1/48	Must use
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**Description:** Identifying number for a product or service

LIN04	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 537, Included: 8)

**Code Name**

CH Country of Origin Code

**Note 1:**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

CR Contract Number

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** *Data structure for the 13 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** *Data structure for the 8 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

IN Buyer's Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

UK GTIN 14-digit Data Structure

**Description:** *Data structure for the 14 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** *Data structure for the 12 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)*

VN Vendor's (Seller's) Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

LIN05	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

LIN06	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 537, Included: 8)

**Code Name**

CH Country of Origin Code

**Note 1:**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

CR Contract Number

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** Data structure for the 13 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** Data structure for the 8 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

IN Buyer's Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

UK GTIN 14-digit Data Structure

**Description:** Data structure for the 14 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN)

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** Data structure for the 12 digit EAN.UCC (EAN International. Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)

VN Vendor's (Seller's) Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

LIN07	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

LIN08	235	<b>Product/Service ID Qualifier</b>	X	ID	2/2	Used
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**Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**CodeList Summary** (Total Codes: 537, Included: 8)

**Code Name**

CH Country of Origin Code

**Note 1:**

**Code Name**

*GS1 Canada recommends use of the ISO Country Code List 3166-1 Alpha -2 codes. If a product is manufacturer in more than one country, separate the ISO country codes by a space within Data Element 234.*

CR Contract Number

EN GTIN EAN/UCC - 13 Digit Data Structure

**Description:** *Data structure for the 13 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

EO GTIN EAN/UCC - 8 Digit Data Structure

**Description:** *Data structure for the 8 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

IN Buyer's Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

UK GTIN 14-digit Data Structure

**Description:** *Data structure for the 14 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN)*

**Note 1:**

*Codes CA and UK are mutually exclusive; only one of those codes may be used within this segment.*

UP GTIN UCC - 12 Digit Data Structure

**Description:** *Data structure for the 12 digit EAN.UCC (EAN International Uniform Code Council) Global Trade Item Number (GTIN). Also known as the Universal Product Code (U.P.C.)*

VN Vendor's (Seller's) Item Number

**Note 1:**

*This will be phased out in future versions and will be replaced with GTIN (Global Trade Item Number).*

LIN09	234	<b>Product/Service ID</b>	X	AN	1/48	Used
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**Description:** Identifying number for a product or service

**Syntax Rules:**

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

## **Semantics:**

1. LIN01 is the line item identification

# SN1 Item Detail (Shipment)

Pos: 0300	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To specify line-item detail relative to shipment

**Note 1:**

*This segment is used to specify the quantities associated with the item identified in the LIN at the HL 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.*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SN101	350	<b>Assigned Identification</b>	O	AN	1/20	Used
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
SN102	382	<b>Number of Units Shipped</b>	M	R	1/10	Must use
		<b>Description:</b> Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
SN103	355	<b>Unit or Basis for Measurement Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

**CodeList Summary (Total Codes: 903, Included: 31)**

<u>Code</u>	<u>Name</u>
BG	Bag
BO	Bottle
BX	Box
CA	Case
CT	Carton
DR	Drum
DZ	Dozen
EA	Each
GA	Gallon
GR	Gram
KG	Kilogram
KT	Kit
LB	Pound
LT	Liter
MC	Microgram
ME	Milligram
ML	Milliliter

<b>Code</b>	<b>Name</b>
MM	Millimeter
MR	Meter
OZ	Ounce - Av
PK	Package
PR	Pair
QT	Quart
RL	Roll
RM	Ream
SF	Square Foot
SH	Sheet
SM	Square Meter
TB	Tube
TY	Tray
YD	Yard

SN105    380    **Quantity**                                                            X    R            1/15            Used

**Description:** Numeric value of quantity

**Syntax Rules:**

1. P0506 - If either SN105 or SN106 is present, then the other is required.

**Semantics:**

1. SN101 is the ship notice line-item identification.
2. SN105 is quantity ordered.

# PRF Purchase Order Reference

Pos: 0500	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To provide reference to a specific purchase order

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PRF01	324	<b>Purchase Order Number</b>  <b>Description:</b> Identifying number for Purchase Order assigned by the orderer/purchaser <b>Note 1:</b> <i>Purchaser's original purchase order number</i>	M	AN	1/22	Must use
PRF02	328	<b>Release Number</b>  <b>Description:</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction <b>Note 1:</b> <i>Purchaser's release against the purchase order, if used</i>	O	AN	1/30	Used
PRF04	373	<b>Date</b>  <b>Description:</b> Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year <b>Note 1:</b> <i>Purchaser's original purchase order date</i>	O	DT	8/8	Used
PRF06	367	<b>Contract Number</b>  <b>Description:</b> Contract number	O	AN	1/30	Used

## Semantics:

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



# PID Product/Item Description

Pos: 0700	Max: 200
Detail - Optional	
Loop: HL	Elements: 2

**User Option (Usage):** Used

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

## Note 1:

*The PID segment is used to provide product/item descriptions in text and or coded formats.*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	Item Description Type	M	ID	1/1	Must use

**Description:** Code indicating the format of a description

**CodeList Summary** (Total Codes: 3, Included: 1)

### Code Name

F	Free-form
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### Note 1:

*The description will be found in PID05.*

PID05	352	Description	X	AN	1/80	Used
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**Description:** A free-form description to clarify the related data elements and their content

## Syntax Rules:

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

## Semantics:

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

# TD4 Carrier Details (Special Handling, or Hazardous Materials, or Both)

Pos: 1400	Max: 5
Detail - Optional	
Loop: HL	Elements: 1

**User Option (Usage):** Used

**Purpose:** To specify transportation special handling requirements, or hazardous materials information, or both

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TD401	152	Special Handling Code	X	ID	2/3	Used

**Description:** Code specifying special transportation handling instructions

**CodeList Summary** (Total Codes: 579, Included: 3)

**Code Name**

FR Fragile - Handle with Care

DNF Do Not Freeze

**Description:** *Specifies that the temperature of a shipment must not go below the freezing point during transit*

HAZ Hazardous Cargo

## Syntax Rules:

1. C0203 - If TD402 is present, then TD403 is required.
2. R010204 - At least one of TD401, TD402 or TD404 is required.

## Semantics:

1. TD405 identifies if a Material Safety Data Sheet (MSDS) exists for this product. A "Y" indicates an MSDS exists for this product; an "N" indicates an MSDS does not exist for this product.

# REF Reference Information

Pos: 1500	Max: >1
Detail - Optional	
Loop: HL	Elements: 4

**User Option (Usage):** Used

**Purpose:** To specify identifying information

## Note 1:

*For a single serial number use REF01 and REF02 with SE Serial Number*

*For a range of serial numbers with a lot number use REF01 and REF02 with LT Lot Number and then in REF0401 and REF0402 use BG Beginning Serial Number and REF0403 and REF0404 use EG Ending Serial Number.*

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
		<p><b>Description:</b> Code qualifying the Reference Identification</p> <p><b>CodeList Summary</b> (Total Codes: 1813, Included: 3)</p> <p><b>Code Name</b></p> <p>BG Beginning Serial Number</p> <p>LT Lot Number</p> <p>SE Serial Number</p>				
REF02	127	<b>Reference Identification</b>	X	AN	1/80	Must use
		<p><b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier</p>				
REF03	352	<b>Description</b>	X	AN	1/80	Used
		<p><b>Description:</b> A free-form description to clarify the related data elements and their content</p>				
REF04	C040	<b>Reference Identifier</b>	O	Comp		Used
		<p><b>Description:</b> To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier</p>				
REF04-01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
		<p><b>Description:</b> Code qualifying the Reference Identification</p> <p><b>CodeList Summary</b> (Total Codes: 1813, Included: 3)</p> <p><b>Code Name</b></p> <p>EG Ending Serial Number</p> <p>LT Lot Number</p> <p>SE Serial Number</p>				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF04-02	127	<b>Reference Identification</b>	M	AN	1/80	Must use

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

### Syntax Rules:

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

### Semantics:

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

# DTM Date/Time Reference

Pos: 2000	Max: 10
Detail - Optional	
Loop: HL	Elements: 3

**User Option (Usage):** Used

**Purpose:** To specify pertinent dates and times

## Element Summary:

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

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

**CodeList Summary** (Total Codes: 1307, Included: 1)

**Code Name**

036 Expiration

**Description:** *Date coverage expires*

**Note 1:**

*Date product is no longer consumable or usable*

DTM02	373	Date	X	DT	8/8	Must use
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**Description:** Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

DTM03	337	Time	X	TM	4/8	Used
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**Description:** Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

## Syntax Rules:

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

# CTT Transaction Totals

Pos: 0100	Max: 1
Summary - Optional	
Loop: N/A	Elements: 1

**User Option (Usage):** Used

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	NO	1/6	Must use

**Description:** Total number of line items in the transaction set

**Note 1:** *The number of HL segments present in the transaction set*

## Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

## Comments:

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

# SE Transaction Set Trailer

Pos: 0200	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Must use

**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	<b>Number of Included Segments</b>	M	N0	1/10	Must use
		<b>Description:</b> Total number of segments included in a transaction set including ST and SE segments				
SE02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Must use
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				
		<b>Note 1:</b> <i>This must be the same number as is in the ST segment (ST02) for the transaction set.</i>				

## Comments:

- SE is the last segment of each transaction set.