856 Ship Notice/Manifest

856 ANSI X12 004010

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Version Number	Version Date	Description of Change	Reason of Change	Author	Change Reference
1	01.24.2013	Initial release	Original Document	Adrian Birau	All Sections
1.1	11.25.2013	REF Segment from Optional to Mandatory	REF segment (Pos 150) it has become mandatory.	Adrian Birau	LOOP ID – HL REF segment
1.2	02.19.2013	REF. Mandatory Note Added	REF segment (Specific code)	Arkadyuti Banik	LOOP ID – HL REF segment
2	01.14.2015	DTM Updates at Header and Line	DTM segment (Specific code – 017,011)	Arkadyuti Banik	DTM Segment
3	02.09.2016	MEA Update at Loop HL Item level	MEA Segment	Arkadyuti Banik	MEA Segment
4	30.06.2016	TD106 New Qualifier - N REF02 New Qualifier – ZZ (Item Level) N1 Loop	TD1, REF, N1 Loop	Arkadyuti Banik	TD1, REF, N1 Loop
5	01.10.2021	DTM Updates at Header	DTM segment (Specific code – 065)	Arkadyuti Banik	DTM Segment

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856 Ship Notice/Manifest

Functional Group = **SH**

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	M	10			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level(Shipment)	M	1		C2/010	Must use
050	PRF	Purchase Order Reference	O	1			Used
110	TD1	Carrier Details (Quantity and Weight)	O	20			Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
150	REF	Reference Identification	M	>1			Must use
200	DTM	Date/Time Reference	M	10			Used
LOOP ID - HL					**200000**	**C2/010L**	
010	HL	Hierarchical Level(Item)	M	1		CN2/010	Must use
020	LIN	Item Identification	O	1			Used
030	SN1	Item Detail	O	1			Used
150	REF	Reference	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

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.

ST Transaction Set Header

User Option (Usage):

Must use
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** **Description:** Code uniquely identifying a Transaction Set **All valid standard codes are used.**	M	ID	3/3	Must use
ST02	329	**Transaction Set Control Number** **Description:** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

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

User Option (Usage):

Must use
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** **Description:** Code identifying purpose of transaction set **"00" – Original** **"01" - Cancellation.**	M	ID	2/2	Must use
BSN02	396	**Shipment Identification** **Description:** Packing slip number (***for SMI program, Replenishment number from originated EDI 862 message)	M	AN	2/30	Must use
BSN03	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
BSN04	337	**Time** **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)	M	TM	4/8	Must use

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.

DTM Date/Time Reference

User Option (Usage):

Used
To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **"017" – Delivery Date and or Time, Estimated (ETA)** **"065"- Forwarder Schedule Delivery Date (FETA)**	M	ID	3/3	Must use
DTM02	373	**Date** **Description:** Date expressed as CCYYMMDD	X	DT	8/8	Used

Note: 017 Qualifier is not mandatory for ETD enabled supplier

Loop HL

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(Shipment)	M	1		Must use
050	PRF	Purchase Order Reference	O	1		Used
110	TD1	Carrier Details (Quantity and Weight)	O	20		Used
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Used
150	REF	Reference Identification	O	>1		Used
200	DTM	Date/Time Reference	O	10		Used
010		Loop HL	M		200000	Must use

HL Hierarchical Level

User Option (Usage):

Must use
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** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Must use
HL02	734	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Used
HL03	735	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **"S" – Shipment**	M	ID	1/2	Must use

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.

PRF Purchase Order Reference

User Option (Usage):

Used
To provide reference to a specific purchase order

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PRF01	324	**Purchase Order Number** **Description:** Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Must use
PRF02	328	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction **Release No.(From 862)** **If MRP item => PO#**	O	AN	1/30	Used

TD1 Carrier Details (Quantity and Weight)

User Option (Usage):

Used
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** **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 **"Box".**	O	AN	3/5	Used
TD102	80	**Lading Quantity** **Description:** Number of units (pieces) of the lading commodity	X	N0	1/7	Used
TD106	187	**Weight Qualifier** **Description:** Code defining the type of weight **"G" – Gross Weight.** **"N" – Net Weight.**	O	ID	1/2	Used
TD107	81	**Weight** **Description:** Numeric value of weight	X	R	1/10	Used
TD108	355	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **"LB" – Pounds** **"KG" - Kilogram**	X	ID	2/2	Used

Syntax:

1. C0102 - If TD101 is present, then all of TD102 are required
2. C0607 - If TD106 is present, then all of TD107 are required
3. P0708 - If either TD107,TD108 is present, then all are required

TD5 Carrier Details (Routing Sequence/Transit Time)

User Option (Usage):

Used
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** **Description:** Code describing the relationship of a carrier to a specific shipment movement **"B" – Origin/Del. Carrier.**	O	ID	1/2	Used
TD503	67	**Identification code** **Description:** Code identifying a party or other code	X	AN	2/80	Used
TD504	91	**Transportation Method/ Type Code** **Description:** Code specifying the method or type of transportation for the shipment **Note *All codes are allowed**	X	ID	1/2	Used
TD505	387	**Routing** **Description:** the originating carrier's identity	X	AN	1/35	Used
TD510	732	**Transit Time Direction Qualifier** **Description:** Code specifying the value of time used to measure the transit time **"CD" – Calendar Days (Includes Weekends).**	O	ID	2/2	Used
TD511	733	**Transit Time** **Description:** The numeric amount of transit time in Days	X	R	1/4	Used
TD512	284	**Service Level Code** **Description:** Code indicating the level of transportation service or the billing service offered by the transportation carrier **"AE" – Air Economy** **"ND" – Next day Air "SC"** **– Second day Air "SD" –** **Saturday del "ST" – Std.** **Class Ground "DF" –** **Deferred Service.**	X	ID	2/2	Used

Syntax:

1. R0204050612 - At least one of TD502,TD504,TD505,TD506,TD512 is required
2. C1011 - If TD510 is present, then TD511 is required

Semantics:

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

REF Reference Identification

User Option (Usage):
Used
To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **"FR" – Freight Bill Number** **"BM" – Bill of Lading No.** **"AW" – Airway Bill.** **"VR" – Supplier code**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Waybill Number	X	AN	1/30	Used

Syntax:

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

Comments:

1. REF01 – At least one of the code listed(FR , BM, AW) is mandatory

DTM Date/Time Reference

User Option (Usage):

Used
To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **"011" - Shipped Date and or Time (ETD)**	M	ID	3/3	Must use
DTM02	373	**Date** **Description:** Date expressed as CCYYMMDD	X	DT	8/8	Used

Loop HL

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(Item)	M	1		Must use
020	LIN	Item Identification	O	1		Used
030	SN1	Item Detail	O	1		Used

HL Hierarchical Level

User Option (Usage):

Must use
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** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	AN	1/12	Must use
HL02	734	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	AN	1/12	Used
HL03	735	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **"I" - Item**	M	ID	1/2	Must use

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

User Option (Usage):

Used
To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN01	350	**Assigned Identification** **Description:** Flextronics delivery Line Item No.	M	AN	1/20	Used
LIN02	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **"BP" – Buyer Part Number**	M	ID	2/2	Must use
LIN03	234	**Product/Service ID** **Description:** Identifying number for a product or service	M	AN	1/48	Must use
LIN04	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **"VP" – Supplier Part Number** **"MG" – Manufacturer Part Number**	X	ID	2/2	Used
LIN05	234	**Product/Service ID** **Description:** Identifying number for a product or service	X	AN	1/48	Used
LIN06	235	**Product/Service ID qualifier** **Description: Code I**dentifying the type /source of the descriptive number used in product / service ID (234) **PU – Customer Part Number**	X	ID	2/2	Used
LIN07	234	**Product/Service ID** **Description:** Identifying number for a product or service	X	AN	1/48	Used

SN1 Item Detail

User Option (Usage):

Used
To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN101	350	**Assigned Identification** **Description:** Flex Delivery Line Item No.	O	AN	1/20	Used
SN102	382	**Number of Units Shipped** **Description:** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M	R	1/10	Must use
SN103	355	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **"EA".**	M	ID	2/2	Must use

Semantics:

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

Comments:

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

MEA Measurements

Pos: 080	Max: 40
Detail - Optional	
Loop: HL	Elements: 10

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 **"TO" – Total Dimensions**				
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Used
		Description: Code identifying a specific product or process characteristic to which a measurement applies **"HT" – Height** **"LN" – Length** **"WD" – Width**				
MEA03	739	**Measurement Value**	X	R	1/20	Used
		Description: The value of the measurement				
MEA04	C001	**Composite Unit of Measure**	X	Comp		Used

Semantics:

1. MEA04 defines the unit of measure for MEA03

REF Reference Identification

User Option (Usage):

Used
To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **"MH"- Manufacturer Order Part** **"ZZ"- Manufacturer Description(Name)** **"LT"- Lot Number**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Manufacturer Order Part	X	AN	1/30	Used

Syntax:

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

Loop N1

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
310	N1	Name	O	1		Used
320	N2	Additional Name Information	O	2		Used
330	N3	Address Information	O	2		Used
340	N4	Geographic Location	O	>1		Used

N1 Name

User Option (Usage):

Used

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** **Description:** Code identifying an organizational entity, a physical location, property or an individual **"SF" – Ship From**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name	X	AN	1/60	Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **"ZZ".**	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Ship to code / Bill to Code	X	AN	2/80	Used

Syntax:

3. R0203 - At least one of N101, N102 is required
4. P0304 - If either N103,N104 is present, then all are required

Comments:

2. 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.

N2 Additional Name Information

User Option (Usage):

Used

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** **Description:** Free-form name	M	AN	1/60	Must use
N202	93	**Name** **Description:** Free-form name	O	AN	1/60	Used

N3 Address Information

User Option (Usage):

Used

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

User Option (Usage):

Used

To specify the geographic place of the named party

Element Summary:

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

Comments:

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

CTT Transaction Totals

User Option (Usage):

Used

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** **Description:** Total number of line items in the transaction set	M	N0	1/6	Must use
CTT02	347	**Hash Total** **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.	O	R	1/10	Used

SE Transaction Set Trailer

User Option (Usage):

Must use
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** **Description:** Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	**Transaction Set Control Number** **Description:** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Comments:

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

Example:

ISA~00~ ~00~ ~01~006995419ECG ~16~941714834TEST
~160614~1630~U~00200~000110094~0~T~<
GS~SH~006995419ECG~9417148340855~20160614~1630~9850~X~004010
ST~856~98500001
BSN~00~74762504~20160614~1631
DTM~017~20160616
HL~1~~S~1
PRF~J59I56736
TD1~BOX~1~~~~G~4~LB
TD1~BOX~1~~~~N~3.5~LB
TD5~B~2~EIG1~~EIG1
REF~BM~0081000900
DTM~011~20160615
HL~2~1~I
LIN~0010~BP~TRB3H-76614~VP~76614
SN1~0010~4000~EA
REF~MH~APT1608SURCK
REF~ZZ~KINGBRIGHT
MEA~TO~HT~125.74~MR
MEA~TO~LN~35.24~LN
MEA~TO~WD~32~CM
REF~LT~a111111111b222222222c111111111
REF~LT~d111111111e111111111f111111111
REF~LT~g111111111h111111111i111111111
REF~LT~j111111111k111111111
N1~SF~
N2~
N3~
N4~CHINA~~~CN~~
CTT~1
SE~28~98500001
GE~1~9850
IEA~1~000110094

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