1205 Kimball Blvd
Jasper, IN 47546
812-634-4000

Advanced Ship Notice / Manifest

EDI Transaction 856
Specifications X12
Standard 004010
Inbound to Kimball

Document 10000000000034935
Version 00
Date 2024-02-01

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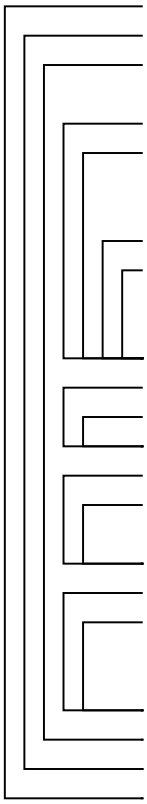
1 Schema structure



Name	Level	Max Occ.	Content
ISA	1	1	Interchange Control Header
GS	2	-1	Functional Group Header
ST	3	-1	Transaction Set Header
BSN_001_004	4	1	Beginning Segment for Ship Notice
HL_S	4	200000	Hierarchical Level
HL	5	1	Hierarchical Level
REF	6	-1	Reference Identification
DTM	6	10	Date/Time Reference
N1	6	200	Name
N1	7	1	Name
N2	8	2	Additional Name Information
N3	8	2	Address Information
N4	8	1	Geographic Location
HL_O	4	200000	Hierarchical Level
HL	5	1	Hierarchical Level
PRF	6	1	Purchase Order Reference
HL_P	4	200000	Hierarchical Level
HL	5	1	Hierarchical Level
LIN	6	1	Item Identification
MAN	6	-1	Marks and Numbers
HL_I	4	200000	Hierarchical Level
HL	5	1	Hierarchical Level
LIN	6	1	Item Identification
SN1	6	1	Item Detail (Shipment)
REF	6	-1	Reference Identification
SE	4	1	Transaction Set Trailer
GE	3	1	Functional Group Trailer
IEA	2	1	Interchange Control Trailer

2 Header Segments

2.1 ISA (Interchange Control Header)

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

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
I01	Authorization Information Qualifier	M ID2/2	M ID2/2	Description: Code to identify the type of information in the Authorization Information Standard codelist for I01 is supported.
I02	Authorization Information	O AN10/10	O AN10/10	Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)
I03	Security Information Qualifier	M ID2/2	M ID2/2	Description: Code to identify the type of information in the Security Information Standard codelist for I03 is supported.
I04	Security Information	O AN10/10	O AN10/10	Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)
I05	Interchange ID Qualifier	M ID2/2	M ID2/2	Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Code** **Description** ZZ **Mutually Defined**
I06	Interchange Sender ID	M AN15/15	M AN15/15	Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element
I05	Interchange ID Qualifier	M ID2/2	M ID2/2	Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Code** **Description** ZZ **Mutually Defined**
I07	Interchange Receiver ID	M AN15/15	M AN15/15	Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them

Label	Name	Standard	Impl	Comment
I08	Interchange Date	M DT6/6	M DT6/6	Description: Date of the interchange
I09	Interchange Time	M TM4/4	M TM4/4	Description: Time of the interchange
I10	Interchange Control Standards Identifier	M ID1/1	M ID1/1	Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer **Code Description** U
I11	Interchange Control Version Number	M ID5/5	M ID5/5	Description: Code specifying the version number of the interchange control segments **Code Description** 00401
I12	Interchange Control Number	M N9/9	M N9/9	Description: A control number assigned by the interchange sender
I13	Acknowledgment Requested	M ID1/1	M ID1/1	Description: Code sent by the sender to request an interchange acknowledgment (TA1) Standard codelist for I13 is supported.
I14	Usage Indicator	M ID1/1	M ID1/1	Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information Standard codelist for I14 is supported.
I15	Component Element Separator	M AN1/1	M AN1/1	Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator

2.2 GS (Functional Group Header)

Purpose: To indicate the beginning of a functional group and to provide control information
Semantics: GS04 is the group date.
GS05 is the group time.
The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02. Comments: A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

This segment is mandatory here.
Max. occurrences is "unbound".

Label	Name	Standard	Impl	Comment
479	Functional Identifier Code	M ID2/2	M ID2/2	Description: Code identifying a group of application related transaction sets **Code** **Description** SH **Ship Notice/Manifest**
142	Application Sender's Code	M AN2/15	M AN2/15	Description: Code identifying party sending transmission; codes agreed to by trading partners
124	Application Receiver's Code	M AN2/15	M AN2/15	Description: Code identifying party receiving transmission; codes agreed to by trading partners
373	Date	M DT8/8	M DT8/8	Description: Date expressed as CCYYMMDD
337	Time	M TM4/8	M TM4/8	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)
28	Group Control Number	M N0/9	M N0/9	Description: Assigned number originated and maintained by the sender
455	Responsible Agency Code	M ID1/2	M ID1/2	Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **Code** **Description** X **Accredited Standards Committee X12**

Label	Name	Standard	Impl	Comment
480	Version / Release / Industry Identifier Code	M AN1/12	M AN1/12	Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed **Code** **Description** 004010

2.3 ST (Transaction Set Header)

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

This segment is mandatory here.
Max. occurrences is "unbound".

Label	Name	Standard	Impl	Comment
143	Transaction Set Identifier Code	M ID3/3	M ID3/3	Description: Code uniquely identifying a Transaction Set **Code** **Description** 856 **Ship Notice/Manifest**
329	Transaction Set Control Number	M AN4/9	M AN4/9	Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

3 Message Segments

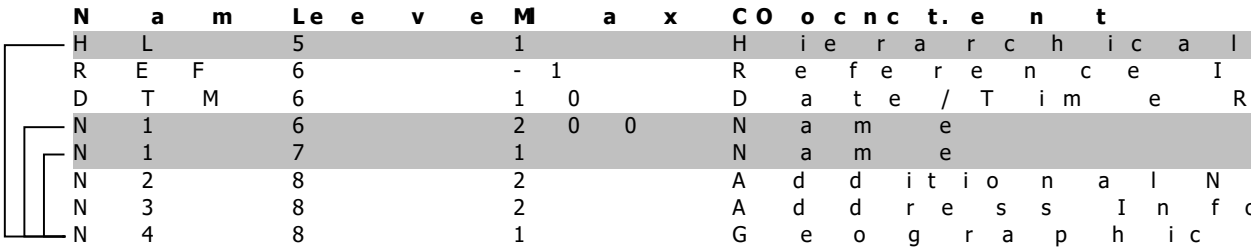
3.1 BSN_001_004 (Beginning Segment for Ship Notice)

Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set Semantics: BSN03 is the date the shipment transaction set is created.
BSN04 is the time the shipment transaction set is created.
BSN06 is limited to shipment related codes.
Comments: BSN06 and BSN07 differentiate the functionality of use for the transaction set.
' Syntax Rules: C0706 : If BSN07 is present, then BSN06 is required.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
353	Transaction Set Purpose Code	M ID2/2	M ID2/2	Description: Code identifying purpose of transaction set **Code** **Description** 00 Original
396	Shipment Identification	M AN2/30	M AN2/30	Description: A unique control number assigned by the original shipper to identify a specific shipment
373	Date	M DT8/8	M DT8/8	Description: Date expressed as CCYYMMDD
337	Time	M TM4/8	M TM4/8	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)
1005	Hierarchical Structure Code	O ID4/4	M ID4/4	Description: Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set **Code** **Description** 0004 Shipment, Order, Item 0001 Shipment, Order, Packaging, Item

3.2 HL_S (Hierarchical Level)



Name	Level	Max	COcnct.	Content
HL	5	1		Hierarchical
REF	6	-1		Reference I
DTM	6	10		Date/Time R
N1	6	200		Name
N1	7	1		Name
N2	8	2		Additional N
N3	8	2		Address Inf
N4	8	1		Geographic

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

This segment group is mandatory here.
Max. occurrences is 200,000.

3.2.1 HL (Hierarchical Level)

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning. Comments: The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
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.
HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
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.
HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
628	Hierarchical ID Number	M AN1/12	M AN1/12	Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure
734	Hierarchical Parent ID Number	O AN1/12	O AN1/12	Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to
735	Hierarchical Level Code	M ID1/2	M ID1/2	Description: Code defining the characteristic of a level in a hierarchical structure

Label	Name	Standard		Impl	Comment
					Code **Description** S Shipment
REF	Reference Identification	O		M	Purpose: To specify identifying information Semantics: REF04 contains data relating to the value cited in REF02. ' Syntax Rules: R0203 : At least one of REF02 or REF03 is required. Max. occurrences is "unbound".
DTM	Date/Time Reference	O		M	Purpose: To specify pertinent dates and times' Syntax Rules: R020305 : At least one of DTM02, DTM03 or DTM05 is required. C0403 : If DTM04 is present, then DTM03 is required. P0506 : If either DTM05 or DTM06 is present, then the other is required. Max. occurrences is 10.
N1	Name	O		M	Purpose: To identify a party by type of organization, name, and code Max. occurrences is 200.

3.2.1.1 REF (Reference Identification)

Purpose: To specify identifying information Semantics: REF04 contains data relating to the value cited in REF02.
' Syntax Rules: R0203 : At least one of REF02 or REF03 is required.

This segment is mandatory here.
Max. occurrences is "unbound".

Label	Name	Standard	Impl	Comment
128	Reference Identification Qualifier	M ID2/3	M ID2/3	Description: Code qualifying the Reference Identification **Code** **Description** BM Bill of Lading Number CN Carrier's Reference Number (PRO/Invoice)
127	Reference Identification	O AN1/30	M AN1/30	Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

3.2.1.2 DTM (Date/Time Reference)

Purpose: To specify pertinent dates and times' Syntax Rules: R020305 : At least one of DTM02, DTM03 or DTM05 is required. C0403 : If DTM04 is present, then DTM03 is required. P0506 : If either DTM05 or DTM06 is present, then the other is required.

This segment is mandatory here.
Max. occurrences is 10.

Label	Name	Standard	Impl	Comment
374	Date/Time Qualifier	M ID3/3	M ID3/3	Description: Code specifying type of date or time, or both date and time **Code** **Description** 011 Shipped 017 Estimated Delivery
373	Date	O DT8/8	M DT8/8	Description: Date expressed as CCYYMMDD

3.2.1.3 N1 (Name)

	N	a	Lm	e	e v M	e	a l	C x	o	O n	ct	cc	n
┌	N	1	7		1			N	a	m		e	
│	N	2	8		2			A	d	d	i	t i o	n
│	N	3	8		2			A	d	d	r	e s	s
└	N	4	8		1			G	e	o	g	r a	

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

This segment group is mandatory here.
Max. occurrences is 200.

3.2.1.3.1 N1 (Name)

Purpose: To identify a party by type of organization, name, and code Comments: 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.
N105 and N106 further define the type of entity in N101.
' Syntax Rules: R0203 : At least one of N102 or N103 is required. P0304 : If either N103 or N104 is present, then the other is required.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
98	Entity Identifier Code	M ID2/3	M ID2/3	Description: Code identifying an organizational entity, a physical location, property or an individual **Code** **Description** ST Ship To SF Ship From BY Buying Party (Purchaser)
93	Name	O AN1/60	O AN1/60	Description: Free-form name
66	Identification Code Qualifier	O ID1/2	M ID1/2	Description: Code designating the system/method of code structure used for Identification Code (67) **Code** **Description** 92 Assigned by Buyer or Buyer's Agent
67	Identification Code	O AN2/80	M AN2/80	Description: Code identifying a party or other code
N2	Additional Name Information	O	O	Purpose: To specify additional names or those longer than 35 characters in length Max. occurrences is 2.

Label	Name	Standard	Impl	Comment
N3	Address Information	O	O	Purpose: To specify the location of the named party Max. occurrences is 2.
N4	Geographic Location	O	O	Purpose: To specify the geographic place of the named party Comments: A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location. N402 is required only if city name (N401) is in the U.S. or Canada. ' Syntax Rules: C0605 : If N406 is present, then N405 is required. Max. occurrences is 1.

3.2.1.3.1.1 N2 (Additional Name Information)

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

This segment is optional here.
Max. occurrences is 2.

Label	Name	Standard	Impl	Comment
93	Name	M AN1/60	M AN1/60	Description: Free-form name

3.2.1.3.1.2 N3 (Address Information)

Purpose: To specify the location of the named party

This segment is optional here.
Max. occurrences is 2.

Label	Name	Standard	Impl	Comment
166	Address Information	M AN1/55	M AN1/55	Description: Address information

3.2.1.3.1.3 N4 (Geographic Location)

Purpose: To specify the geographic place of the named party Comments: A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
N402 is required only if city name (N401) is in the U.S. or Canada.
' Syntax Rules: C0605 : If N406 is present, then N405 is required.

This segment is optional here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
19	City Name	O AN2/30	M AN2/30	Description: Free-form text for city name
156	State or Province Code	O ID2/2	M ID2/2	Description: Code (Standard State/Province) as defined by appropriate government agency
116	Postal Code	O ID3/15	M ID3/15	Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)
26	Country Code	O ID2/3	M ID2/3	Description: Code identifying the country

3.3 HL_O (Hierarchical Level)

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

This segment group is mandatory here.
Max. occurrences is 200,000.

3.3.1 HL (Hierarchical Level)

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning. Comments: The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
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.
HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
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.
HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
628	Hierarchical ID Number	M AN1/12	M AN1/12	Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure
734	Hierarchical Parent ID Number	O AN1/12	O AN1/12	Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to
735	Hierarchical Level Code	M ID1/2	M ID1/2	Description: Code defining the characteristic of a level in a hierarchical structure **Code** **Description** O Order

Label	Name	Standard	Impl	Comment
PRF	Purchase Order Reference	O	M	Purpose: To provide reference to a specific purchase order Semantics: PRF04 is the date assigned by the purchaser to purchase order. Max. occurrences is 1.

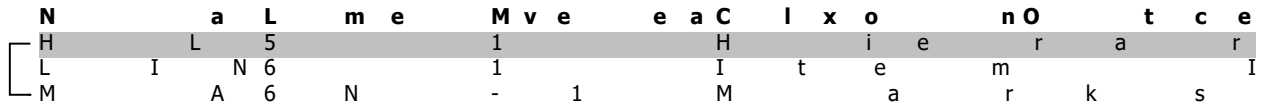
3.3.1.1 PRF (Purchase Order Reference)

Purpose: To provide reference to a specific purchase order Semantics: PRF04 is the date assigned by the purchaser to purchase order.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
324	Purchase Order Number	M AN1/22	M AN1/22	Description: Identifying number for Purchase Order assigned by the orderer/purchaser
328	Release Number	O AN1/30	M AN1/30	Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction **The PO Line Item Number is expected in this field. It needs to match the value sent in the original PO.**

3.4 HL_P (Hierarchical Level)



Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

This segment group is optional here. **Both SOPI and SOI structures are accepted.**
Max. occurrences is 200,000.

3.4.1 HL (Hierarchical Level)

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning. Comments: The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
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.
HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
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.
HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
628	Hierarchical ID Number	M AN1/12	M AN1/12	Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure
734	Hierarchical Parent ID Number	O AN1/12	M AN1/12	Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to
735	Hierarchical Level Code	M ID1/2	M ID1/2	Description: Code defining the characteristic of a level in a hierarchical structure **Code** **Description** P Pack

Label	Name	Standard		Impl	Comment
LIN	Item Identification	O		M	Purpose: To specify basic item identification data Semantics: LIN01 is the line item identification Comments: See the Data Dictionary for a complete list of IDs. 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. ' Syntax Rules: P0405 : If either LIN04 or LIN05 is present, then the other is required. P0607 : If either LIN06 or LIN07 is present, then the other is required. P0809 : If either LIN08 or LIN09 is present, then the other is required. P1011 : If either LIN10 or LIN11 is present, then the other is required. P1213 : If either LIN12 or LIN13 is present, then the other is required. P1415 : If either LIN14 or LIN15 is present, then the other is required. P1617 : If either LIN16 or LIN17 is present, then the other is required. P1819 : If either LIN18 or LIN19 is present, then the other is required. P2021 : If either LIN20 or LIN21 is present, then the other is required. P2223 : If either LIN22 or LIN23 is present, then the other is required. P2425 : If either LIN24 or LIN25 is present, then the other is required. P2627 : If either LIN26 or LIN27 is present, then the other is required. P2829 : If either LIN28 or LIN29 is present, then the other is required. P3031 : If either LIN30 or LIN31 is present, then the other is required. Max. occurrences is 1.

Label	Name	Standard		Impl	Comment
MAN	Marks and Numbers	O		M	Purpose: To indicate identifying marks and numbers for shipping containers Semantics: MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container. 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. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range. Comments: When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06. MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers. When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained. ' Syntax Rules: P0405 : If either MAN04 or MAN05 is present, then the other is required. C0605 : If MAN06 is present, then MAN05 is required. Max. occurrences is "unbound".

3.4.1.1 LIN (Item Identification)

Purpose: To specify basic item identification data Semantics: LIN01 is the line item identification
Comments: See the Data Dictionary for a complete list of IDs.
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.
' Syntax Rules: P0405 : If either LIN04 or LIN05 is present, then the other is required. P0607 : If either LIN06 or LIN07 is present, then the other is required. P0809 : If either LIN08 or LIN09 is present, then the other is required. P1011 : If either LIN10 or LIN11 is present, then the other is required. P1213 : If either LIN12 or LIN13 is present, then the other is required. P1415 : If either LIN14 or LIN15 is present, then the other is required. P1617 : If either LIN16 or LIN17 is present, then the other is required. P1819 : If either LIN18 or LIN19 is present, then the other is required. P2021 : If either LIN20 or LIN21 is present, then the other is required. P2223 : If either LIN22 or LIN23 is present, then the other is required. P2425 : If either LIN24 or LIN25 is present, then the other is required. P2627 : If either LIN26 or LIN27 is present, then the other is required. P2829 : If either LIN28 or LIN29 is present, then the other is required. P3031 : If either LIN30 or LIN31 is present, then the other is required.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
350	Assigned Identification	O AN1/20	O AN1/20	Description: Alphanumeric characters assigned for differentiation within a transaction set
235	Product/Service ID Qualifier	M ID2/2	M ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code** **Description** BP Buyer's Part Number
234	Product/Service ID	M AN1/48	M AN1/48	Description: Identifying number for a product or service
235	Product/Service ID Qualifier	O ID2/2	O ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) Standard codelist for _235 is supported.
234	Product/Service ID	O AN1/48	O AN1/48	Description: Identifying number for a product or service
235	Product/Service ID Qualifier	O ID2/2	O ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) Standard codelist for _235 is supported.
234	Product/Service ID	O AN1/48	O AN1/48	Description: Identifying number for a product or service
235	Product/Service ID Qualifier	O ID2/2	O ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) Standard codelist for _235 is supported.
234	Product/Service ID	O AN1/48	O AN1/48	Description: Identifying number for a product or service
235	Product/Service ID Qualifier	O ID2/2	O ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) Standard codelist for _235 is supported.

3.4.1.2 MAN (Marks and Numbers)

Purpose: To indicate identifying marks and numbers for shipping containers Semantics: MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
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.
When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.
Comments: When MAN01 contains code "UC" (U.P.C. Shipping Container Code) and MAN05/MAN06 contain a range of ID numbers, MAN03 is not used. The reason for this is that the U.P.C. Shipping Container code is the same on every carton that is represented in the range in MAN05/MAN06.
MAN03 and/or MAN06 are only used when sending a range(s) of ID numbers.
When both MAN02/MAN03 and MAN05/MAN06 are used to send ranges of ID numbers, the integrity of the two ID numbers must be maintained.
' Syntax Rules: P0405 : If either MAN04 or MAN05 is present, then the other is required. C0605 : If MAN06 is present, then MAN05 is required.

This segment is mandatory here.
Max. occurrences is "unbound".

Label	Name	Standard	Impl	Comment
88	Marks and Numbers Qualifier	M ID1/2	M ID1/2	Description: Code specifying the application or source of Marks and Numbers (87) **Code** **Description** GM SSCC-18 and Application Identifier
87	Marks and Numbers	M AN1/48	M AN1/48	Description: Marks and numbers used to identify a shipment or parts of a shipment

3.5 HL_I (Hierarchical Level)

N a	Lm e e v	M e a l	C x o O n ct œ n
H L	5	1	H i e r a r c
L I N	6	1	I t e m I d
S N	16	1	I t e m D e
R E F	6	- 1	R e f e r e n

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

This segment group is mandatory here.
Max. occurrences is 200,000.

3.5.1 HL (Hierarchical Level)

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments Set Comments: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning. Comments: The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
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.
HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
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.
HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
628	Hierarchical ID Number	M AN1/12	M AN1/12	Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure
734	Hierarchical Parent ID Number	O AN1/12	M AN1/12	Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to
735	Hierarchical Level Code	M ID1/2	M ID1/2	Description: Code defining the characteristic of a level in a hierarchical structure

Label	Name	Standard		Impl	Comment
					Code **Description** I Item
LIN	Item Identification	O		M	Purpose: To specify basic item identification data Semantics: LIN01 is the line item identification Comments: See the Data Dictionary for a complete list of IDs. 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. ' Syntax Rules: P0405 : If either LIN04 or LIN05 is present, then the other is required. P0607 : If either LIN06 or LIN07 is present, then the other is required. P0809 : If either LIN08 or LIN09 is present, then the other is required. P1011 : If either LIN10 or LIN11 is present, then the other is required. P1213 : If either LIN12 or LIN13 is present, then the other is required. P1415 : If either LIN14 or LIN15 is present, then the other is required. P1617 : If either LIN16 or LIN17 is present, then the other is required. P1819 : If either LIN18 or LIN19 is present, then the other is required. P2021 : If either LIN20 or LIN21 is present, then the other is required. P2223 : If either LIN22 or LIN23 is present, then the other is required. P2425 : If either LIN24 or LIN25 is present, then the other is required. P2627 : If either LIN26 or LIN27 is present, then the other is required. P2829 : If either LIN28 or LIN29 is present, then the other is required. P3031 : If either LIN30 or LIN31 is present, then the other is required. Max. occurrences is 1.
SN1	Item Detail (Shipment)	O		M	Purpose: To specify line-item detail relative to shipment Semantics: SN101 is the ship notice line-item identification. Comments: SN103 defines the unit of measurement for both SN102 and SN104. ' Syntax Rules: P0506 : If either SN105 or SN106 is present, then the other is required. Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
REF	Reference Identification	O	M	Purpose: To specify identifying information Semantics: REF04 contains data relating to the value cited in REF02. Syntax Rules: R0203 : At least one of REF02 or REF03 is required. Max. occurrences is "unbound".

3.5.1.1 LIN (Item Identification)

Purpose: To specify basic item identification data Semantics: LIN01 is the line item identification
Comments: See the Data Dictionary for a complete list of IDs.
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.
' Syntax Rules: P0405 : If either LIN04 or LIN05 is present, then the other is required. P0607 : If either LIN06 or LIN07 is present, then the other is required. P0809 : If either LIN08 or LIN09 is present, then the other is required. P1011 : If either LIN10 or LIN11 is present, then the other is required. P1213 : If either LIN12 or LIN13 is present, then the other is required. P1415 : If either LIN14 or LIN15 is present, then the other is required. P1617 : If either LIN16 or LIN17 is present, then the other is required. P1819 : If either LIN18 or LIN19 is present, then the other is required. P2021 : If either LIN20 or LIN21 is present, then the other is required. P2223 : If either LIN22 or LIN23 is present, then the other is required. P2425 : If either LIN24 or LIN25 is present, then the other is required. P2627 : If either LIN26 or LIN27 is present, then the other is required. P2829 : If either LIN28 or LIN29 is present, then the other is required. P3031 : If either LIN30 or LIN31 is present, then the other is required.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
350	Assigned Identification	O AN1/20	M AN1/20	Description: Alphanumeric characters assigned for differentiation within a transaction set
235	Product/Service ID Qualifier	M ID2/2	M ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code** **Description** BP Buyer's Part Number
234	Product/Service ID	M AN1/48	M AN1/48	Description: Identifying number for a product or service
235	Product/Service ID Qualifier	O ID2/2	M ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Code** **Description** MG Manufacturer's Part Number

Label	Name	Standard	Impl	Comment
234	Product/Service ID	O AN1/48	M AN1/48	Description: Identifying number for a product or service
235	Product/Service ID Qualifier	O ID2/2	O ID2/2	Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) Standard codelist for _235 is supported.
234	Product/Service ID	O AN1/48	O AN1/48	Description: Identifying number for a product or service

3.5.1.2 SN1 (Item Detail (Shipment))

Purpose: To specify line-item detail relative to shipment Semantics: SN101 is the ship notice line-item identification.
Comments: SN103 defines the unit of measurement for both SN102 and SN104.
' Syntax Rules: P0506 : If either SN105 or SN106 is present, then the other is required.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
350	Assigned Identification	O AN1/20	O AN1/20	Description: Alphanumeric characters assigned for differentiation within a transaction set
382	Number of Units Shipped	M R1/10	M R1/10	**Batch / Lot Quantity** Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set
355	Unit or Basis for Measurement Code	M ID2/2	M ID2/2	Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Standard codelist for _355 is supported.

3.5.1.3 REF

Purpose: To specify identifying information Semantics: REF04 contains data relating to the value cited in REF02.
Syntax Rules: R0203 : At least one of REF02 or REF03 is required.

This segment is mandatory here.
Max. occurrences is "unbound".

Label	Name	Standard	Impl	Comment
128	Reference Identification Qualifier	M ID2/3	M ID2/3	Description: Code qualifying the Reference Identification **Code** **Description** ZZ Mutually Defined. Manufacturing Date Code BT Batch Number / Lot Number
127	Reference Identification	O AN1/30	M AN1/30	Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

4 Trailer Segments

4.1 SE (Transaction Set Trailer)

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments) Comments: SE is the last segment of each transaction set.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
96	Number of Included Segments	M N0/10	M N0/10	Description: Total number of segments included in a transaction set including ST and SE segments
329	Transaction Set Control Number	M AN4/9	M AN4/9	Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

4.2 GE (Functional Group Trailer)

Purpose: To indicate the end of a functional group and to provide control information Semantics: The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06. Comments: The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
97	Number of Transaction Sets Included	M N0/6	M N0/6	Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element
28	Group Control Number	M N0/9	M N0/9	Description: Assigned number originated and maintained by the sender

4.3 IEA (Interchange Control Trailer)

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

This segment is mandatory here.
Max. occurrences is 1.

Label	Name	Standard	Impl	Comment
I16	Number of Included Functional Groups	M N0/5	M N0/5	Description: A count of the number of functional groups included in an interchange
I12	Interchange Control Number	M N9/9	M N9/9	Description: A control number assigned by the interchange sender

5 Example Files

5.1 856 SAMPLE FILE (WITH PACKAGING)

ISA*00* *00* *ZZ*SENDER *ZZ*RECEIVER *190328*1332*U*00401*000000101*0*P*>

GS*SH*SENDER*RECEIVER*20190328*133238*101*X*004010

ST*856*124204

BSN*00*0080238842*20190711*150516*0001

HL*1**S

REF*BM*TESTBOL1

REF*CN*111111

DTM*011*20190711

N1*BY**92*KIKEG11

N1*SF**92*40012886

N1*ST*Kimball Electronics Poland*92*KIKEG11

N2*Sp. z o.o.

N3*Poznanska 1c

N4*Tarnowo Podgorne*WL*62-080*PL

HL*2*1*O

PRF*4502157773*00010

HL*3*2*P

MAN*GM*100000000203

HL*4*3*I

LIN*00010*BP*453564159171-0001

SN1**12000*EA

SE*20*124204

GE*1*124190

IEA*1*000124190

5.2 856 SAMPLE FILE (NO PACKAGING)

ISA*00* *00* *ZZ*SENDER *ZZ*RECEIVER *190328*1332*U*00401*000000101*0*P*>

GS*SH*SENDER*RECEIVER*20190328*133238*101*X*004010

ST*856*124204

BSN*00*0080238842*20190711*150516*0004

HL*1**S

REF*BM*TESTBOL1

REF*CN*111111

DTM*011*20190711

N1*BY**92*KIKEG11

N1*SF**92*40012886

N1*ST*Kimball Electronics Poland*92*KIKEG11

N2*Sp. z o.o.

N3*Poznanska 1c

N4*Tarnowo Podgorne*WL*62-080*PL

HL*2*1*O

PRF*4502157773*00010

HL*3*2*I

LIN*00010*BP*453564159171-0001

SN1**12000*EA

SE*18*124204

GE*1*124190

IEA*1*000124190

5.3 856 SAMPLE FILE (MULTIPLE BATCH NUMBERS)

ISA*00* *00* *ZZ*SENDER *ZZ*RECEIVER *190328*1332*U*00401*000000101*0*P*>

GS*SH*SENDER*RECEIVER*20190328*133238*101*X*004010

ST*856*124204

BSN*00*0080238842*20190711*150516*0004

HL*1**S

REF*BM*TESTBOL1

REF*CN*111111

DTM*011*20190711

N1*BY**92*KIKEG11

N1*SF**92*40012886

N1*ST*Kimball Electronics Poland*92*KIKEG11

N2*Sp. z o.o.

N3*Poznanska 1c

N4*Tarnowo Podgorne*WL*62-080*PL

HL*2*1*O

PRF*4502157773*00010

HL*3*2*P

LIN*00010*BP*453564159171-0001

SN1**12000*EA

HL*4*3*I

LIN*00010*BP*453564159171-0001*MG*11111111

SN1**4000*EA

REF*BT*Batch 1~

REF*ZZ* Production/manufacture date in free text format~

HL*5*3*I

LIN*00010*BP*453564159171-0001*MG*11111111

SN1**5000*EA

REF*BT*Batch 2~

REF*ZZ* Production/manufacture date in free text format~

HL*6*3*I

LIN*00010*BP*453564159171-0001*MG*11111111

SN1**3000*EA

REF*BT*Batch 3~

REF*ZZ* Production/manufacture date in free text format~

SE*33*124204

GE*1*124190

IEA*1*000124190