CooperStandard

830 Planning Schedule

X12 Vers. 4010: 830 Planning Schedule

Author: Adam Tenorio

Trading Partner: CSA Suppliers

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Notes: 207 South West Street
Auburn, IN 46706

atenorio@cooperstandard.com
Phone: 440.263.5616
Fax: 260.927.3201

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830 Planning Schedule with Release Capability

Functional Group=PS

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations.The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1			Must use
020	BFR	Beginning Segment for Planning Schedule	M	1			Must use
040	CUR	Currency	O	1			Must use
060	PER	Administrative Communications Contact	O	3			Used
LOOP ID - N1					**200**		
230	N1	Name	O	1			Must use
240	N2	Additional Name Information	O	2			Used
250	N3	Address Information	O	2			Used
260	N4	Geographic Location	O	1			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - LIN					**>1**		
010	LIN	Item Identification	M	1			Must use
020	UIT	Unit Detail	O	1			Must use
080	PID	Product/Item Description	O	1000			Used
150	PER	Administrative Communications Contact	O	3			Used
230	ATH	Resource Authorization	O	20			Used
LOOP ID - FST					**>1**	**N2/410L**	
410	FST	Forecast Schedule	O	1		N2/410	Must use
LOOP ID - SHP					**25**		

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
470	SHP	Shipped/Received Information	O	1			Must use
480	REF	Reference Identification	O	5			Used

Summary:

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

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

Notes:

2/410L   At least one occurrence of segment FST is required, either in the FST loop or within the SDP loop. These two loops are mutually exclusive.

2/410   At least one occurrence of segment FST is required, either in the FST loop or within the SDP loop. These two loops are mutually exclusive.

3/010   Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 16

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA01	I01	**Authorization Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Authorization Information

CodeList Summary (Total Codes: 7, Included: 1)

Code **Name**

00   No Authorization Information Present (No Meaningful Information in I02)

ISA02	I02	**Authorization Information**	M	AN	10/10	Must use

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)

ISA03	I03	**Security Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Security Information

CodeList Summary (Total Codes: 2, Included: 1)

Code **Name**

00   No Security Information Present (No Meaningful Information in I04)

ISA04	I04	**Security Information**	M	AN	10/10	Must use

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)

ISA05	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

CodeList Summary (Total Codes: 38, Included: 1)

Code **Name**

01   Duns (Dun & Bradstreet)

ISA06	I06	**Interchange Sender ID**	M	AN	15/15	Must use

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

ISA07	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

CodeList Summary (Total Codes: 38, Included: 1)

Code Name
01   Duns (Dun & Bradstreet)

ISA08	I07	**Interchange Receiver ID**	M	AN	15/15	Must use

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

ISA09	I08	**Interchange Date**	M	DT	6/6	Must use

Description: Date of the interchange

ISA10	I09	**Interchange Time**	M	TM	4/4	Must use

Description: Time of the interchange

ISA11	I10	**Interchange Control Standards Identifier**	M	ID	1/1	Must use

Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer
All valid standard codes are used. (Total Codes: 1)

ISA12	I11	**Interchange Control Version Number**	M	ID	5/5	Must use

Description: Code specifying the version number of the interchange control segments

CodeList Summary (Total Codes: 14, Included: 2)

Code Name
00300 Standard Issued as ANSI X12.5-1992

00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997

ISA13	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender

ISA14	I13	**Acknowledgment Requested**	M	ID	1/1	Must use

Description: Code sent by the sender to request an interchange acknowledgment (TA1)

CodeList Summary (Total Codes: 2, Included: 1)

Code Name
0   No Acknowledgment Requested

ISA15	I14	**Usage Indicator**	M	ID	1/1	Must use

Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information

CodeList Summary (Total Codes: 3, Included: 1)

Code Name
P   Production Data

ISA16	I15	**Component Element Separator**	M		1/1	Must use

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

GS Functional Group Header

Pos:	**Max: 1**
Not Defined - Mandatory	
Loop: N/A	**Elements: 8**

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS01	479	**Functional Identifier Code**	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

CodeList Summary (Total Codes: 240, Included: 1)

Code	Name
PS	Planning Schedule with Release Capability (830)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS02	142	**Application Sender's Code**	M	AN	2/15	Must use

Description: Code identifying party sending transmission; codes agreed to by trading partners

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS03	124	**Application Receiver's Code**	M	AN	2/15	Must use

Description: Code identifying party receiving transmission; codes agreed to by trading partners

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS04	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS05	337	**Time**	M	TM	4/8	Must use

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS06	28	**Group Control Number**	M	N0	1/9	Must use

Description: Assigned number originated and maintained by the sender

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS07	455	**Responsible Agency Code**	M	ID	1/2	Must use

Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

CodeList Summary (Total Codes: 2, Included: 1)

Code	Name
X	Accredited Standards Committee X12

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS08	480	**Version / Release / Industry Identifier Code**	M	AN	1/12	Must use

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage

CodeList Summary (Total Codes: 39, Included: 1)

Code	Name
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. 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:

1. 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.

ST   Transaction Set Header

<table>
<tr><td>Pos: 010</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 2</td></tr>
</table>

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code	Name
830	Planning Schedule with Release Capability

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

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

BFR Beginning Segment for Planning Schedule

Pos: 020 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 9**

User Option (Usage): Must use

Purpose: To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR01	353	**Transaction Set Purpose Code**	M	ID	2/2	Must use

Description: Code identifying purpose of transaction set

CodeList Summary (Total Codes: 65, Included: 1)

Code	Name
05	Replace

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR03	328	**Release Number**	X	AN	1/30	Must use

Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR04	675	**Schedule Type Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast

CodeList Summary (Total Codes: 11, Included: 1)

Code	Name
DL	Delivery Based

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR05	676	**Schedule Quantity Qualifier**	M	ID	1/1	Must use

Description: Code identifying the type of quantities used when defining a schedule or forecast

CodeList Summary (Total Codes: 4, Included: 1)

Code	Name
A	Actual Discrete Quantities

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR06	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR07	373	**Date**	O	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR08	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BFR11	324	**Purchase Order Number**	O	AN	1/22	Must use

Ref	Id	Element Name	Req	Type	Min/Max	Usage

Description: Identifying number for Purchase Order assigned by the orderer/purchaser

Syntax Rules:

1. R0203 - At least one of BFR02 or BFR03 is required.

Semantics:

1. If BFR01 contains the value "04" (Net Change), BFR09 is required.
2. BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
3. BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
4. BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
5. BFR08 is the date forecast generated: The date the forecast data was generated.
6. BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)

CUR Currency

<table>
<tr><td>Pos: 040</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Optional</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 2</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify the currency (dollars, pounds, francs, etc.) used in a transaction

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR01	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual

CodeList Summary (Total Codes: 1312, Included: 1)

Code	Name
ZZ	Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR02	100	**Currency Code**	M	ID	3/3	Must use

Description: Code (Standard ISO) for country in whose currency the charges are specified

User Note 1: *ZZZ - As indicated on the Purchase Order*

Syntax Rules:

1. C0807 - If CUR08 is present, then CUR07 is required.
2. C0907 - If CUR09 is present, then CUR07 is required.
3. L101112 - If CUR10 is present, then at least one of CUR11 or CUR12 is required.
4. C1110 - If CUR11 is present, then CUR10 is required.
5. C1210 - If CUR12 is present, then CUR10 is required.
6. L131415 - If CUR13 is present, then at least one of CUR14 or CUR15 is required.
7. C1413 - If CUR14 is present, then CUR13 is required.
8. C1513 - If CUR15 is present, then CUR13 is required.
9. L161718 - If CUR16 is present, then at least one of CUR17 or CUR18 is required.
10. C1716 - If CUR17 is present, then CUR16 is required.
11. C1816 - If CUR18 is present, then CUR16 is required.
12. L192021 - If CUR19 is present, then at least one of CUR20 or CUR21 is required.
13. C2019 - If CUR20 is present, then CUR19 is required.
14. C2119 - If CUR21 is present, then CUR19 is required.

Comments:

1. See Figures Appendix for examples detailing the use of the CUR segment.

PER Administrative Communications Contact

Pos: 060　　**Max: 3**
Heading - Optional
Loop: N/A　　**Elements: 2**

User Option (Usage): Used

Purpose: To identify a person or office to whom administrative communications should be directed

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER01	366	**Contact Function Code**	M	ID	2/2	Must use

Description: Code identifying the major duty or responsibility of the person or group named

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER02	93	**Name**	O	AN	1/60	Used

Description: Free-form name

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.
3. P0708 - If either PER07 or PER08 is present, then the other is required.

Loop Name

Pos: 230   Repeat: 200

Optional

Loop: N1   Elements: N/A

User Option (Usage): Must use

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

Loop Summary:

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

N1 Name

Pos: 230	**Max: 1**
Heading - Optional	
Loop: N1	**Elements: 4**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual

CodeList Summary (Total Codes: 1312, Included: 2)

Code	Name
ST	Ship To
SU	Supplier/Manufacturer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	X	AN	1/60	Must use

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	X	ID	1/2	Must use

Description: Code designating the system/method of code structure used for Identification Code (67)

CodeList Summary (Total Codes: 215, Included: 2)

Code	Name
1	D-U-N-S Number, Dun & Bradstreet
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	X	AN	2/80	Must use

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

N2   Additional Name Information

Pos: 240	Max: 2
Heading - Optional	
Loop: N1	**Elements: 1**

User Option (Usage): Used

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

Element Summary:

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

N3 Address Information

Pos: 250	Max: 2
Heading - Optional	
Loop: N1	**Elements: 1**

User Option (Usage): Used

Purpose: To specify the location of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N301	166	**Address Information**	M	AN	1/55	Must use

Description: Address information

N4 Geographic Location

Pos: 260   Max: 1
Heading - Optional
Loop: N1   Elements: 3

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

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

Syntax Rules:

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

Comments:

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

Loop Item Identification

<table>
<tr><td>Pos: 010</td><td>Repeat: >1</td></tr>
<tr><td colspan="2" align="center">Mandatory</td></tr>
<tr><td>Loop: LIN</td><td>Elements: N/A</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify basic item identification data

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	LIN	Item Identification	M	1		Must use
020	UIT	Unit Detail	O	1		Must use
080	PID	Product/Item Description	O	1000		Used
150	PER	Administrative Communications Contact	O	3		Used
230	ATH	Resource Authorization	O	20		Used
410		Loop FST	O		>1	Must use
470		Loop SHP	O		25	Must use

LIN   Item Identification

<table>
<tr><td>Pos: 010</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Mandatory</td></tr>
<tr><td>Loop: LIN</td><td>Elements: 5</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN01	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

User Note 1: If the line number sent, it must be sent back in the same format in the 856

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

CodeList Summary (Total Codes: 477, Included: 1)

Code	Name
BP	Buyer's Part Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN03	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN04	235	**Product/Service ID Qualifier**	X	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

CodeList Summary (Total Codes: 477, Included: 1)

Code	Name
PO	Purchase Order Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN05	234	**Product/Service ID**	X	AN	1/48	Must use

Description: Identifying number for a product or service

Syntax Rules:

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

Semantics:

1. LIN01 is the line item identification

Comments:

1. See the Data Dictionary for a complete list of IDs.

2. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

UIT **Unit Detail**

<table>
<tr><td>Pos: 020</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: LIN</td><td>Elements: 1</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify item unit data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
UIT01	C001	**Composite Unit of Measure**	M	Comp		Must use

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

UIT01-01	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code (Standard ISO) for unit of measure specifying the units in which a value is being expressed, or manner in which a measurement has been taken.

User Note 1: *Can use any valid X12 code. This is determined by the plant.*

CodeList Summary (Total Codes: 794, Included: 3)

Code	Name
EA	Each
LB	Pound
PC	Piece

Syntax Rules:

1. C0302 - If UIT03 is present, then UIT02 is required.

PID   Product/Item Description

Pos: 080   Max: 1000
Detail - Optional
Loop: LIN   Elements: 2

User Option (Usage): Used

Purpose: To describe a product or process in coded or free-form format

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	**Item Description Type**	M	ID	1/1	Must use
		Description: Code indicating the format of a description				
PID05	352	**Description**	X	AN	1/80	Used
		Description: A free-form description to clarify the related data elements and their content				

Syntax Rules:

1. C0403 - If PID04 is present, then PID03 is required.
2. R0405 - At least one of PID04 or PID05 is required.
3. C0703 - If PID07 is present, then PID03 is required.
4. C0804 - If PID08 is present, then PID04 is required.
5. C0905 - If PID09 is present, then PID05 is required.

Semantics:

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

Comments:

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

PER Administrative Communications Contact

Pos: 150　　　**Max: 3**
Detail - Optional
Loop: LIN　　**Elements: 2**

User Option (Usage): Used

Purpose: To identify a person or office to whom administrative communications should be directed

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER01	366	**Contact Function Code**	M	ID	2/2	Must use

Description: Code identifying the major duty or responsibility of the person or group named

CodeList Summary (Total Codes: 230, Included: 1)

Code	Name
EX	Expeditor

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER02	93	**Name**	O	AN	1/60	Must use

Description: Free-form name

Syntax Rules:

1. P0304 - If either PER03 or PER04 is present, then the other is required.
2. P0506 - If either PER05 or PER06 is present, then the other is required.
3. P0708 - If either PER07 or PER08 is present, then the other is required.

ATH   Resource Authorization

Pos: 230   Max: 20
Detail - Optional
Loop: LIN   Elements: 3

User Option (Usage): Used

Purpose: To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ATH01	672	**Resource Authorization Code**	M	ID	2/2	Must use

> **Description:** Code identifying the resource which the buyer is authorizing the seller to commit to
>
> **CodeList Summary** (Total Codes: 8, Included: 3)
>
> | Code | Name |
> |------|------|
> | FI | Finished (Labor, Material, and Overhead/Burden) |
> | MT | Material |
> | PQ | Cumulative Quantity Required Prior to First Schedule Period |

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ATH03	380	**Quantity**	X	R	1/15	Must use

> **Description:** Numeric value of quantity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ATH05	373	**Date**	X	DT	8/8	Must use

> **Description:** Date expressed as CCYYMMDD

Syntax Rules:

1. R0203 - At least one of ATH02 or ATH03 is required.
2. C0305 - If ATH03 is present, then ATH05 is required.
3. C0405 - If ATH04 is present, then ATH05 is required.

Semantics:

1. ATH02 is the resource authorization through date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
2. ATH03 is the current cumulative requirements quantity: The cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02).
3. ATH05 is the cumulative start date: The date where the cumulative quantity count starts. This date might be the start date of a contract period, a calendar or fiscal year, or other.

Comments:

1. It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
2. ATH04 is the maximum cumulative requirements quantity: The maximum cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02). This is a high water mark. If the forecast decreases, the current cumulative requirements quantity also decreases, but the maximum cumulative requirements quantity does not decrease.

Loop Forecast Schedule

<div style="border:1px solid">

Pos: 410   **Repeat: >1**

Optional

Loop: FST   Elements: N/A
</div>

User Option (Usage): Must use

Purpose: To specify the forecasted dates and quantities

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
410	FST	Forecast Schedule	O	1		Must use

FST Forecast Schedule

Pos: 410	Max: 1
Detail - Optional	
Loop: FST	**Elements: 4**

User Option (Usage): Must use

Purpose: To specify the forecasted dates and quantities

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FST01	380	**Quantity**	M	R	1/15	Must use

Description: Numeric value of quantity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FST02	680	**Forecast Qualifier**	M	ID	1/1	Must use

Description: Code specifying the sender's confidence level of the forecast data or an action associated with a forecast

CodeList Summary (Total Codes: 21, Included: 3)

Code	Name
A	Immediate
C	Firm
D	Planning

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FST03	681	**Forecast Timing Qualifier**	M	ID	1/1	Must use

Description: Code specifying interval grouping of the forecast

CodeList Summary (Total Codes: 11, Included: 7)

Code	Name
C	Daily
D	Discrete
F	Flexible Interval (from Date X through Date Y)
M	Monthly Bucket (Calendar Months)
W	Weekly Bucket (Monday through Sunday)
X	Weekly Bucket (7 day interval)
Z	Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FST04	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Syntax Rules:

1. P0607 - If either FST06 or FST07 is present, then the other is required.
2. P0809 - If either FST08 or FST09 is present, then the other is required.

Semantics:

1. If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.

Comments:

1. As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.
2. FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in

a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.

Loop Shipped/Received Information

Pos: 470   Repeat: 25

Optional

Loop: SHP   Elements: N/A

User Option (Usage): Must use

Purpose: To specify shipment and/or receipt information

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
470	SHP	Shipped/Received Information	O	1		Must use
480	REF	Reference Identification	O	5		Used

SHP Shipped/Received Information

User Option (Usage): Must use

Purpose: To specify shipment and/or receipt information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SHP01	673	**Quantity Qualifier**	O	ID	2/2	Must use

Description: Code specifying the type of quantity

CodeList Summary (Total Codes: 832, Included: 2)

Code	Name
01	Discrete Quantity
02	Cumulative Quantity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SHP02	380	**Quantity**	X	R	1/15	Must use

Description: Numeric value of quantity

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SHP03	374	**Date/Time Qualifier**	X	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

CodeList Summary (Total Codes: 1112, Included: 2)

Code	Name
050	Received
051	Cumulative Quantity Start

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SHP04	373	**Date**	X	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SHP06	373	**Date**	O	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Syntax Rules:

1. C0102 - If SHP01 is present, then SHP02 is required.
2. L030405 - If SHP03 is present, then at least one of SHP04 or SHP05 is required.
3. C0403 - If SHP04 is present, then SHP03 is required.
4. C0503 - If SHP05 is present, then SHP03 is required.

Semantics:

1. SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
2. SHP06 is the cumulative quantity end date.

Comments:

1. The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.
2. If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

REF   Reference Identification

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 1)

Code	Name
SI	Shipper's Identifying Number for Shipment (SID)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

CTT Transaction Totals

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

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use

Description: Total number of line items in the transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT02	347	**Hash Total**	O	R	1/10	Must use

Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. --------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

Comments:

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

SE Transaction Set Trailer

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

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use

    Description: Total number of segments included in a transaction set including ST and SE segments

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

    Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Comments:

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

GE Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE01	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use

     Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element

GE02	28	**Group Control Number**	M	N0	1/9	Must use

     Description: Assigned number originated and maintained by the sender

Semantics:

1. 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:

1. 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.

IEA Interchange Control Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA01	I16	**Number of Included Functional Groups**	M	N0	1/5	Must use

Description: A count of the number of functional groups included in an interchange

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA02	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender

CooperStandard

856 Ship Notice/Manifest

X12 Vers. 4010: 856 Ship Notice/Manifest

Version: 1.0 Final

Author:	**Adam Tenorio**
Trading Partner:	**CSA Suppliers**
Modified:	**1/18/2017**
Notes:	**EDI.SupplierSupport@cooperstandard.com**

Table of Contents

856 Ship Notice/Manifest

Functional Group=SH

Purpose: Cooper Standard Automotive will leverage the 856 and our standard bar code labels in this P2P initiative and work to improve our PO and Release Order accuracy. By doing this we expect to encounter fewer problems when matching POs to invoices and receipts, ultimately streamlining the Payables process and preparing for a move to eInvoicing. This will allow us to comply with our end customer requirements, as well as ultimately set the stage for larger P2P initiatives.

In recent years, the push for uniformity and cooperation in the North American Automotive Industry has resulted in many different changes in the way business is conducted. The Automotive Industry Action Group (AIAG) in conjunction with many managers, executives, and volunteers representing a wide range of companies in the industry have been instrumental in developing standards to improve the entire business process. Examples relative to bar coding are the "Trading Partner Implementation Label Standard (AIAG B-10)" and the "Bar Code Symbology Standard (AIAG B-1)".

Divisional Purchasing at Cooper-Standard Automotive believe that a uniform Bar Code Standard should be issued to our Suppliers due to the continued utilization of radio frequency equipment in our Receiving departments. This document has been issued to illustrate the steps involved in standardizing the supplier-furnished bar code labels in order to meet the AIAG's bar code labeling standards.

As we refine our P2P processes, we need to develop preferred supplier criteria that allow us to readily meet our customer's electronic transmission requirements. Electronically enabling these transactions helps to put you in a preferred supplier position with Cooper Standard.

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	ISA	Interchange Control Header	M	1			Must use
0200	GS	Functional Group Header	M	1			Must use

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	ST	Transaction Set Header	M	1			Must use
0200	BSN	Beginning Segment for Ship Notice	M	1			Must use
0300	DTM	Date/Time Reference	O	1			Must use
0400	DTM	Date/Time Reference	O	1			Used
LOOP ID - HL					**1**	**C1/0100L**	
0200	HL	Hierarchical Level	M	1		C1/0200	Must use
0300	MEA	Measurements	O	1			Must use
0400	MEA	Measurements	O	1			Used
0500	TD1	Carrier Details (Quantity and Weight)	O	20			Must use
0600	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Must use
0700	TD3	Carrier Details (Equipment)	O	12			Must use
0900	REF	Reference Identification	O	>1			Used
1000	REF	Reference Identification	O	>1			Used
1100	REF	Reference Identification	O	>1			Used
LOOP ID - N1					**200**		
1300	N1	Name	O	1			Must use
1400	N1	Name	O	1			Must use
1500	FOB	F.O.B. Related Instructions	O	1			Used

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL					**200000**	**C2/2000L**	
2100	HL	Hierarchical Level	M	1		C2/2100	Must use
2200	LIN	Item Identification	O	1			Must use
2300	SN1	Item Detail (Shipment)	O	1			Must use
2400	PRF	Purchase Order Reference	O	1			Must use
2500	REF	Reference Identification	O	>1			Used
2600	REF	Reference Identification	O	>1			Used
2700	REF	Reference Identification	O	>1			Used
LOOP ID - CLD					**200**		
3000	CLD	Load Detail	O	1			Must use
3100	REF	Reference Identification	O	200			Must use
3200	REF	Reference Identification	O	>1			Used
LOOP ID - CLD					**200**		
3600	CLD	Load Detail	O	1			Must use
3700	REF	Reference Identification	O	200			Must use
4500	DTM	Date/Time Reference	O	1			Used
4600	DTM	Date/Time Reference	O	1			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - HL					**200000**	**C3/4700L**	
4800	HL	Hierarchical Level	M	1		C3/4800	Must use
4900	LIN	Item Identification	O	1			Must use
5000	SN1	Item Detail (Shipment)	O	1			Must use
0100	CTT	Transaction Totals	O	1		N3/0100	Must use
0200	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	GE	Functional Group Trailer	M	1			Must use
0200	IEA	Interchange Control Trailer	M	1			Must use

Notes:

3/0100   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.

ISA Interchange Control Header

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA01	I01	**Authorization Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Authorization Information

Code	Name
00	No Authorization Information Present (No Meaningful Information in I02)

ISA02	I02	**Authorization Information**	M	AN	10/10	Must use

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)

ISA03	I03	**Security Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Security Information

Code	Name
00	No Security Information Present (No Meaningful Information in I04)

ISA04	I04	**Security Information**	M	AN	10/10	Must use

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)

ISA05	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

Code	Name
ZZ	Mutually Defined

ISA06	I06	**Interchange Sender ID**	M	AN	15/15	Must use

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

ISA07	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

Code	Name
ZZ	Mutually Defined

ISA08	I07	**Interchange Receiver ID**	M	AN	15/15	Must use

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

ISA09	I08	**Interchange Date**	M	DT	6/6	Must use

Description: Date of the interchange

ISA10	I09	**Interchange Time**	M	TM	4/4	Must use

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		Description: Time of the interchange				
ISA11	I10	**Interchange Control Standards Identifier**	M	ID	1/1	Must use

Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer
All valid standard codes are used.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA12	I11	**Interchange Control Version Number**	M	ID	5/5	Must use

Description: Code specifying the version number of the interchange control segments

Code	Name
00401	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA13	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA14	I13	**Acknowledgment Requested**	M	ID	1/1	Must use

Description: Code sent by the sender to request an interchange acknowledgment (TA1)

Code	Name
0	No Acknowledgment Requested

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA15	I14	**Usage Indicator**	M	ID	1/1	Must use

Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information

Code	Name
P	Production Data

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA16	I15	**Component Element Separator**	M		1/1	Must use

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

GS   Functional Group Header

<div style="border:1px solid black">

Pos: 0200   **Max: 1**

Not Defined - Mandatory

Loop: N/A   **Elements: 8**

</div>

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS01	479	**Functional Identifier Code**	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

Code	Name
SH	Ship Notice/Manifest (856)

GS02	142	**Application Sender's Code**	M	AN	2/15	Must use

Description: Code identifying party sending transmission; codes agreed to by trading partners

GS03	124	**Application Receiver's Code**	M	AN	2/15	Must use

Description: Code identifying party receiving transmission; codes agreed to by trading partners

GS04	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

GS05	337	**Time**	M	TM	4/8	Must use

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

GS06	28	**Group Control Number**	M	N0	1/9	Must use

Description: Assigned number originated and maintained by the sender

GS07	455	**Responsible Agency Code**	M	ID	1/2	Must use

Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

Code	Name
X	Accredited Standards Committee X12

GS08	480	**Version / Release / Industry Identifier Code**	M	AN	1/12	Must use

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	Name
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

ST Transaction Set Header

Pos: 0100	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set

Code	Name
856	Ship Notice/Manifest

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

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

BSN   Beginning Segment for Ship Notice

Pos: 0200	**Max: 1**
Heading - Mandatory	
Loop: N/A	**Elements: 4**

User Option (Usage): Must use

Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN01	353	**Transaction Set Purpose Code**	M	ID	2/2	Must use

Description: Code identifying purpose of transaction set

Code	Name
00	Original
01	Cancellation (Future use)
05	Replace (Future use)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN02	396	**Shipment Identification**	M	AN	2/30	Must use

Description: A unique control number assigned by the original shipper to identify a specific shipment

User Note 1:

Unique supplier-assigned number that is not repeated within a one year period when BSN01="00".

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN03	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BSN04	337	**Time**	M	TM	4/8	Must use

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Syntax Rules:

1. C0706 - If BSN07 is present, then BSN06 is required.

Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.
3. BSN06 is limited to shipment related codes.

DTM   Date/Time Reference

<table>
<tr><td>Pos: 0300</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Optional</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 3</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

Code	Name
011	Shipped

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	X	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM03	337	**Time**	X	TM	4/8	Must use

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

DTM   Date/Time Reference

Pos: 0400	Max: 1
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Used

    Description: Code specifying type of date or time, or both date and time

Code	Name
017	Estimated Delivery

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	X	DT	8/8	Used

    Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM03	337	**Time**	X	TM	4/8	Used

    Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

HL   Hierarchical Level

<table>
<tr><td>Pos: 0200</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: HL</td><td>Elements: 3</td></tr>
</table>

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use

Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

User Note 1:

Use "1" for this occurrence of the HL at the shipment level, increment by 1 for each subsequent HL segment within the transaction.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Not used

Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

User Note 1:

Not used at the Shipment Level.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use

Description: Code defining the characteristic of a level in a hierarchical structure

Code	Name
S	Shipment

MEA Measurements

<table>
<tr><td>Pos: 0300</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 4</td></tr>
</table>

User Option (Usage): Must use

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	Must use

Description: Code identifying the broad category to which a measurement applies

Code	Name
PD	Physical Dimensions

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Must use

Description: Code identifying a specific product or process characteristic to which a measurement applies

Code	Name
G	Gross Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA03	739	**Measurement Value**	X	R	1/20	Must use

Description: The value of the measurement

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA04	C001	**Composite Unit of Measure**	X	Comp		Must use

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA04-01	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code	Name
KG	Kilogram
LB	Pound

Syntax Rules:

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

Semantics:

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

MEA Measurements

<table>
<tr><td>Pos: 0400</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 4</td></tr>
</table>

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	Must use

Description: Code identifying the broad category to which a measurement applies

Code	Name
PD	Physical Dimensions

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA02	738	**Measurement Qualifier**	O	ID	1/3	Must use

Description: Code identifying a specific product or process characteristic to which a measurement applies

Code	Name
N	Actual Net Weight

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA03	739	**Measurement Value**	X	R	1/20	Must use

Description: The value of the measurement

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA04	C001	**Composite Unit of Measure**	X	Comp		Must use

Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA04-01	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code	Name
KG	Kilogram
LB	Pound

Syntax Rules:

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

Semantics:

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

TD1 Carrier Details (Quantity and Weight)

Pos: 0500	**Max: 20**
Heading - Optional	
Loop: HL	**Elements: 2**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD101	103	**Packaging Code**	O	AN	3/5	Must use

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

User Note 1:

Use any valid X12 packaging code.

Code	Name
CNT	Container
CTN	Carton
PAL	Pail
PCS	Pieces
PKG	Package
PLT	Pallet
SKD	Skid
TBE	Tube

Code	Name
71	Not Otherwise Specified
90	Standard

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD102	80	**Lading Quantity**	X	N0	1/7	Must use

Description: Number of units (pieces) of the lading commodity

Syntax Rules:

1. C0102 - If TD101 is present, then TD102 is required.
2. C0304 - If TD103 is present, then TD104 is required.
3. C0607 - If TD106 is present, then TD107 is required.
4. P0708 - If either TD107 or TD108 is present, then the other is required.
5. P0910 - If either TD109 or TD110 is present, then the other is required.

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 0600	Max: 12
Heading - Optional	
Loop: HL	Elements: 6

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD501	133	**Routing Sequence Code**	O	ID	1/2	Must use

Description: Code describing the relationship of a carrier to a specific shipment movement

Code	Name
B	Origin/Delivery Carrier (Any Mode)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD502	66	**Identification Code Qualifier**	X	ID	1/2	Must use

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
2	Standard Carrier Alpha Code (SCAC)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD503	67	**Identification Code**	X	AN	2/80	Must use

Description: Code identifying a party or other code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD504	91	**Transportation Method/Type Code**	X	ID	1/2	Must use

Description: Code specifying the method or type of transportation for the shipment

User Note 1:

Any valid X12 code except mutually defined "ZZ".

Code	Name
A	Air
E	Expedited Truck
J	Motor
M	Motor (Common Carrier)
LT	Less Than Trailer Load (LTL)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD507	309	**Location Qualifier**	O	ID	1/2	Used

Description: Code identifying type of location

User Note 1:

If TD504 = 'A', use code value "OR", meaning Origin (Shipping Point).

Code	Name
OR	Origin (Shipping Point)
PP	Pool Point

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD508	310	**Location Identifier**	X	AN	1/30	Used

Description: Code which identifies a specific location

User Note 1:

Give pool code if TD507 is "PP"; give airport code identifier if TD507 is "OR" for an air shipment (i.e. DTW = Detroit Metro Airport)

Syntax Rules:

1. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. C0203 - If TD502 is present, then TD503 is required.
3. C0708 - If TD507 is present, then TD508 is required.
4. C1011 - If TD510 is present, then TD511 is required.
5. C1312 - If TD513 is present, then TD512 is required.
6. C1413 - If TD514 is present, then TD513 is required.
7. C1512 - If TD515 is present, then TD512 is required.

Semantics:

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

TD3 Carrier Details (Equipment)

Pos: 0700	Max: 12
Heading - Optional	
Loop: HL	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD301	40	**Equipment Description Code**	X	ID	2/2	Must use

Description: Code identifying type of equipment used for shipment

User Note 1:

Any valid X12 code except mutually defined.

Code **Name**

TL   Trailer (not otherwise specified)

| TD303 | 207 | **Equipment Number** | X | AN | 1/10 | Must use |

Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)

Syntax Rules:

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

REF   Reference Identification

Pos: 0900	Max: >1
Heading - Optional	
Loop: HL	**Elements: 2**

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
BM	Bill of Lading Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

REF Reference Identification

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
PK	Packing List Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

REF **Reference Identification**

<div>

Pos: 1100   **Max: >1**

Heading - Optional

Loop: HL   **Elements: 2**

</div>

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
AW	Air Waybill Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

N1 **Name**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual

Code	Name
SU	Supplier/Manufacturer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	X	ID	1/2	Must use

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
1	D-U-N-S Number, Dun & Bradstreet
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	X	AN	2/80	Must use

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

N1 **Name**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use

Description: Code identifying an organizational entity, a physical location, property or an individual

Code	Name
ST	Ship To

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	X	ID	1/2	Must use

Description: Code designating the system/method of code structure used for Identification Code (67)

Code	Name
1	D-U-N-S Number, Dun & Bradstreet
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	X	AN	2/80	Must use

Description: Code identifying a party or other code

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. P0304 - If either N103 or N104 is present, then the other is required.

FOB F.O.B. Related Instructions

Pos: 1500	Max: 1
Heading - Optional	
Loop: N1	Elements: 1

User Option (Usage): Used

Purpose: To specify transportation instructions relating to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FOB01	146	**Shipment Method of Payment**	M	ID	2/2	Must use

> **Description:** Code identifying payment terms for transportation charges

Code	Name
CC	Collect
PC	Prepaid but Charged to Customer
PP	Prepaid (by Seller)

Syntax Rules:

1. C0302 - If FOB03 is present, then FOB02 is required.
2. C0405 - If FOB04 is present, then FOB05 is required.
3. C0706 - If FOB07 is present, then FOB06 is required.
4. C0809 - If FOB08 is present, then FOB09 is required.

Semantics:

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.

HL Hierarchical Level

Pos: 2100	Max: 1
Detail - Mandatory	
Loop: HL	Elements: 3

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use

Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use

Description: Code defining the characteristic of a level in a hierarchical structure

Code Name

I   Item

LIN **Item Identification**

<table>
<tr><td>Pos: 2200</td><td>Max: 1</td></tr>
<tr><td colspan="2" align="center">Detail - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 5</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN01	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

User Note 1: If sent in the 830, this will be the line number (99999 format)

LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code **Name**

BP   Buyer's Part Number

LIN03	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service

LIN04	235	**Product/Service ID Qualifier**	X	ID	2/2	Not used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code **Name**

DR   Drawing Revision Number
EC   Engineering Change Level
VP   Vendor's (Seller's) Part Number

LIN05	234	**Product/Service ID**	X	AN	1/48	Not used

Description: Identifying number for a product or service

Syntax Rules:

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

Semantics:

1. LIN01 is the line item identification

SN1 Item Detail (Shipment)

<table>
<tr><td>Pos: 2300</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: HL</td><td>Elements: 3</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN102	382	**Number of Units Shipped**	M	R	1/10	Must use

Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

User Note 1:

This should be the same Unit of Measure provided on the corresponding releasing document.

Use any valid X12 code except mutually defined, "ZZ".

Code	Name
01	Actual Pounds
CA	Case
CT	Carton
EA	Each
IN	Inch

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN104	646	**Quantity Shipped to Date**	O	R	1/15	Must use

Description: Number of units shipped to date

Syntax Rules:

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

Semantics:

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

PRF   Purchase Order Reference

Pos: 2400	**Max: 1**
Detail - Optional	
Loop: HL	**Elements: 1**

User Option (Usage): Must use

Purpose: To provide reference to a specific purchase order

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PRF01	324	**Purchase Order Number**	M	AN	1/22	Must use

Description: Identifying number for Purchase Order assigned by the orderer/purchaser

User Note 1:

Use PO number from releasing document.

Semantics:

1. PRF04 is the date assigned by the purchaser to purchase order.

REF Reference Identification

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
DK	Dock Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

REF Reference Identification

Pos: 2600	Max: >1
Detail - Optional	
Loop: HL	Elements: 2

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
LF	Assembly Line Feed Location

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

REF   Reference Identification

Pos: 2700	**Max: >1**
Detail - Optional	
Loop: HL	**Elements: 2**

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

> **Description:** Code qualifying the Reference Identification

Code	Name
RL	Reserve Assembly Line Feed Location

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

> **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

CLD Load Detail

<table>
<tr><td>Pos: 3000</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: CLD</td><td>Elements: 3</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify the number of material loads shipped

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD01	622	**Number of Loads**	M	N0	1/5	Must use

Description: Number of customer-defined loads shipped by the supplier

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD02	382	**Number of Units Shipped**	M	R	1/10	Must use

Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

User Note 1:

Total quantity per container.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD03	103	**Packaging Code**	O	AN	3/5	Must use

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

User Note 1:

Any valid X12 code except mutually defined, "ZZ".

Code	Name
PLT	Pallet

Code	Name
71	Not Otherwise Specified
90	Standard

Syntax Rules:

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

Semantics:

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

REF   Reference Identification

User Option (Usage): Must use

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
LS	Bar-Coded Serial Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

User Note 1:

The Master Barcode must have a Prefix of 'M' with a size of 19.

The Mixed Master Barcode must have a Prefix of 'G' with a size of 19.

The format must be SSSSSSCCYY123456789

S=Supplier Id (6)

If your supplier id is numeric, zero fill

If your supplier id is alphabetic and >6, use the last 6 characters

CCYY=Century and Year (4)

123456789-Unique Serial Number (9 digits), zero fill

Syntax Rules:

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

Semantics:

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

REF Reference Identification

			Pos: 3200	Max: >1
			Detail - Optional	
			Loop: CLD	**Elements: 2**

User Option (Usage): Used

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
LT	Lot Number

REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

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

Semantics:

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

CLD Load Detail

<table>
<tr><td>Pos: 3600</td><td>Max: 1</td></tr>
<tr><td colspan="2">Detail - Optional</td></tr>
<tr><td>Loop: CLD</td><td>Elements: 3</td></tr>
</table>

User Option (Usage): Must use

Purpose: To specify the number of material loads shipped

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD01	622	**Number of Loads**	M	N0	1/5	Must use

Description: Number of customer-defined loads shipped by the supplier

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD02	382	**Number of Units Shipped**	M	R	1/10	Must use

Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

User Note 1:

Total quantity per container.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CLD03	103	**Packaging Code**	O	AN	3/5	Must use

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

User Note 1:

Any valid X12 code except mutually defined, "ZZ".

Code	Name
CTN	Carton
PCS	Pieces

Code	Name
71	Not Otherwise Specified
90	Standard

Syntax Rules:

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

Semantics:

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

REF   Reference Identification

<div style="float:right; border:1px solid black;">

Pos: 3700   **Max: 200**
Detail - Optional
Loop: CLD   **Elements: 2**

</div>

User Option (Usage): Must use

Purpose: To specify identifying information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code	Name
LS	Bar-Coded Serial Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	X	AN	1/30	Must use

Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

User Note 1:

The Serial Barcode must have a Prefix of 'S' with a size of 19.

The format must be SSSSSSCCYY123456789

S=Supplier Id (6)

  If your supplier id is numeric, zero fill

  If your supplier id is alphabetic and >6, use the last 6 characters

CCYY=Century and Year (4)

123456789-Unique Serial Number (9 digits), zero fill

Syntax Rules:

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

Semantics:

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

DTM Date/Time Reference

Pos: 4500	Max: 1
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Used

Description: Code specifying type of date or time, or both date and time

Code	Name
094	Manufacture

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	X	DT	8/8	Used

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM03	337	**Time**	X	TM	4/8	Used

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

DTM Date/Time Reference

Pos: 4600	Max: 1
Detail - Optional	
Loop: HL	Elements: 3

User Option (Usage): Used

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Used

Description: Code specifying type of date or time, or both date and time

Code	Name
036	Expiration

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	X	DT	8/8	Used

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM03	337	**Time**	X	TM	4/8	Used

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

HL Hierarchical Level

Pos: 4800	**Max: 1**
Summary - Mandatory	
Loop: HL	**Elements: 3**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL01	628	**Hierarchical ID Number**	M	AN	1/12	Must use

Description: A unique number assigned by the sender to identify a particular data segment in a hierarchical structure

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL02	734	**Hierarchical Parent ID Number**	O	AN	1/12	Used

Description: Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to

User Note 1:

If you are sending in a HL Level for Returnable Containers then this HL02 must match the HL01 from which was in the HL for the Buyers Part Number.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
HL03	735	**Hierarchical Level Code**	M	ID	1/2	Must use

Description: Code defining the characteristic of a level in a hierarchical structure

Code	Name
I	Item

LIN **Item Identification**

User Option (Usage): Must use

Purpose: To specify basic item identification data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN02	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

Code	Name
RC	Returnable Container Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
LIN03	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service

User Note 1:

If the pallet/container is in a Returnable Container it must be returned in the LIN03 element.

Syntax Rules:

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

Semantics:

1. LIN01 is the line item identification

SN1 Item Detail (Shipment)

Pos: 5000	**Max: 1**
Summary - Optional	
Loop: HL	**Elements: 3**

User Option (Usage): Must use

Purpose: To specify line-item detail relative to shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN102	382	**Number of Units Shipped**	M	R	1/10	Must use

Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set

User Note 1:

This is the Number of Returnable Containers.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

User Note 1:

This should be the same Unit of Measure provided on the corresponding releasing document.

Use any valid X12 code except mutually defined, "ZZ".

Code	Name
BX	Box
CT	Carton
EA	Each

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SN104	646	**Quantity Shipped to Date**	O	R	1/15	Must use

Description: Number of units shipped to date

Syntax Rules:

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

Semantics:

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

CTT   Transaction Totals

<table>
<tr><td>Pos: 0100</td><td>Max: 1</td></tr>
<tr><td colspan="2">Summary - Optional</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 2</td></tr>
</table>

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use

Description: Total number of line items in the transaction set

User Note 1:

Total number of HL segments.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT02	347	**Hash Total**	O	R	1/10	Must use

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.

User Note 1:

Hash total of quantity shipped (SN102).

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

SE   Transaction Set Trailer

Pos: 0200	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use

Description: Total number of segments included in a transaction set including ST and SE segments

SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

GE Functional Group Trailer

Pos: 0100	Max: 1
Not Defined - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE01	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use

Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE02	28	**Group Control Number**	M	N0	1/9	Must use

Description: Assigned number originated and maintained by the sender

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

IEA Interchange Control Trailer

Pos: 0200	Max: 1
Not Defined - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA01	I16	**Number of Included Functional Groups**	M	N0	1/5	Must use

Description: A count of the number of functional groups included in an interchange

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA02	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender

CooperStandard

997 Functional Acknowledgment

X12 Vers. 4010: 997 Functional Acknowledgment

Version: 1.0 Final

Author: Adam Tenorio

Trading Partner: CSA Suppliers

Modified: 10/14/2011

Notes: 207 South West Street
Auburn, IN 46706

adam.tenorio@cooperstandard.com
Phone: 440.263.5616
Fax: 260.927.3203

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997 Functional Acknowledgment

Functional Group=FA

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1		N1/010	Must use
020	AK1	Functional Group Response Header	M	1		N1/020	Must use
LOOP ID - AK2					**999999**	**N1/030L**	
030	AK2	Transaction Set Response Header	O	1		N1/030	Must use
060	AK5	Transaction Set Response Trailer	M	1			Must use
070	AK9	Functional Group Response Trailer	M	1			Must use
080	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

Notes:

1/010   These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

1/020   AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

1/030L AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

1/030   AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

ISA   Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	**Elements: 16**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA01	I01	**Authorization Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Authorization Information

CodeList Summary (Total Codes: 7, Included: 1)

Code	Name
00	No Authorization Information Present (No Meaningful Information in I02)

ISA02	I02	**Authorization Information**	M	AN	10/10	Must use

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)

ISA03	I03	**Security Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Security Information

CodeList Summary (Total Codes: 2, Included: 1)

Code	Name
00	No Security Information Present (No Meaningful Information in I04)

ISA04	I04	**Security Information**	M	AN	10/10	Must use

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)

ISA05	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

CodeList Summary (Total Codes: 38, Included: 1)

Code	Name
ZZ	Mutually Defined

ISA06	I06	**Interchange Sender ID**	M	AN	15/15	Must use

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

ISA07	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

CodeList Summary (Total Codes: 38, Included: 1)

Code Name
ZZ   Mutually Defined

| ISA08 | I07 | **Interchange Receiver ID** | M | AN | 15/15 | Must use |

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

| ISA09 | I08 | **Interchange Date** | M | DT | 6/6 | Must use |

Description: Date of the interchange

| ISA10 | I09 | **Interchange Time** | M | TM | 4/4 | Must use |

Description: Time of the interchange

| ISA11 | I10 | **Interchange Control Standards Identifier** | M | ID | 1/1 | Must use |

Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer
All valid standard codes are used. (Total Codes: 1)

| ISA12 | I11 | **Interchange Control Version Number** | M | ID | 5/5 | Must use |

Description: Code specifying the version number of the interchange control segments

CodeList Summary (Total Codes: 14, Included: 1)

Code Name
00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997

| ISA13 | I12 | **Interchange Control Number** | M | N0 | 9/9 | Must use |

Description: A control number assigned by the interchange sender

| ISA14 | I13 | **Acknowledgment Requested** | M | ID | 1/1 | Must use |

Description: Code sent by the sender to request an interchange acknowledgment (TA1)

CodeList Summary (Total Codes: 2, Included: 1)

Code Name
0   No Acknowledgment Requested

| ISA15 | I14 | **Usage Indicator** | M | ID | 1/1 | Must use |

Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information

CodeList Summary (Total Codes: 3, Included: 1)

Code Name
P   Production Data

| ISA16 | I15 | **Component Element Separator** | M | | 1/1 | Must use |

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

GS Functional Group Header

Pos:	**Max: 1**
Not Defined - Mandatory	
Loop: N/A	**Elements: 8**

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS01	479	**Functional Identifier Code**	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

CodeList Summary (Total Codes: 240, Included: 1)

Code Name

FA   Functional Acknowledgment (997)

GS02	142	**Application Sender's Code**	M	AN	2/15	Must use

Description: Code identifying party sending transmission; codes agreed to by trading partners

GS03	124	**Application Receiver's Code**	M	AN	2/15	Must use

Description: Code identifying party receiving transmission; codes agreed to by trading partners

GS04	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

GS05	337	**Time**	M	TM	4/8	Must use

Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

GS06	28	**Group Control Number**	M	N0	1/9	Must use

Description: Assigned number originated and maintained by the sender

GS07	455	**Responsible Agency Code**	M	ID	1/2	Must use

Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

CodeList Summary (Total Codes: 2, Included: 1)

Code Name

X   Accredited Standards Committee X12

GS08	480	**Version / Release / Industry Identifier Code**	M	AN	1/12	Must use

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage

CodeList Summary (Total Codes: 39, Included: 1)

Code	Name
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. 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:

1. 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.

ST Transaction Set Header

<div>

Pos: 010   Max: 1

Heading - Mandatory

Loop: N/A   Elements: 2

</div>

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code	Name
997	Functional Acknowledgment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

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

AK1 Functional Group Response Header

Pos: 020   Max: 1

Heading - Mandatory

Loop: N/A   Elements: 2

User Option (Usage): Must use

Purpose: To start acknowledgment of a functional group

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK101	479	**Functional Identifier Code**	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

CodeList Summary (Total Codes: 234, Included: 1)

Code	Name
PS	Planning Schedule with Release Capability (830)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK102	28	**Group Control Number**	M	N0	1/9	Must use

Description: Assigned number originated and maintained by the sender

Semantics:

1. AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.
2. AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.

Loop Transaction Set Response Header

Pos: 030	Repeat: 999999
Optional	
Loop: AK2	**Elements: N/A**

User Option (Usage): Must use

Purpose: To start acknowledgment of a single transaction set

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
030	AK2	Transaction Set Response Header	O	1		Must use
060	AK5	Transaction Set Response Trailer	M	1		Must use

AK2 Transaction Set Response Header

User Option (Usage): Must use

Purpose: To start acknowledgment of a single transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK201	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code	Name
830	Planning Schedule with Release Capability

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK202	329	**Transaction Set Control Number**	M	AN	4/9	Must use

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

1. AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
2. AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

AK5 Transaction Set Response Trailer

Pos: 060	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 1

User Option (Usage): Must use

Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK501	717	**Transaction Set Acknowledgment Code**	M	ID	1/1	Must use

Description: Code indicating accept or reject condition based on the syntax editing of the transaction set

CodeList Summary (Total Codes: 6, Included: 1)

Code	Name
A	Accepted

AK9 Functional Group Response Trailer

Pos: 070   Max: 1
Heading - Mandatory
Loop: N/A   Elements: 4

User Option (Usage): Must use

Purpose: To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK901	715	**Functional Group Acknowledge Code**	M	ID	1/1	Must use

Description: Code indicating accept or reject condition based on the syntax editing of the functional group

CodeList Summary (Total Codes: 7, Included: 1)

Code	Name
A	Accepted

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK902	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use

Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK903	123	**Number of Received Transaction Sets**	M	N0	1/6	Must use

Description: Number of Transaction Sets received

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK904	2	**Number of Accepted Transaction Sets**	M	N0	1/6	Must use

Description: Number of accepted Transaction Sets in a Functional Group

Comments:

1. If AK901 contains the value "A" or "E", then the transmitted functional group is accepted.

SE Transaction Set Trailer

Pos: 080   Max: 1
Heading - Mandatory
Loop: N/A   **Elements: 2**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use

          Description: Total number of segments included in a transaction set including ST and SE segments

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

          Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Comments:

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

GE   Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE01	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use

> **Description:** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE02	28	**Group Control Number**	M	N0	1/9	Must use

> **Description:** Assigned number originated and maintained by the sender

Semantics:

1. 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:

1. 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.

IEA Interchange Control Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA01	I16	**Number of Included Functional Groups**	M	N0	1/5	Must use

Description: A count of the number of functional groups included in an interchange

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA02	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender