

The Notice/Manifest - 856 (Advance Shipping Notice)



The ASC X12 856 ship notice/manifest (commonly known as the advance shipping notice or ASN) is primarily an electronic version of the packing slip. However, instead of being received with the shipment, the ASN is transmitted at the time the shipment is released by the supplier to the Transportation Company. When the ASN and purchase order acknowledgement are used together, there is no need to provide supersession, obsolescence, or quantity rounding exception information via paper documents.

In general, only the following types of information will be included on the ASN:

- product information -- shipped, backordered, or cancelled quantities, and the disposition of remainders;
- purchase order reference for each specified part;
- shipment physical characteristics -- weight, number of boxes; and,
- shipment information -- date shipped, expected arrival date, shipping mode, and transportation company used.

Ideally, the distributor should integrate the electronic receipt of the ASN into his existing computerized receiving function. For instance, the following combination of manual and automated procedures might be used:

1. The supplier generates and transmits the ASN, assigning a shipment number.
2. The distributor receives the electronic transmission, verifies that the referenced purchase orders are valid, and stores it according to the shipment number.
 - a. If critical parts ordered are not contained in the shipment, the distributor might immediately begin finding alternative sources.
 - b. If the shipment is large or is expected to arrive on the same day as other shipments, thereby causing an overload of receiving operations, the distributor might schedule additional receiving dock personnel or prioritize processing of shipments based on need for the parts in transit.

3. When the shipment is received, the receiving personnel enter the shipment number, causing:
 - a. The specified purchase orders to be updated based on shipment quantities claimed by the supplier;
 - b. On-hand balances to be increased based on claimed shipment quantities;
 - c. The shipment to be audited based on ASN-specified quantities, or verified in full. This is done either before moving the product to picking areas, or as a part of replenishing the picking shelves.
4. After discrepancies are found and reported, the purchase order and receiving information are electronically matched and made available to the accounts payable computer system.

Note how the use of EDI has removed the need to handle paper documents and keypunch data.

The ship notice/manifest will use the document control structure described on the following page, in compliance with the ASC X12 standards. Please note that indentations are significant, as an indented line (or segment) indicates it is a subset of the segment above it. Segments with the same level of indenture are not necessarily directly related to each other but refer to the immediately preceding segment, (ST and BSN under GS), or signify the closure of a control loop (the ISA and IEA loops).

For more information please refer to the ASC X12 standards manuals available from the Data Interchange Standards Association (DISA). DISA is located at 1800 Diagonal Drive, Suite 355, Alexandria, VA 22314-2852, and may be reached by calling 703-548-7005.

ASC X12 856 Ship Notice/Manifest Transaction Set

1. **ISA** - Control Header *Notes
2. **GS** - Specify Advance Shipping Notice Transaction Set *Notes
3. **ST** - Specify Beginning of a Transaction Set *Notes *Guide
4. **BSN** - Shipment Identification Number *Guide
5. **DTM** - Shipment Date *Guide
6. **HL** - Transaction Hierarchy Marker (Shipment Level) *Notes *Guide
7. **TD1** - Shipment Packaging Information *Guide
8. **TD5** - Carrier Route Details *Notes *Guide
9. **TD3** - Carrier Equipment Details *Guide
10. **REF** - Bill of Lading *Guide
11. **REF** - Packing List Number *Guide
12. **FOB** - Shipment Payment Method *Guide
13. **N1** - Ship From Location *Notes *Guide
14. | **N1** - Ship To Location *Notes *Guide
15. | **N1** - Bill To Code *Notes *Guide
16. **HL** - Transaction Hierarchy Marker (Purchase Order Level) *Notes *Guide
17. **PRF** - Purchase Offer Reference *Notes *Guide
18. **REF** - Packing List Reference *Guide
19. **HL** - Transaction Hierarchy Marker (Line Item Level) *Notes *Guide
20. **LIN** - Item Identification *Notes *Guide
21. **SN1** - Units Shipped *Notes *Guide
22. **TD5** - Shipped/Backordered/Cancelled Status *Notes *Guide
23. **CLD** - Load Detail (Optional) *Guide
24. **REF** - Bar Coded Serial Number(s) Reference *Guide
25. **CTT** - Hash Total Number of Line Items *Guide
26. **SE** - End of ST Control Loop *Guide
27. **GE** - End of GS Control Loop
28. **IEA** - End of ISA Control Loop

856 - Ship Notice/Manifest - Sample Data

ISA*00*bbbbbbbbbb*00*bbbbbbbbbb*01*007061617bbbbbb*01
*005070479bbbbbb*920804*1035*U*00303*000000623*0*p**^
GS*SH*007061617*005070479*920804*1035*877*X*003030^
ST*856*1150^
BSN*00*0579745*920804*1033^
DTM*011*920804*1033^
HL*1**S^
TD1*CTN90*1***G*24*LB^
TD5*B*2*YFSY*LT^
TD3*TL**0579745^
REF*BM*579745^
REF*PK*579745^
FOB*CC^
N1*SF**91*H9811A1^
N1*ST**92*123456789^
N1*BT**91*123456^
HL*2**O^
PRF*SEQ38828***920801^
REF*PK*0579745^
HL*3**I^
LIN**BP*7450*VP*84237450^
SN1**38*EA^
TD5***X*CC^
CLD*1*38*CTN90^
REF*LS*SFLE400191^
CTT*1*38^
SE*20*1150^
GE*1*877^
IEA*1*000000623^

856 ASN Notes

The following are notes regarding those segments that may require further explanation:

1. **ISA** -- Only one ISA-IEA control loop may be used per transmission from the supplier to the distributor receiving the electronic documents.
2. **GS** -- One or more GS-GE control loops may be used per transmission by the supplier, but only one is required.
3. **ST** -- Multiple shipments can be reported by using the ST-SE control loop; there will be as many ST-SE control loops as there are shipments being made by the supplier to the distributor.
6. **HL*1** -- This segment marks the beginning of the information covering a single shipment by the supplier.
13. **N1*SF** -- The ship-from information is used to specify the supplier's shipment location, and is important when the supplier ships to the distributor from several points.
14. **N1*ST** -- The ship-to location can be used when the distributor has several warehouse locations, or has specified a drop shipment.
15. **HL*2** -- This segment marks the beginning of information about all the purchase orders included in the shipment. If multiple orders are included in a single shipment, there will be multiple HL*2 loops.
16. **PRF** -- This is the reference to the distributor's purchase order; all subsequent LIN, SN1, and TD5 segments must share the same purchase order reference unless another HL*2 segment is encountered.
17. **HL*3** -- This level marks the beginning of information about all the lines specified on a single purchase order included in the shipment.
18. **LIN** -- The part numbers are specified on this segment. The buyer's part number is presented first. Optional additional information is a second part number indicating vendor (supplier) part number, and a third specifying vendor line code prefix.
 - a. The vendor part number is used in those cases where the vendor's internal part number for the part being shipped to the customer differs from the part number in the vendor's catalog. However, this is not a common occurrence in the aftermarket.

- b. Distributors routinely assign a line code prefix to the supplier's trade part number in order to eliminate duplicate part numbers. The assignment of these prefixes is somewhat arbitrary. While the supplier could specify the distributor's line code and supplier part number in the LIN segment, to do so would require the supplier to maintain a table of each customer's line codes. Instead, the distributor should assign the line code, probably based on the supplier identification - a continuation of processes required using paper-packing slips.

19. **SN1** -- The units shipped segment describes the quantity and unit of measure.

20. **TD5** -- The TD5 segment is used to provide both initial information about the line being shipped, and ongoing reporting of the line. For instance, the order line might be shipped complete. However, unshipped quantities could be shown as backordered or cancelled. Subsequent shipments of the product on the same purchase order would be shown as such. Subsequent cancellation of line items, for reasons such as seasonal goods, would also be displayed in this segment.

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

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:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BSN	Beginning Segment for Ship Notice	M	1		
	040	DTM	Date/Time/Period	O	10		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - HL			200000	
Must Use	010	HL	Hierarchical Level	M	1		c1
	110	TD1	Carrier Details (Quantity and Weight)	O	20		
	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
	130	TD3	Carrier Details (Equipment)	O	12		
	141	REF	Reference Numbers	O	>1		
	150	REF	Reference Numbers	O	>1		
	210	FOB	F.O.B. Related Instructions	O	1		
			LOOP ID - N1			200	
	216	N1	Name	O	1		
	217	N1	Name	O	1		
	218	N1	Name	O	1		
Must Use	282	HL	Hierarchical Level	M	1		c2
	283	PRF	Purchase Order Reference	O	1		
	284	REF	Reference Numbers	O	>1		
Must Use	285	HL	Hierarchical Level	M	1		c3
	286	LIN	Item Identification	O	1		

287	SN1	Item Detail (Shipment)	O	1
288	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12
289	CLD	Load Detail	O	1
351	REF	Reference Numbers	O	>1

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	CTT	Transaction Totals	M	1		n1
Must Use	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. 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.

Transaction Set Comments

1. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
2. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.
3. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Segment: **ST** Transaction Set Header

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

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

Syntax Notes:

Semantic Notes: 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).

Comments:

Notes: Segment Example: ST*856*1150^

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
>>	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			Refer to 003030 Data Element Dictionary for acceptable code values.	
>>	ST02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

Segment: **BSN** Beginning Segment for Ship Notice
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Syntax Notes: 1 If BSN07 is present, then BSN06 is required.
Semantic Notes: 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.
Notes: Segment Example: BSN*00*0579745*920804*1033^

Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
>> BSN01	353	Transaction Set Purpose Code		M ID 2/2
		Code identifying purpose of transaction set		
		Suggested codes for aftermarket usage. Any ASC X12 approved code may be used.		
		00 Original		
		07 Duplicate		
>> BSN02	396	Shipment Identification		M AN 2/30
		A unique control number assigned by the original shipper to identify a specific shipment		
>> BSN03	373	Date		M DT 6/6
		Date (YYMMDD)		
>> BSN04	337	Time		M TM 4/6
		Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)		

Segment: **DTM** Date/Time/Period
Position: 040
Loop:
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes: 1 At least one of DTM02 or DTM03 is required.
Semantic Notes:
Comments:
Notes: Segment Example: DTM*011*920804*1033**19^

Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
>> DTM01	374	Date/Time Qualifier	M	ID 3/3
		Code specifying type of date or time, or both date and time Suggested code for aftermarket usage. Any ASC X12 approved codes may be used.		
		011 Shipped		
DTM02	373	Date	X	DT 6/6
		Date (YYMMDD)		
DTM03	337	Time	X	TM 4/6
		Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959)		
DTM05	624	Century	O	N0 2/2
		The first two characters in the designation of the year (CCYY)		

Segment: **HL Hierarchical Level**
Position: 010
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

- 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 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.
 - 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 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.
 - 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Segment Example: HL*1**S^
This Segment marks the beginning of the information covering a single shipment by the supplier.
This segment is used to detail the shipment.

Data Element Summary

Ref.	Des.	Data Element	Name	Attributes
>>	HL01	628	Hierarchical ID Number	M AN 1/12
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
>>	HL03	735	Hierarchical Level Code	M ID 1/2
			Code defining the characteristic of a level in a hierarchical structure	
			S Shipment	

Segment: **TD1** Carrier Details (Quantity and Weight)

Position: 110

Loop: HL

Level: Detail

Usage: Optional

Max Use: 20

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

Syntax Notes: 1 If TD101 is present, then TD102 is required.

2 If TD103 is present, then TD104 is required.

3 If TD106 is present, then both TD107 and TD108 are required.

Semantic Notes:

Comments:

Notes: Segment Example: TD1*CTN90*1****G*24*LB^

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
TD101	103		Packaging Code	O AN 5/5
			Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material	
			Suggested codes for aftermarket usage. Any ASC X12 approved code may be used.	
			CTN Carton	
			90 Standard	
TD102	80		Lading Quantity	X N0 1/7
			Number of units (pieces) of the lading commodity	
TD106	187		Weight Qualifier	O ID 1/2
			Code defining the type of weight	
			Suggested codes for aftermarket usage. Any ASC X12 approved code may be used.	
			G Gross Weight	
			N Actual Net Weight	
TD107	81		Weight	X R 1/10
			Numeric value of weight	
TD108	355		Unit or Basis for Measurement Code	X ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
			LB Pound	

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)

Position: 120

Loop: HL

Level: Detail

Usage: Optional

Max Use: 12

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

- Syntax Notes:**
- 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.
 - 2 If TD502 is present, then TD503 is required.
 - 3 If TD507 is present, then TD508 is required.
 - 4 If TD510 is present, then TD511 is required.

Semantic Notes:

- 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.

Notes: Segment Example: TD5*B*2*YFSY*LT^

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
TD501	133 Routing Sequence Code	O ID 1/2
	Code describing the relationship of a carrier to a specific shipment movement	
	Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
	B Origin/Delivery Carrier (Any Mode)	
TD502	66 Identification Code Qualifier	X ID 1/2
	Code designating the system/method of code structure used for Identification Code (67)	
	Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
	2 Standard Carrier Alpha Code (SCAC)	
TD503	67 Identification Code	X AN 2/17
	Code identifying a party or other code	
TD504	91 Transportation Method/Type Code	X ID 1/2
	Code specifying the method or type of transportation for the shipment	
	Suggested codes for aftermarket usage. Any ASC X12 approved code may be used.	
	A Air	
	AE Air Express	
	LT Less Than Trailer Load (LTL)	
	R Rail	
	U Private Parcel Service	

TD507	309	Location Qualifier	O ID 1/2
		Code identifying type of location	
		If the code value of element TD504 is "A" or "AE," elements TD507 and TD508 would be used.	
		Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
		OR	
		Origin (Shipping Point)	
TD508	310	Location Identifier	X AN 1/25
		Code which identifies a specific location	

Segment: **TD3** Carrier Details (Equipment)

Position: 130

Loop: HL

Level: Detail

Usage: Optional

Max Use: 12

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

Syntax Notes: 1 If TD302 is present, then TD303 is required.

2 If TD304 is present, then both TD305 and TD306 are required.

Semantic Notes:

Comments:

Notes: Segment Example: TD5*TL**0579745

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
>> TD301	40	Equipment Description Code	M ID 2/2
		Code identifying type of equipment used for shipment	
		Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
		AF Air Freight (Break Bulk)	
		TL Trailer (not otherwise specified)	
TD303	207	Equipment Number	X AN 1/10
		Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	

Segment: **REF** Reference Numbers
Position: 141
Loop: HL
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying numbers.
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes: Segment Example: REF*BM*579745^

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
>> REF01	128 Reference Number Qualifier	M ID 2/2
	Code qualifying the Reference Number. Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
	BM Bill of Lading Number	
REF02	127 Reference Number	X AN 1/30
	Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	

Segment: **REF** Reference Numbers
Position: 150
Loop: HL
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying numbers.
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes: Segment Example: REF*PK*579745^

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
>> REF01	128 Reference Number Qualifier Code qualifying the Reference Number. Suggested code for aftermarket usage. Any ASC X12 approved code may be used. PK Packing List Number	M ID 2/2
REF02	127 Reference Number Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	X AN 1/30

Segment: **FOB** F.O.B. Related Instructions

Position: 210

Loop: HL

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify transportation instructions relating to shipment

- Syntax Notes:**
- 1 If FOB03 is present, then FOB02 is required.
 - 2 If FOB04 is present, then FOB05 is required.
 - 3 If FOB07 is present, then FOB06 is required.
 - 4 If FOB08 is present, then FOB09 is required.

- Semantic Notes:**
- 1 FOB01 indicates which party will pay the carrier.
 - 2 FOB02 is the code specifying transportation responsibility location.
 - 3 FOB06 is the code specifying the title passage location.
 - 4 FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and FOB06/FOB07.

Comments:

Notes: Segment Example: FOB*CC^

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	FOB01	146	Shipment Method of Payment	M ID 2/2
			Code identifying payment terms for transportation charges	
			Suggested codes for aftermarket usage. Any ASC X12 approved code may be used.	
			CA	Advance Collect
			CC	Collect
			PC	Prepaid but Charged to Customer
			PP	Prepaid (by Seller)
			PU	Pickup

Segment: **N1** Name

Position: 216

Loop: N1

Level: Detail

Usage: Optional

Max Use: 1

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

Syntax Notes: 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

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.

Notes: Segment Example: N1*SF**91*H9811A1^

SF--The ship-from information is used to specify the supplier's shipment location, and is important when the supplier ships to the distributor from several points.

Data Element Summary

Ref.	Data	Element	Name	Attributes
>> N101	98	Entity Identifier Code		M ID 2/2
			Code identifying an organizational entity, a physical location, or an individual	
			Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
		SF	Ship From	
N103	66	Identification Code Qualifier		X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
		91	Assigned by Seller or Seller's Agent	
N104	67	Identification Code		X AN 2/17
			Code identifying a party or other code	

Segment: **N1** Name

Position: 217

Loop: N1

Level: Detail

Usage: Optional

Max Use: 1

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

- Syntax Notes:**
- 1 At least one of N102 or N103 is required.
 - 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

- 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.

Notes: Segment Example: N1*ST**92*123456789^
The ship-to location can be used when the distributor has several warehouse locations, or has specified a drop shipment.
Use this segment if the ship-to location is different from the ISA receiver.

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
>> N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, or an individual Suggested code for aftermarket usage. Any ASC X12 approved code may be used. ST Ship To	M ID 2/2
N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) Suggested code for aftermarket usage. Any ASC X12 approved code may be used. 91 Assigned by Seller or Seller's Agent 92 Assigned by Buyer or Buyer's Agent	X ID 1/2
N104	67 Identification Code Code identifying a party or other code	X AN 2/17

Segment: **N1** Name

Position: 218

Loop: N1

Level: Detail

Usage: Optional

Max Use: 1

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

Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

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.

Notes: Segment Example: N1*BT**91*123456^
The "Bill-to" Code.

Use this segment if the bill-to location is different from the ISA receiver.

Data Element Summary

Ref.	Data	Element	Name	Attributes
>>	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, or an individual Suggested code for aftermarket usage. Any ASC X12 approved code may be used. BT Party to be Billed For Other Than Freight(Bill To)	M ID 2/2
	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) Suggested codes for aftermarket usage. Any ASC X12 approved code may be used. 91 Assigned by Seller or Seller's Agent 92 Assigned by Buyer or Buyer's Agent	X ID 1/2
	N104	67	Identification Code Code identifying a party or other code	X AN 2/17

Segment: **HL Hierarchical Level**
Position: 282
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

- 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 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.
 - 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 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.
 - 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Segment Example: HL*2**O^
This segment marks the beginning of information about all the purchase orders included in the shipment. If multiple orders are included in a single shipment, there will be multiple HL*2 loops.

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	HL01	628 Hierarchical ID Number	M AN 1/12
		A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
>>	HL03	735 Hierarchical Level Code	M ID 1/2
		Code defining the characteristic of a level in a hierarchical structure	
		O	Order

Segment: **PRF** Purchase Order Reference
Position: 283
Loop: HL
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes:
Comments:
Notes: Segment Example: PRF*SESQ38828***920801^

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
>> PRF01	324 Purchase Order Number	M AN 1/22
	Identifying number for Purchase Order assigned by the orderer/purchaser	
PRF04	323 Purchase Order Date	O DT 6/6
	Date assigned by the purchaser to Purchase Order	

Segment: **REF** Reference Numbers
Position: 284
Loop: HL
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying numbers.
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes: Segment Example: REF*PK*579745^

Data Element Summary

Ref.	Data	Attributes
Des.	Element Name	
>> REF01	128 Reference Number Qualifier	M ID 2/2
	Code qualifying the Reference Number. Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
	PK Packing List Number	
REF02	127 Reference Number	X AN 1/30
	Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	

Segment: **HL Hierarchical Level**
Position: 285
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

- 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 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.
 - 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
 - 4 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.
 - 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Segment Example: HL*3**I^
This segment/level marks the beginning of information about all the lines specified on a single purchase order included in the shipment.

Data Element Summary

Ref.	Des.	Data Element	Name	Attributes
>>	HL01	628	Hierarchical ID Number	M AN 1/12
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
>>	HL03	735	Hierarchical Level Code	M ID 1/2
			Code defining the characteristic of a level in a hierarchical structure	
			I Item	

Segment: **LIN** Item Identification

Position: 286

Loop: HL

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes:

- 1 If LIN04 is present, then LIN05 is required.
- 2 If LIN06 is present, then LIN07 is required.
- 3 If LIN08 is present, then LIN09 is required.
- 4 If LIN10 is present, then LIN11 is required.
- 5 If LIN12 is present, then LIN13 is required.
- 6 If LIN14 is present, then LIN15 is required.
- 7 If LIN16 is present, then LIN17 is required.
- 8 If LIN18 is present, then LIN19 is required.
- 9 If LIN20 is present, then LIN21 is required.
- 10 If LIN22 is present, then LIN23 is required.
- 11 If LIN24 is present, then LIN25 is required.
- 12 If LIN26 is present, then LIN27 is required.
- 13 If LIN28 is present, then LIN29 is required.
- 14 If LIN30 is present, then LIN31 is required.

Semantic Notes:

- 1 LIN01 is the line item identification

Comments:

- 1 See the Data Dictionary for a complete list of ID's.
- 2 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Notes: Segment Example: LIN**BP*7450*VP*84237450^

Data Element Summary

Ref.	Data	Attributes
<u>Des.</u>	<u>Element</u> <u>Name</u>	<u>Attributes</u>
>>	LIN02 235 Product/Service ID Qualifier	M ID 2/2
	Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
	Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
	Use "SS" code only when a supersession takes place.	
	BP Buyer's Part Number	
	SS Superseded Part Number	
>>	LIN03 234 Product/Service ID	M AN 1/30
	Identifying number for a product or service	
	LIN04 235 Product/Service ID Qualifier	O ID 2/2
	Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
	Suggested code for aftermarket usage. Any ASC X12 approved code	

Segment: **SN1** Item Detail (Shipment)
Position: 287
Loop: HL
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: 1 If SN105 is present, then SN106 is required.
Semantic Notes: 1 SN101 is the ship notice line-item identification.
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104.
Notes: Segment Example: SN1**38*EA^

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>> SN102	382	Number of Units Shipped	M R 1/10
		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
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		Suggested code for aftermarket usage. Any ASC X12 approved code may be used.	
		EA	Each

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)
Position: 288
Loop: HL
Level: Detail
Usage: Optional
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:

- 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.
- 2 If TD502 is present, then TD503 is required.
- 3 If TD507 is present, then TD508 is required.
- 4 If TD510 is present, then TD511 is required.

Semantic Notes:
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.

Notes: Segment Example: TD5*****X*CC^

Data Element Summary

Ref.	Data	Attributes
<u>Des.</u>	<u>Element</u> <u>Name</u>	<u>Attributes</u>
TD505	387 Routing	X AN 1/35
	Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	
	Suggested code for aftermarket usage.	
	X = Item Status Only	
TD506	368 Shipment/Order Status Code	X ID 2/2
	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	
	Suggested codes for aftermarket usage. Any ASC X12 approved codes may be used.	
	A "BK" code indicates that the item is from a previous shipment, and may be used in addition to another "CC", "BP" or "CP" code.	
	BK Back Ordered from Previous Order	
	BP Shipment Partial, Back Order to Ship on (Date)	
	CC Shipment Complete on (Date)	
	CP Partial Shipment on (Date), Considered No Backorder	

Segment: **CLD** Load Detail
Position: 289
Loop: HL
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the number of material loads shipped
Syntax Notes:
Semantic Notes: 1 CLD05, "Unit of Measure Code," is used to dimension the value given in CLD04, "Size."
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.
Notes: Segment Example: CLD*1*38*CTN90^
This is an optional segment.

Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
>>	CLD01	622	Number of Loads	M N0 1/5
			Number of customer-defined loads shipped by the supplier	
>>	CLD02	382	Number of Units Shipped	M R 1/10
			Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	
	CLD03	103	Packaging Code	O AN 5/5
			Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material	
			Suggested codes for aftermarket usage. Any ASC X12 approved code may be used.	
		CTN	Carton	
		90	Standard	

Segment: **REF** Reference Numbers
Position: 351
Loop: HL
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying numbers.
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes: Segment Example: REF*LS*SFLE400191^
 This is an optional segment.

Data Element Summary

Ref.	Data	Attributes
<u>Des.</u>	<u>Element</u> <u>Name</u>	<u>Attributes</u>
>> REF01	128 Reference Number Qualifier Code qualifying the Reference Number. Suggested code for aftermarket usage. Any ASC X12 approved code may be used. LS Bar-Coded Serial Number	M ID 2/2
REF02	127 Reference Number Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	X AN 1/30

Segment: **CTT Transaction Totals**
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: 1 If CTT03 is present, then CTT04 is required.
2 If CTT05 is present, then CTT06 is required.

Semantic Notes:

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

Notes: Segment Example: CTT*1*38^

Data Element Summary

Ref.	Data			Attributes
Des.	Element	Name		
>> CTT01	354	Number of Line Items		M N0 1/6
		Total number of line items in the transaction set		
CTT02	347	Hash Total		O R 1/10
		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.		
CTT03	81	Weight		O R 1/10
		Numeric value of weight		
CTT04	355	Unit or Basis for Measurement Code		X ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
		Refer to 003030 Data Element Dictionary for acceptable code values.		
CTT05	183	Volume		O R 1/8
		Value of volumetric measure		
CTT06	355	Unit or Basis for Measurement Code		X ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
		Refer to 003030 Data Element Dictionary for acceptable code values.		
CTT07	352	Description		O AN 1/80

A free-form description to clarify the related data elements and their content

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
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).

Syntax Notes:

Semantic Notes:

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

Notes: Segment Example: SE*20*1150^

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>> SE01	96	Number of Included Segments	M N0 1/10
		Total number of segments included in a transaction set including ST and SE segments	
>> SE02	329	Transaction Set Control Number	M AN 4/9
		Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	