856 Ship Notice/Manifest

Functional Group=SH

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

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1			Must use
020	BSN	Beginning Segment for Ship Notice	M	1			Must use
040	DTM	Date/Time Reference	O	10			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use
080	MEA	Measurements	O	40			Used
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
130	TD3	Carrier Details (Equipment)	O	12			Used
150	REF	Reference Identification	O	>1			Used
LOOP ID - N1					**200**		
220	N1	Name	O	1			Used
230	N2	Additional Name Information	O	2			Used
240	N3	Address Information	O	2			Used
250	N4	Geographic Location	O	1			Used
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail (Shipment)	O	1			Used
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level	M	1		C2/010	Must use
150	REF	Reference Identification	O	>1			Used
LOOP ID - CLD					**200**		
170	CLD	Load Detail	O	1			Used
180	REF	Reference Identification	O	200			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use

Notes:

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

Comments:

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

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ST Transaction Set Header

Pos: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use
		Description: Code uniquely identifying a Transaction Set				
		Code **Name** 856 Ship Notice/Manifest				
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

Semantics:

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

BSN Beginning Segment for Ship Notice

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

User Option (Usage): Must use
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN01	353	**Transaction Set Purpose Code**	M	ID	2/2	Must use
		Description: Code identifying purpose of transaction set				
		Code **Name** 00 Original 01 Cancellation				
BSN02	396	**Shipment Identification**	M	AN	2/30	Must use
		Description: A unique control number assigned by the original shipper to identify a specific shipment				
BSN03	373	**Date**	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
BSN04	337	**Time**	M	TM	4/8	Must use
		Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				

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.

DTM Date/Time Reference

Pos: 040	Max: 10
Heading - Optional	
Loop: N/A	Elements: 4

User Option (Usage): Used
Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		Code **Name** 011 Shipped 017 Estimated Delivery				
DTM02	373	**Date**	X	DT	8/8	Used
		Description: Date expressed as CCYYMMDD				
DTM03	337	**Time**	X	TM	4/8	Used
		Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)				
DTM04	623	**Time Code**	O	ID	2/2	Used
		Description: Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow **All valid standard codes are used.**				

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 HL

Pos: 010	Repeat: 200000
Mandatory	
Loop: HL	Elements: N/A

User Option (Usage): Must use

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	HL	Hierarchical Level	M	1		Must use
080	MEA	Measurements	O	40		Used
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
130	TD3	Carrier Details (Equipment)	O	12		Used
150	REF	Reference Identification	O	>1		Used
220		Loop N1	O		200	Used

HL Hierarchical Level

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		Code **Name** S Shipment				
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described				

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.

MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA01	737	**Measurement Reference ID Code**	O	ID	2/2	Used
		Description: Code identifying the broad category to which a measurement applies				
		Code **Name** PD Physical Dimensions				
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Used
		Description: Code identifying a specific product or process characteristic to which a measurement applies				
		Code **Name** G Gross Weight N Actual Net Weight				
MEA03	739	**Measurement Value**	X	R	1/20	Used
		Description: The value of the measurement				
MEA04	C001	**Composite Unit of Measure**	X	Comp		Used
		Description: To identify a composite unit of measure(See Figures Appendix for examples of use)				
	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		Code **Name** KG Kilogram LB Pound				

Syntax Rules:

1. R03050608 - At least one of MEA03, MEA05, MEA06 or MEA08 is required.
2. C0504 - If MEA05 is present, then MEA04 is required.
3. C0604 - If MEA06 is present, then MEA04 is required.
4. L07030506 - If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
5. E0803 - Only one of MEA08 or MEA03 may be present.

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a

positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

TD1 Carrier Details (Quantity and Weight)

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

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD101	103	**Packaging Code**	O	AN	3/5	Used
		Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required				
		Code **Name**				
		BDL Bundle				
		CNT Container				
		PLT Pallet				
		Code **Name**				
		52 Iron or Steel				
		71 Not Otherwise Specified				
TD102	80	**Lading Quantity**	X	N0	1/7	Used
		Description: Number of units (pieces) of the lading commodity				

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: 120	Max: 12
Detail - Optional	
Loop: HL	Elements: 8

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD501	133	**Routing Sequence Code**	O	ID	1/2	Used
		Description: Code describing the relationship of a carrier to a specific shipment movement				
		Code **Name** B Origin/Delivery Carrier (Any Mode)				
TD502	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		Code **Name** 2 Standard Carrier Alpha Code (SCAC)				
TD503	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				
TD504	91	**Transportation Method/Type Code**	X	ID	1/2	Used
		Description: Code specifying the method or type of transportation for the shipment				
		Code **Name** C Consolidation E Expedited Truck M Motor (Common Carrier) P Private Carrier R Rail S Ocean W Inland Waterway AC Air Charter AE Air Express LT Less Than Trailer Load (LTL) MP Motor (Package Carrier) RR Roadrailer				
TD505	387	**Routing**	X	AN	1/35	Used
		Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity				
TD506	368	**Shipment/Order Status Code**	X	ID	2/2	Used
		Description: Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction				
TD507	309	**Location Qualifier**	O	ID	1/2	Used

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: Code identifying type of location				
		Code **Name** OR Origin (Shipping Point) PP Pool Point				
TD508	310	**Location Identifier**	X	AN	1/30	Used
		Description: Code which identifies a specific location				

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.

TD3 Carrier Details (Equipment)

Pos: 130	Max: 12
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD301	40	**Equipment Description Code**	X	ID	2/2	Used
		Description: Code identifying type of equipment used for shipment				
		Code **Name** AP Aircraft RR Rail Car TL Trailer (not otherwise specified) VE Vessel, Ocean VL Vessel, Lake				
TD302	206	**Equipment Initial**	O	AN	1/4	Used
		Description: Prefix or alphabetic part of an equipment unit's identifying number				
TD303	207	**Equipment Number**	X	AN	1/10	Used
		Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)				

Syntax Rules:

1. E0110 - Only one of TD301 or TD310 may be present.
2. C0203 - If TD302 is present, then TD303 is required.
3. C0405 - If TD304 is present, then TD305 is required.
4. P0506 - If either TD305 or TD306 is present, then the other is required.

REF Reference Identification

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

User Option (Usage): Used
Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use
		Description: Code qualifying the Reference Identification				
		Code **Name**				
		AW Air Waybill Number				
		BM Bill of Lading Number				
		CN Carrier's Reference Number (PRO/Invoice)				
		MB Master Bill of Lading				
		PK Packing List Number				
REF02	127	**Reference Identification**	X	AN	1/30	Used
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

Syntax Rules:

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

Semantics:

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

Loop N1

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

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
220	N1	Name	O	1		Used
230	N2	Additional Name Information	O	2		Used
240	N3	Address Information	O	2		Used
250	N4	Geographic Location	O	1		Used

N1 Name

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

User Option (Usage): Used

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

Element Summary:

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				
		Code **Name**				
		MI Planning Schedule/Material Release Issuer				
		SF Ship From				
		ST Ship To				
		SU Supplier/Manufacturer				
N102	93	**Name**	X	AN	1/60	Used
		Description: Free-form name				
N103	66	**Identification Code Qualifier**	X	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		Code **Name**				
		1 D-U-N-S Number, Dun & Bradstreet				
		92 Assigned by Buyer or Buyer's Agent				
N104	67	**Identification Code**	X	AN	2/80	Used
		Description: Code identifying a party or other code				

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: 230	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To specify additional names or those longer than 35 characters in length

Element Summary:

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

N3 Address Information

Pos: 240	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used
Purpose: To specify the location of the named party

Element Summary:

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

N4 Geographic Location

Pos: 250	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used
Purpose: To specify the geographic place of the named party

Element Summary:

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

Syntax Rules:

1. C0605 - If N406 is present, then N405 is required.

Comments:

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

Loop HL

Pos: 010	Repeat: 200000
Mandatory	
Loop: HL	Elements: N/A

User Option (Usage): Must use

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	HL	Hierarchical Level	M	1		Must use
020	LIN	Item Identification	O	1		Used
030	SN1	Item Detail (Shipment)	O	1		Used

HL Hierarchical Level

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		Code **Name** O Order				
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described **All valid standard codes are used.**				

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.

LIN Item Identification

Pos: 020 **Max: 1**
Detail - Optional
Loop: HL **Elements: 11**

User Option (Usage): Used
Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code **Name** BP Buyer's Part Number				
LIN03	234	**Product/Service ID**	M	AN	1/48	Must use
		Description: Identifying number for a product or service				
LIN04	235	**Product/Service ID Qualifier**	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code **Name** PO Purchase Order Number				
LIN05	234	**Product/Service ID**	X	AN	1/48	Used
		Description: Identifying number for a product or service				
LIN06	235	**Product/Service ID Qualifier**	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code **Name** A3 Locally Assigned Control Number				
LIN07	234	**Product/Service ID**	X	AN	1/48	Used
		Description: Identifying number for a product or service				
LIN08	235	**Product/Service ID Qualifier**	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code **Name** EC Engineering Change Level				
LIN09	234	**Product/Service ID**	X	AN	1/48	Used
		Description: Identifying number for a product or service				

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN10	235	**Product/Service ID Qualifier**	X	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code **Name** RC Returnable Container Number				
LIN11	234	**Product/Service ID**	X	AN	1/48	Used
		Description: Identifying number for a product or service				

Syntax Rules:

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

Semantics:

1. LIN01 is the line item identification

Comments:

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

SN1 Item Detail (Shipment)

Pos: 030	Max: 1
Detail - Optional	
Loop: HL	Elements: 4

User Option (Usage): Used
Purpose: To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN101	350	**Assigned Identification**	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
SN102	382	**Number of Units Shipped**	M	R	1/10	Must use
		Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
SN103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
SN104	646	**Quantity Shipped to Date**	O	R	1/15	Used
		Description: Number of units shipped to date				

Syntax Rules:

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

Semantics:

1. SN101 is the ship notice line-item identification.

Comments:

1. SN103 defines the unit of measurement for both SN102 and SN104.

Loop HL

Pos: 010	Repeat: 200000
Mandatory	
Loop: HL	Elements: N/A

User Option (Usage): Must use

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	HL	Hierarchical Level	M	1		Must use
150	REF	Reference Identification	O	>1		Used
170		Loop CLD	O		200	Used

HL Hierarchical Level

Pos: 010	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 4

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use
		Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure				
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used
		Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to				
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use
		Description: Code defining the characteristic of a level in a hierarchical structure				
		Code **Name** I Item				
HL04	736	**Hierarchical Child Code**	O	ID	1/1	Used
		Description: Code indicating if there are hierarchical child data segments subordinate to the level being described **All valid standard codes are used.**				

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.

REF Reference Identification

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

User Option (Usage): Used
Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use
		Description: Code qualifying the Reference Identification				
		Code **Name**				
		DK Dock Number				
		HC Heat Code				
		LF Assembly Line Feed Location				
		LT Lot Number				
		RF Export Reference Number				
REF02	127	**Reference Identification**	X	AN	1/30	Used
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

Syntax Rules:

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

Semantics:

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

Loop CLD

Pos: 170 **Repeat: 200**
Optional
Loop: CLD **Elements: N/A**

User Option (Usage): Used
Purpose: To specify the number of material loads shipped

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
170	CLD	Load Detail	O	1		Used
180	REF	Reference Identification	O	200		Used

CLD Load Detail

Pos: 170	Max: 1
Detail - Optional	
Loop: CLD	Elements: 5

User Option (Usage): Used

Purpose: To specify the number of material loads shipped

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD01	622	**Number of Loads**	M	N0	1/5	Must use
		Description: Number of customer-defined loads shipped by the supplier				
CLD02	382	**Number of Units Shipped**	M	R	1/10	Must use
		Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
CLD03	103	**Packaging Code**	O	AN	3/5	Used
		Description: Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required				
CLD04	357	**Size**	X	R	1/8	Used
		Description: Size of supplier units in pack				
CLD05	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				

Code	Name
KG	Kilogram
LB	Pound

Syntax Rules:

1. C0504 - If CLD05 is present, then CLD04 is required.

Semantics:

1. CLD05 is used to dimension the value given in CLD04.

Comments:

1. The CLD data segment may be used to provide information to aid in the preparation of move tags and/or bar coded labels.

REF Reference Identification

Pos: 180	Max: 200
Detail - Optional	
Loop: CLD	Elements: 3

User Option (Usage): Used
Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use
		Description: Code qualifying the Reference Identification				
		Code **Name** LS Bar-Coded Serial Number RS Returnable Container Serial Number				
REF02	127	**Reference Identification**	X	AN	1/30	Used
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
REF03	352	**Description**	X	AN	1/80	Used
		Description: A free-form description to clarify the related data elements and their content				

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.

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use
		Description: Total number of line items in the transaction set				
CTT02	347	**Hash Total**	O	R	1/10	Used
		Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. --------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.				

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

User Option (Usage): Must use

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

Element Summary:

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

Comments:

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

Eaton Corporation
EDI Advance Ship Notice (856) sample 1
(Automotive / Truck)

ST*856*121831

BSN*00*1027084356468*20020719*0912

Original shipment ID # **1027084356468**, dated **7/19/02** at **09:12**

DTM*011*20020719*0912*ET

Shipment sent **7/19/02** at **09:12**, **eastern time**.

DTM*017*20020718
Estimated arrival **7/18/2002**

HL*1**S

MEA*PD*G*1837*LB

Gross shipment weight is **1837** pounds.

MEA*PD*N*1777*LB

Net shipment weight is **1777** pounds.

TD1*PLT71*2

Two pallets were shipped

TD5*B*2*YFSY*LT*YELLOW FREIGHT

Yellow Freight was the carrier and it was not a full truckload

TD3*TL**534

Trailer number **534**

REF*BM*1304933

Bill of lading **1304933**

REF*CN*550016965

Carrier’s PRO number **550016965**

REF*PK*1069608

Packing list **1069608**

N1*MI**1*074499419

Material issuer **074499419**

N1*SF**1*007273865

Material shipped from **007273865**

N1*ST**1*074499419

Material shipped to **074499419**

N1*SU**1*007273865

Supplier duns is **007273865**

HL*2**O

LIN*1*BP*17237*A3*22-1*PO*6574

Eaton part is **17237** on Purchase order **6574**, line **1**, release **22**, shipment **1**

SN1*1*20*PC

20 pieces shipped.

HL*3*2*I

CLD*2*10*CTN71*50*LB

2 cartons containing **10** pieces weighing **50 pounds.**

REF*SE*S300034

Bar code serial number **S300034.**

CTT*1
SE*25*121831

Eaton Corporation
EDI Advance Ship Notice (856) sample 2
(Electrical)

ST*856*121831

BSN*00*1027084356468*20020719*0912

Original shipment ID # **1027084356468**, dated **7/19/02** at **09:12**

DTM*011*20020719*0912*ET

Shipment sent **7/19/02** at **09:12**, **eastern time**.

DTM*017*20020718
Estimated arrival **7/18/2002**

HL*1**S

TD5*B*2*YFSY*LT*YELLOW FREIGHT

Yellow Freight was the carrier and it was not a full truckload

TD3*TL**534

Trailer number **534**

REF*CN*550016965

Carrier's PRO number **550016965**

N1*ST**92*1

Material shipped to warehouse 1

N1*SU*ABC Tooling

Supplier is ABC Tooling

HL*2**O

LIN*1*BP*17237*PO*6574

Part buyer put on purchase order **6574**, line **1** is **17237**

SN1*1*20*PC

20 pieces shipped.

CLD*2*10*CTN71

2 cartons containing **10** pieces each**.**

REF*RS*S300034

Container number is **S300034.**

CTT*1
SE*24*121831