



856

SHIP NOTICE/MANIFEST

Functional Group - SH

This X12 Transaction Set contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information.

The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, 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.

Interchange Header:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>
010	ISA	Interchange Control Header	M	1	
020	GS	Functional Group Header	M	1	

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>
010	ST	Transaction Set Header	M	1	
020	BSN	Beginning Segment for Ship Notice	M	1	

LOOP ID – HL Shipment (S)			M	>1
110	TD1	Carrier Details (Quantity and Weight)	M	20
120	TD5	Carrier Details (Routing Sequence)	M	12
150	REF	Reference Identification	M	>1
200	DTM	Date/Time Reference	M	10
210	FOB	F.O.B. Related Instructions	O	1
LOOP ID - N1			M	200
220	N1	Name	M	1
240	N3	Address Information	M	2
250	N4	Geographic Location	M	1
LOOP ID – HL Order (O)			M	>1
050	PRF	Purchase Order Reference	M	1
150	REF	Reference Information	O	>1
220	N1	Name	O	1



LOOP ID – HL Tare (T) or Pack (P)			O	>1
190	MAN	Marks and Numbers	M	>1
LOOP ID – HL Item (I)			M	>1
020	LIN	Item Identification	M	1
030	SN1	Item Detail [Shipment]	M	1
060	PO4	Item Physical Details	O	1

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat
LOOP ID - CTT			M		1
010	CTT	Transaction Totals	M	1	
030	SE	Transaction Set Trailer	M	1	

Interchange Trailer:

Pos	Id	Segment Name	Req	Max Use	Repeat
010	GE	Functional Group Trailer	M	1	
020	IEA	Interchange Control Trailer	M	1	



Delimiters being used:

- Element: *
- Segment: ~
- Sub-Element/Component: >

Encoding being used:

- UTF-8



ISA - Interchange Control Header

Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	'00'
ISA02	I02	Authorization Information	M	AN	10/10	10 Blanks
ISA03	I03	Security Information Qualifier	M	ID	2/2	'00'
ISA04	I04	Security Information	M	AN	10/10	10 Blanks
ISA05	I05	Sender ID Qualifier	M	ID	2/2	Sender ID Qualifier
ISA06	I06	Sender ID	M	AN	15/15	Sender ID
ISA07	I07	Receiver ID Qualifier	M	ID	2/2	Receiver ID Qualifier
ISA08	I08	Receiver ID	M	AN	15/15	Receiver ID
ISA09	I09	Date	M	DT	6/6	YYMMDD Format
ISA10	I10	Time	M	TM	4/4	HHMM Format
ISA11	I65	Control Standard	M		1/1	'U'
ISA12	I11	Control Version	M	ID	5/5	'00401'
ISA13	I12	Interchange Control Number	M	N0	9/9	Sequential number assigned by vendor
ISA14	I13	Acknowledgement Requested	M	ID	1/1	'0' - No '1' - Yes
ISA15	I14	Test Indicator	M	ID	1/1	'T' - Test 'P' - Production
ISA16	I15	Sub-Element	M		1/1	'>'

GS - Functional Group Header

Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
GS01	479	Functional ID	M	ID	2/2	SH
GS02	142	Sender ID	M	AN	2/15	Sender ID
GS03	124	Receiver ID	M	AN	2/15	Receiver ID
GS04	373	Date	M	DT	8/8	CCYYMMDD Format
GS05	337	Time	M	TM	4/8	HHMM, HHMMSS, or HHMMSSDD format
GS06	28	Group Control Number	M	N0	1/9	Sequential number assigned by vendor
GS07	455	Agency Code	M	ID	1/1	'X'
GS08	480	Version	M	AN	1/12	'004010'



ST - Transaction Set Header
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
ST01	143	Transaction Set Identifier Code	M	ID	3/3	'856' – Ship Notice/Manifest
ST02	329	Transaction Set Control Number	M	AN	4/9	Assigned by Sender

BSN - Beginning Segment for Ship Notice
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
BSN01	353	Transaction Set Purpose Code	M	ID	2/2	'00' – Original
BSN02	396	Shipment Identification	M	AN	2/30	Shipment ID
BSN03	373	Date	M	DT	8/8	Creation Date
BSN04	337	Time	M	TM	4/8	Creation Time
BSN05	1005	Hierarchical Structure Code	M	ID	4/4	'0001' – Shipment, Order, Packaging, Item



HL - Hierarchical Level Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
HL01	628	Hierarchical ID Number	M	AN	1/12	1
HL02	734	Hierarchical Parent ID Number	O	AN	1/12	
HL03	735	Hierarchical Level Code	M	ID	1/2	'S' - Shipment

TD1 - Carrier Details (Quantity and Weight) [Shipment] Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
TD101	103	Packaging Code	M	AN	3/5	'CTN' – Carton 'PLT' – Pallet
TD102	80	Lading Quantity	M	N0	1/7	Total Qty Shipped based on TD101 value
TD106	187	Weight Qualifier	O	ID	1/2	'G' – Gross Weight
TD107	81	Weight	O	R	1/10	Shipment Gross Weight
TD108	355	Unit or Basis for Measurement Code	O	ID	2/2	'LB' - Pound

*TD106/07/08 optional for D2C

TD5 - Carrier Details (Routing Sequence) [Shipment] Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
TD502	66	Identification Code Qualifier	M	ID	1/2	'2' – Standard Carrier Alpha Code
TD503	67	Identification Code	M	AN	2/80	SCAC
TD504	91	Transportation Method/Type Code	M	ID	1/2	See Appendix for possible values
TD505	387	Routing	M	AN	1/35	



REF - Reference Information [Shipment]
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
REF01	128	Reference Identification Qualifier	M	ID	2/3	'BM' – Bill of Lading # (Optional) 'CN' – Carrier's Pro # (Mandatory)
REF02	127	Reference Identification	M	AN	1/30	
*For LTL shipments, REF*BM mandatory						

DTM - Date/Time Reference [Shipment]
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
DTM01	374	Date/Time Qualifier	M	ID	3/3	'011' – Shipped (Mandatory)
DTM02	373	Date	M	DT	8/8	

FOB - F.O.B. Related Instructions [Shipment]
Optional segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
FOB01	146	Shipment Method of Payment	M	ID	2/2	'CC' – Collect 'PP' – Prepaid (by seller) 'PU' – Pick-Up
FOB02	309	Location Qualifier	O	ID	2/2	'DE' – Destination 'OR' – Origin



N1 - Name [Shipment] Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
N101	98	Entity Identifier Code	M	ID	2/3	'SF' – Ship From (Mandatory) 'ST' – Ship To (Mandatory)
N102	93	Name	M	AN	1/60	Name
N103	66	Identification Code Qualifier	M	ID	1/2	'92' – Assigned by Buyer or Buyer's Agent
N104	67	Identification Code	M	AN	2/80	
*N104 for N1*SF should be REF*VR from 850						
*N102 optional for N1*ST when not D2C						

N3 - Party Location [Shipment/Loop N1] Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
N301	166	Address Information	M	AN	1/55	Address 1
N302	166	Address Information	O	AN	1/55	Address 2
*Optional for N1*ST when not D2C						

N4 - Geographic Location [Shipment/Loop N1] Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
N401	19	City Name	M	ID	2/30	City
N402	156	State or Province Code	M	ID	2/2	State or Province Code
N403	116	Postal Code	M	ID	3/15	Zip Code
N404	26	Country Code	O	ID	2/3	Country
*N404 only needed if outside the US						
*Optional for N1*ST when not D2C						



HL - Hierarchical Level
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
HL01	628	Hierarchical ID Number	M	AN	1/12	
HL02	734	Hierarchical Parent ID Number	M	AN	1/12	
HL03	735	Hierarchical Level Code	M	ID	1/ 2	'O' - Order

PRF - Purchase Order Reference [Order]
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Values/Comments
PRF01	324	Purchase Order Number	M	AN	1/22	PO #
PRF04	373	Date	M	DT	8/8	PO Date

REF - Reference Information [Order]
Optional segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
REF01	128	Reference Identification Qualifier	M	ID	2/3	'CO' – Customer Order Number
REF02	127	Reference Identification	M	AN	1/30	

*Mandatory for D2C



N1 - Name [Order]
Optional segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
N101	98	Entity Identifier Code	M	ID	2/3	'Z7' – Mark For
N103	66	Identification Code Qualifier	M	ID	1/2	'92' – Assigned by Buyer or Buyer's Agent
N104	67	Identification Code	M	AN	2/80	3 digit Branch #
*Only for cross dock POs						



HL - Hierarchical Level

Optional segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
HL01	628	Hierarchical ID Number	M	AN	1/12	
HL02	734	Hierarchical Parent ID Number	M	AN	1/12	
HL03	735	Hierarchical Level Code	M	ID	1/2	'T' – Tare or 'P' - Pack
*Either sent T or P, not both.						

MAN - Marks and Numbers Information [Tare or Pack]

Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Values/Comments
MAN01	88	Marks and Numbers Qualifier	M	ID	1/2	'GM' – SSCC-18
MAN02	87	Marks and Numbers	M	AN	1/48	Pallet UCC-128 #
MAN04	88	Marks and Numbers Qualifier	O	ID	1/2	'CP' – Carrier's Tracking #
MAN05	87	Marks and Numbers	O	AN	1/48	
*MAN04/05 mandatory for parcel carriers and D2C						
*MAN01/02 not needed for D2C						



HL - Hierarchical Level
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
HL01	628	Hierarchical ID Number	M	AN	1/12	
HL02	734	Hierarchical Parent ID Number	M	AN	1/12	
HL03	735	Hierarchical Level Code	M	ID	1/2	'I' - Item

LIN - Item Identification [Item]
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Values/Comments
LIN02	235	Product/Service ID Qualifier	M	ID	2/2	'UP' - UPC Number
LIN03	234	Product/Service ID	M	AN	1/48	UPC #
LIN04	235	Product/Service ID Qualifier	M	ID	2/2	'VN' - Vendor Part Number
LIN05	234	Product/Service ID	M	AN	1/48	Vendor's Part #

SN1 - Item Detail [Item]
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Values/Comments
SN102	382	Number of Units Shipped	M	R	1/10	Quantity Shipped
SN103	355	Unit or Basis for Measurement Code	M	ID	2/2	'BN' - Bundle 'CA' - Case 'DR' - Drum 'EA' - Each 'FT' - Foot 'LB' - Pound 'PR' - Pair 'RL' - Roll 'TN' - Ton



PO4 - Item Physical Details [Item]
Optional segment

Ref	Ref ID	Description	Req	Type	Min / Max	Values/Comments
PO401	356	Pack Size	O	N0	1/6	*Only needed when SN103 = CA



CTT - Transaction Totals [Summary]
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
CTT01	354	Number of Line Items	M	N0	1/6	Total number of HL segments
CTT02	347	Hash Total	M	R	1/10	Sum of SN102 quantities

SE - Transaction Set Trailer
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
SE01	96	Number of Included Segments	M	N0	1/10	Number of included segments in the 856. From and Including ST and SE.
SE02	329	Transaction Set Control Number	M	AN	4/9	Same as ST02

GE - Functional Group Trailer
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
GE01	97	Number of Transaction Sets Included	M	ID	1/6	Number of Transaction Sets Included in the Functional Group
GE02	28	Group Control Number	M	AN	1/9	Sequential Number Assigned by Vendor

IEA - Interchange Control Trailer
Mandatory segment

Ref	Ref ID	Description	Req	Type	Min / Max	Qualifiers/Definitions
IEA01	I16	Number of Functional Groups Included	M	N0	1/5	Number of Functional Groups Included in transmission
IEA02	I12	Interchange Control Number	M	N0	9/9	Sequential Number Assigned by Vendor



APPENDIX

<u>Code</u>	<u>Description</u>
A	Air
AE	Air Express
C	Consolidate
D	Parcel Post
E	Expedited Truck
H	Customer Pick-Up
L	Contract Carrier
M	Motor (Common Carrier)
R	Rail
S	Ocean
T	Best Way (Shipper's Option)
U	Private Parcel Service



SEGMENT USAGE EXAMPLES

1. SOTI - DM

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ISA*00*      *00*      *ZZ*SENDER      *12*RECEIVER      *240821*0814*U*00401*000000001*0*P*>~
GS*SH*SENDER*RECEIVER*20240821*0814*1*X*004010~
ST*856*0001~
BSN*00*ASN123*20240821*0814*0001~
HL*1**S~
TD1*PLT*1****G*100*LB~
TD5**2*SCAC*A*Carrier Name~
REF*CN*1x234569870~
DTM*011*20230518~
FOB*CC*OR~
N1*SF*SF Name*92*VENDNUM~
N3*SF Address1~
N4*SF City*PA*16066~
N1*ST**92*080~
HL*2*1*O~
PRF*PO100***20230516~
HL*3*2*T~
MAN*GM*00345678901324567890~
HL*4*3*I~
LIN**UP*123456789012*VN*111222~
SN1**25*EA~
HL*5*3*I~
LIN**UP*345678901234*VN*333444~
SN1**10*EA~
CTT*6~
SE*24*0001~
GE*1*1~
IEA*1*000000001~
  
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2. SOTI – D2C

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ISA*00*      *00*      *ZZ*SENDER      *12*RECEIVER      *240821*0814*U*00401*000000001*0*P*>~
GS*SH*SENDER*RECEIVER*20240821*0814*1*X*004010~
ST*856*0001~
BSN*00*ASN123*20240821*0814*0001~
HL*1**S~
TD1*PLT*1****G*100*LB~
TD5**2*SCAC*A*Carrier Name~
REF*CN*1x234569870~
DTM*011*20230518~
FOB*CC*OR~
N1*SF*SF Name*92*VENDNUM~
N3*SF Address1~
N4*SF City*PA*16066~
N1*ST*ST Name*92*080~
N3*ST Address 1*ST Address2~
N4*ST City*PA*16066~
HL*2*1*O~
PRF*PO100***20230516~
REF*CO*CUSTORDER1~
HL*3*2*T~
MAN****CP*1x234567890~
HL*4*3*I~
LIN**UP*123456789012*VN*111222~
SN1**25*EA~
HL*5*3*I~
LIN**UP*345678901234*VN*333444~
SN1**10*EA~
CTT*6~
SE*27*0001~
GE*1*1~
IEA*1*000000001~

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3. SOPI - DM

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ISA*00*          *00*          *ZZ*SENDER      *12*RECEIVER      *240821*0814*U*00401*000000001*0*P*>~
GS*SH*SENDER*RECEIVER*20240821*0814*1*X*004010~
ST*856*0001~
BSN*00*ASN123*20240821*0814*0001~
HL*1**S~
TD1*CTN*1****G*100*LB~
TD5**2*SCAC*A*Carrier Name~
REF*CN*1x234569870~
DTM*011*20230518~
FOB*CC*OR~
N1*SF*SF Name*92*VENDNUM~
N3*SF Address1~
N4*SF City*PA*16066~
N1*ST**92*080~
HL*2*1*O~
PRF*PO100***20230516~
HL*3*2*P~
MAN*GM*00345678901324567890~
HL*4*3*I~
LIN**UP*123456789012*VN*111222~
SN1**25*EA~
HL*5*3*I~
LIN**UP*345678901234*VN*333444~
SN1**10*EA~
CTT*6~
SE*24*0001~
GE*1*1~
IEA*1*000000001~

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4. SOPI – D2C

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ISA*00*      *00*      *ZZ*SENDER      *12*RECEIVER      *240821*0814*U*00401*000000001*0*P*>~
GS*SH*SENDER*RECEIVER*20240821*0814*1*X*004010~
ST*856*0001~
BSN*00*ASN123*20240821*0814*0001~
HL*1**S~
TD1*CTN*1****G*100*LB~
TD5**2*SCAC*A*Carrier Name~
REF*CN*1x234569870~
DTM*011*20230518~
FOB*CC*OR~
N1*SF*SF Name*92*VENDNUM~
N3*SF Address1~
N4*SF City*PA*16066~
N1*ST*ST Name*92*080~
N3*ST Address 1*ST Address2~
N4*ST City*PA*16066~
HL*2*1*O~
PRF*PO100***20230516~
REF*CO*CUSTORDER1~
HL*3*2*P~
MAN****CP*1x234567890~
HL*4*3*I~
LIN**UP*123456789012*VN*111222~
SN1**25*EA~
HL*5*3*I~
LIN**UP*345678901234*VN*333444~
SN1**10*EA~
CTT*6~
SE*27*0001~
GE*1*1~
IEA*1*000000001~

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