

810 Invoice

X12/V4010: 810 Invoice

Version: 1.4 Final

Author:	iTradeNetwork, Inc
Company:	iTradeNetwork, Inc
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Trading Partner:	
Notes:	This version includes updated ISA/GS ID info, update to IT105 to mandatory, notes added to IT3 for catch weight items, and notes added to SAC segments.

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810 Invoice

Functional Group=IN

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) 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 and industry practice relative to the billing for goods and services provided.

Not Defined:

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

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BIG	Beginning Segment for Invoice	M	1			Must use
030	NTE	Note/Special Instruction	O	30			Recommended
050	REF	Reference Identification	O	12			Recommended
LOOP ID - N1					<u>9</u>		
070	N1	Name	O	1			Must use
090	N3	Address Information	O	2			Recommended
100	N4	Geographic Location	O	1			Recommended
120	PER	Administrative Communications Contact	O	3			Used
130	ITD	Terms of Sale/Deferred Terms of Sale	O	1			Must use
140	DTM	Date/Time Reference	O	10			Must use
150	FOB	F.O.B. Related Instructions	O	1			Recommended

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
LOOP ID - IT1					<u>200000</u>		
010	IT1	Baseline Item Data (Invoice)	O	1			Must use
030	IT3	Additional Item Data	O	5			Recommended
059	MEA	Measurements	O	40			Recommended
LOOP ID - PID					<u>1000</u>		
060	PID	Product/Item Description	O	1			Recommended
110	ITD	Terms of Sale/Deferred Terms of Sale	O	2			Recommended
120	REF	Reference Identification	O	30			Recommended
LOOP ID - SAC					<u>25</u>		
180	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Recommended

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	TDS	Total Monetary Value Summary	M	1			Must use
030	CAD	Carrier Detail	O	1			Recommended
LOOP ID - SAC					25		
040	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Recommended
LOOP ID - ISS					≥1		
060	ISS	Invoice Shipment Summary	O	1			Recommended
070	CTT	Transaction Totals	O	1		N3/070	Must use
080	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

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

Notes:

3/070 Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 14

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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use
Description: Code to identify the type of information in the Authorization Information						
Code List Summary (Total Codes: 7, Included: 1)						
Code Name						
00 No Authorization Information Present (No Meaningful Information in I02)						
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use
Description: Code to identify the type of information in the Security Information						
Code List Summary (Total Codes: 2, Included: 1)						
Code Name						
00 No Security Information Present (No Meaningful Information in I04)						
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						
All valid standard codes are used. (Total Codes: 38)						
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						
User Note 1: ISA07 Qualifier = '08' for testing, '01' for production.						
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						
User Note 1: iTN's Production ID - 109563165						
iTN's Test ID - 109563165						
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	M	ID	1/1	Must use

<u>Ref</u>	<u>Id</u>	<u>Element Name</u> <u>Identifier</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer				
ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use
		Description: Code specifying the version number of the interchange control segments				
		Code List 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)				
		Code List 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				
		Code List Summary (Total Codes: 3, Included: 2)				
		Code Name				
		P Production Data				
		T Test 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				
		User Note 1: <i>iTradeNetwork uses the '@' symbol on its outbound transactions.</i>				

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:

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

Description: Code identifying a group of application related transaction sets

Code List Summary (Total Codes: 240, Included: 1)

Code Name

IN Invoice Information (810,819)

GS02	142	Application Sender's Code	M	AN	2/15	Must use
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Description: Code identifying party sending transmission; codes agreed to by trading partners

GS03	124	Application Receiver's Code	M	AN	2/15	Must use
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Description: Code identifying party receiving transmission; codes agreed to by trading partners

User Note 1: *iTN's Production ID - 109563165*

iTN's Test ID - 109563165

GS04	373	Date	M	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

GS05	337	Time	M	TM	4/8	Must use
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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
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Description: Assigned number originated and maintained by the sender

GS07	455	Responsible Agency Code	M	ID	1/2	Must use
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Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

Code List 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
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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,

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		then other formats are allowed				
Code List 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

Pos: 010	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:

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

Description: Code uniquely identifying a Transaction Set

Code List Summary (Total Codes: 298, Included: 1)

Code Name

810 Invoice

ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
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Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

User Note 1: *The Transaction Set Control Number*

(ST-02) is assigned by the Supplier.

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).

BIG Beginning Segment for Invoice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 5

User Option (Usage): Must use

Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BIG01	373	Date	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD				
BIG02	76	Invoice Number	M	AN	1/22	Must use
		Description: Identifying number assigned by issuer				
BIG03	373	Date	O	DT	8/8	Recommended
		Description: Date expressed as CCYYMMDD				
BIG04	324	Purchase Order Number	O	AN	1/22	Recommended
		Description: Identifying number for Purchase Order assigned by the orderer/purchaser				
BIG08	353	Transaction Set Purpose Code	O	ID	2/2	Recommended

Description: Code identifying purpose of transaction set

User Note 1: *iTrade supports Replacement and Supplemental invoices.*

Use code '02' for BIG08 to indicate a supplemental invoice.

Use code '05' for BIG08 to indicate a replacement.

Code List Summary (Total Codes: 65, Included: 3)

<u>Code</u>	<u>Name</u>
00	Original
02	Add
05	Replace

Semantics:

1. BIG01 is the invoice issue date.
2. BIG03 is the date assigned by the purchaser to purchase order.
3. BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

Comments:

1. BIG07 is used only to further define the type of invoice when needed.

NTE Note/Special Instruction

Pos: 030	Max: 30
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Recommended

Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
NTE01	363	Note Reference Code	O	ID	3/3	Recommended
		Description: Code identifying the functional area or purpose for which the note applies				
NTE02	352	Description	M	AN	1/80	Must use
		Description: A free-form description to clarify the related data elements and their content				

Comments:

1. The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

REF Reference Identification

Pos: 050	Max: 12
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Recommended

Purpose: To specify identifying information

Element Summary:

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

Description: Code qualifying the Reference Identification

Code List Summary (Total Codes: 1503, Included: 8)

Code Name

21	American Gas Association Equation Number
2I	Tracking Number
BM	Bill of Lading Number
CN	Carrier's Reference Number (PRO/Invoice)
CR	Customer Reference Number
FI	File Identifier
IL	Internal Order Number

User Note 1:

Mandatory

VN	Vendor Order Number
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User Note 1:

Mandatory

REF02	127	Reference Identification	X	AN	1/30	Recommended
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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.

Loop Name

Pos: 070	Repeat: 9
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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
070	N1	Name	O	1		Must use
090	N3	Address Information	O	2		Recommended
100	N4	Geographic Location	O	1		Recommended
120	PER	Administrative Communications Contact	O	3		Used

N1 Name

Pos: 070	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

Code List Summary (Total Codes: 1312, Included: 9)

Code Name

- BO Broker or Sales Office
- BT Bill-to-Party
- BY Buying Party (Purchaser)

User Note 1:

Mandatory

- CA Carrier

User Note 1:

The Carrier Phone Number is entered in the PER segment.

- PW Pick Up Address
- RE Party to receive commercial invoice remittance

User Note 1:

Mandatory

- SF Ship From
- ST Ship To
- VN Vendor

User Note 1:

Mandatory

N102	93	Name	X	AN	1/60	Recommended
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Description: Free-form name

N103	66	Identification Code Qualifier	X	ID	1/2	Recommended
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Description: Code designating the system/method of code structure used for Identification Code (67)

Code List Summary (Total Codes: 215, Included: 5)

Code Name

- 1 D-U-N-S Number, Dun & Bradstreet
- 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix
- 54 Warehouse
- 91 Assigned by Seller or Seller's Agent
- 92 Assigned by Buyer or Buyer's Agent

N104	67	Identification Code	X	AN	2/80	Recommended
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<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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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.

N3 Address Information

Pos: 090	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Recommended

Purpose: To specify the location of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	M	AN	1/55	Must use
		Description: Address information				
N302	166	Address Information	O	AN	1/55	Recommended
		Description: Address information				

N4 Geographic Location

Pos: 100	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Recommended

Purpose: To specify the geographic place of the named party

Element Summary:

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

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.

PER Administrative Communications Contact

Pos: 120	Max: 3
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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

Code List Summary (Total Codes: 230, Included: 1)

Code Name

CN General Contact

PER02	93	Name	O	AN	1/60	Used
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Description: Free-form name

PER03	365	Communication Number Qualifier	X	ID	2/2	Used
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Description: Code identifying the type of communication number

Code List Summary (Total Codes: 40, Included: 1)

Code Name

TE Telephone

PER04	364	Communication Number	X	AN	1/80	Used
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Description: Complete communications number including country or area code when applicable

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.

ITD Terms of Sale/Deferred Terms of Sale

Pos: 130	Max: 1
Heading - Optional	
Loop: N/A	Elements: 9

User Option (Usage): Must use

Purpose: To specify terms of sale

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ITD01	336	Terms Type Code	O	ID	2/2	Recommended
		Description: Code identifying type of payment terms				
		Code List Summary (Total Codes: 65, Included: 1)				
		<u>Code</u>	<u>Name</u>			
		01	Basic			
ITD02	333	Terms Basis Date Code	O	ID	1/2	Recommended
		Description: Code identifying the beginning of the terms period				
		Code List Summary (Total Codes: 17, Included: 1)				
		<u>Code</u>	<u>Name</u>			
		3	Invoice Date			
ITD03	338	Terms Discount Percent	O	R	1/6	Recommended
		Description: Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date				
ITD04	370	Terms Discount Due Date	X	DT	8/8	Recommended
		Description: Date payment is due if discount is to be earned expressed in format CCYYMMDD				
ITD05	351	Terms Discount Days Due	X	N0	1/3	Recommended
		Description: Number of days in the terms discount period by which payment is due if terms discount is earned				
ITD06	446	Terms Net Due Date	O	DT	8/8	Must use
		Description: Date when total invoice amount becomes due expressed in format CCYYMMDD				
ITD07	386	Terms Net Days	O	N0	1/3	Recommended
		Description: Number of days until total invoice amount is due (discount not applicable)				
ITD08	362	Terms Discount Amount	O	N2	1/10	Recommended
		Description: Total amount of terms discount				
ITD12	352	Description	O	AN	1/80	Recommended
		Description: A free-form description to clarify the related data elements and their content				

Syntax Rules:

1. L03040513 - If ITD03 is present, then at least one of ITD04, ITD05 or ITD13 is required.
2. L08040513 - If ITD08 is present, then at least one of ITD04, ITD05 or ITD13 is required.

Comments:

1. If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

DTM Date/Time Reference

Pos: 140	Max: 10
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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 List Summary (Total Codes: 1112, Included: 2)

Code Name

- 011 Shipped
- 118 Requested Pick-up

DTM02	373	Date	X	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

FOB F.O.B. Related Instructions

Pos: 150	Max: 1
Heading - Optional	
Loop: N/A	Elements: 1

User Option (Usage): Recommended

Purpose: To specify transportation instructions relating to shipment

Element Summary:

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

Description: Code identifying payment terms for transportation charges

Code List Summary (Total Codes: 28, Included: 8)

Code Name

BP	Paid by Buyer
CC	Collect
PB	Customer Pick-up/Backhaul
PC	Prepaid but Charged to Customer
PE	Prepaid and Summary Bill
PP	Prepaid (by Seller)
PU	Pickup
TP	Third Party Pay

Semantics:

1. FOB01 indicates which party will pay the carrier.

Loop Baseline Item Data (Invoice)

Pos: 010	Repeat: 200000
Optional	
Loop: IT1	Elements: N/A

User Option (Usage): Must use

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	IT1	Baseline Item Data (Invoice)	O	1		Must use
030	IT3	Additional Item Data	O	5		Recommended
059	MEA	Measurements	O	40		Recommended
060		Loop PID	O		1000	Recommended
110	ITD	Terms of Sale/Deferred Terms of Sale	O	2		Recommended
120	REF	Reference Identification	O	30		Recommended
180		Loop SAC	O		25	Recommended

IT1 Baseline Item Data (Invoice)

Pos: 010 Max: 1
 Detail - Optional
 Loop: IT1 Elements: 11

User Option (Usage): Must use

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IT101	350	Assigned Identification	O	AN	1/20	Recommended

Description: Alphanumeric characters assigned for differentiation within a transaction set

IT102	358	Quantity Invoiced	X	R	1/10	Must use
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Description: Number of units invoiced (supplier units)

IT103	355	Unit or Basis for Measurement Code	X	ID	2/2	Must use
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Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code List Summary (Total Codes: 794, Included: 16)

Code Name

- BG Bag
- BX Box
- CA Case
- CN Can
- CS Cassette
- DR Drum
- EA Each
- GA Gallon
- KG Kilogram
- LB Pound
- OZ Ounce - Av
- PA Pail
- PC Piece
- PK Package
- TE Tote
- UN Unit

IT104	212	Unit Price	X	R	1/17	Must use
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Description: Price per unit of product, service, commodity, etc.

IT105	639	Basis of Unit Price Code	O	ID	2/2	Must use
-------	-----	---------------------------------	---	----	-----	----------

Description: Code identifying the type of unit price for an item

Code List Summary (Total Codes: 91, Included: 4)

Code Name

- PE Price per Each
- PO Price per Ounce
- PP Price per Pound
- TE Contract Price per Each

IT106	235	Product/Service ID Qualifier	X	ID	2/2	Recommended
Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)						
Code List Summary (Total Codes: 477, Included: 7)						
<u>Code</u> <u>Name</u>						
MG Manufacturer's Part Number						
PI Purchaser's Item Code						
UA U.P.C./EAN Case Code (2-5-5)						
UK U.P.C./EAN Shipping Container Code (1-2-5-5-1)						
UP U.P.C. Consumer Package Code (1-5-5-1)						
VN Vendor's (Seller's) Item Number						
VP Vendor's (Seller's) Part Number						
IT107	234	Product/Service ID	X	AN	1/48	Recommended
Description: Identifying number for a product or service						
IT108	235	Product/Service ID Qualifier	X	ID	2/2	Recommended
Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)						
Code List Summary (Total Codes: 477, Included: 7)						
<u>Code</u> <u>Name</u>						
MG Manufacturer's Part Number						
PI Purchaser's Item Code						
UA U.P.C./EAN Case Code (2-5-5)						
UK U.P.C./EAN Shipping Container Code (1-2-5-5-1)						
UP U.P.C. Consumer Package Code (1-5-5-1)						
VN Vendor's (Seller's) Item Number						
VP Vendor's (Seller's) Part Number						
IT109	234	Product/Service ID	X	AN	1/48	Recommended
Description: Identifying number for a product or service						
IT110	235	Product/Service ID Qualifier	X	ID	2/2	Recommended
Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)						
Code List Summary (Total Codes: 477, Included: 7)						
<u>Code</u> <u>Name</u>						
MG Manufacturer's Part Number						
PI Purchaser's Item Code						
UA U.P.C./EAN Case Code (2-5-5)						
UK U.P.C./EAN Shipping Container Code (1-2-5-5-1)						
UP U.P.C. Consumer Package Code (1-5-5-1)						
VN Vendor's (Seller's) Item Number						
VP Vendor's (Seller's) Part Number						
IT111	234	Product/Service ID	X	AN	1/48	Recommended
Description: Identifying number for a product or service						

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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Syntax Rules:

1. P020304 - If either IT102, IT103 or IT104 are present, then the others are required.
2. P0607 - If either IT106 or IT107 is present, then the other is required.
3. P0809 - If either IT108 or IT109 is present, then the other is required.
4. P1011 - If either IT110 or IT111 is present, then the other is required.

Semantics:

1. IT101 is the purchase order line item identification.

Comments:

1. Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
2. IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

IT3 Additional Item Data

Pos: 030	Max: 5
Detail - Optional	
Loop: IT1	Elements: 2

User Option (Usage): Recommended

Purpose: To specify additional item details relating to variations between ordered and shipped quantities, or to specify alternate units of measures and quantities

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IT301	382	Number of Units Shipped	X	R	1/10	Recommended

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

IT302	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
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Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code List Summary (Total Codes: 794, Included: 15)

Code Name

BG	Bag
BX	Box
CA	Case
CN	Can
CS	Cassette
DR	Drum
EA	Each
GA	Gallon
LB	Pound
OZ	Ounce - Av
PA	Pail
PC	Piece
PK	Package
TE	Tote
UN	Unit

Syntax Rules:

1. P0102 - If either IT301 or IT302 is present, then the other is required.

MEA Measurements

Pos: 059	Max: 40
Detail - Optional	
Loop: IT1	Elements: 4

User Option (Usage): Recommended

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
MEA01	737	Measurement Reference ID Code	O	ID	2/2	Recommended

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

Code List Summary (Total Codes: 152, Included: 1)

Code Name

WT Weights

MEA02	738	Measurement Qualifier	O	ID	1/3	Must use
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Description: Code identifying a specific product or process characteristic to which a measurement applies

Code List Summary (Total Codes: 920, Included: 4)

Code Name

B Billed Weight

G Gross Weight

T Tare Weight

WT Weight

MEA03	739	Measurement Value	X	R	1/20	Must use
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Description: The value of the measurement

MEA04	C001	Composite Unit of Measure	M	Comp		Must use
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Description: To identify a composite unit of measure(See Figures Appendix for examples of use)

MEA04-01	355	Unit or Basis for Measurement Code	M	ID	2/2	Must use
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Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

Code List Summary (Total Codes: 794, Included: 1)

Code Name

LB Pound

Semantics:

1. MEA04 defines the unit of measure for MEA03

Comments:

- 1.

Loop Product/Item Description

Pos: 060	Repeat: 1000
Optional	
Loop: PID	Elements: N/A

User Option (Usage): Recommended

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
060	PID	Product/Item Description	O	1		Recommended

PID Product/Item Description

Pos: 060	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

User Option (Usage): Recommended

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type	M	ID	1/1	Must use
Description: Code indicating the format of a description						
Code List Summary (Total Codes: 3, Included: 1)						
Code Name						
F Free-form						
PID05	352	Description	X	AN	1/80	Recommended
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.

Comments:

1. If PID01 equals "F", then PID05 is used.

ITD Terms of Sale/Deferred Terms of Sale

Pos: 110	Max: 2
Detail - Optional	
Loop: IT1	Elements: 2

User Option (Usage): Recommended

Purpose: To specify terms of sale

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ITD03	338	Terms Discount Percent	O	R	1/6	Used

Description: Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date

ITD05	351	Terms Discount Days Due	X	N0	1/3	Used
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Description: Number of days in the terms discount period by which payment is due if terms discount is earned

REF Reference Identification

Pos: 120	Max: 30
Detail - Optional	
Loop: IT1	Elements: 3

User Option (Usage): Recommended

Purpose: To specify identifying information

Element Summary:

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

Description: Code qualifying the Reference Identification

Code List Summary (Total Codes: 1503, Included: 6)

Code Name

- 2I Tracking Number
- BM Bill of Lading Number
- CR Customer Reference Number
- FI File Identifier
- L1 Letters or Notes

User Note 1:

The Notes (maximum 80 characters) are sent in REF03. 30 occurrences of REF L1 are supported.

- PZ Product Change Notice Number

User Note 1:

*PZ (Product Change Notice) Qualifier to be used to indicate if Product has been BioEngineered.
Expected Values in REF02:
TRUE
FALSE
NOT_APPLICABLE*

REF02	127	Reference Identification	X	AN	1/30	Used
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Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

REF03	352	Description	X	AN	1/80	Dependent
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Description: A free-form description to clarify the related data elements and their content

User Note 1: *only for REF01 = L1 (Notes)*

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.

Loop Service, Promotion, Allowance, or Charge Information

Pos: 180	Repeat: 25
Optional	
Loop: SAC	Elements: N/A

User Option (Usage): Recommended

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
180	SAC	Service, Promotion, Allowance, or Charge Information	O	1		Recommended

SAC Service, Promotion, Allowance, or Charge Information

Pos: 180	Max: 1
Detail - Optional	
Loop: SAC	Elements: 15

User Option (Usage): Recommended

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator	M	ID	1/1	Must use
Description: Code which indicates an allowance or charge for the service specified						
Code List Summary (Total Codes: 7, Included: 2)						
<u>Code</u> <u>Name</u>						
A Allowance						
C Charge						
SAC02	1300	Service, Promotion, Allowance, or Charge Code	X	ID	4/4	Must use
Description: Code identifying the service, promotion, allowance, or charge						
User Note 1: Accepted codes are dependant upon the trading relationship. Please confirm code acceptance with trading partner.						
SAC03	559	Agency Qualifier Code	X	ID	2/2	Recommended
Description: Code identifying the agency assigning the code values						
SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	X	AN	1/10	Recommended
Description: Agency maintained code identifying the service, promotion, allowance, or charge						
SAC05	610	Amount	O	N2	1/15	Recommended
Description: Monetary amount						
SAC06	378	Allowance/Charge Percent Qualifier	X	ID	1/1	Recommended
Description: Code indicating on what basis allowance or charge percent is calculated						
SAC07	332	Percent	X	R	1/6	Recommended
Description: Percent expressed as a percent						
SAC08	118	Rate	O	R	1/9	Recommended
Description: Rate expressed in the standard monetary denomination for the currency specified						
SAC09	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken						
SAC10	380	Quantity	X	R	1/15	Recommended

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Numeric value of quantity				
SAC11	380	Quantity	O	R	1/15	Recommended
		Description: Numeric value of quantity				
SAC12	331	Allowance or Charge Method of Handling Code	O	ID	2/2	Recommended
		Description: Code indicating method of handling for an allowance or charge				
SAC13	127	Reference Identification	X	AN	1/30	Recommended
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
SAC14	770	Option Number	O	AN	1/20	Recommended
		Description: A unique number identifying available promotion or allowance options when more than one is offered				
SAC15	352	Description	X	AN	1/80	Recommended
		Description: A free-form description to clarify the related data elements and their content				

Syntax Rules:

1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 is required.

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" -

Dollars in SAC09.

TDS Total Monetary Value Summary

Pos: 010	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 4

User Option (Usage): Must use

Purpose: To specify the total invoice discounts and amounts

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TDS01	610	Amount	M	N2	1/15	Must use
		Description: Monetary amount				
TDS02	610	Amount	O	N2	1/15	Used
		Description: Monetary amount				
TDS03	610	Amount	O	N2	1/15	Used
		Description: Monetary amount				
TDS04	610	Amount	O	N2	1/15	Used
		Description: Monetary amount				

Semantics:

1. TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
2. TDS02 indicates the amount upon which the terms discount amount is calculated.
3. TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
4. TDS04 indicates the total amount of terms discount.

Comments:

1. TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

CAD Carrier Detail

Pos: 030	Max: 1
Summary - Optional	
Loop: N/A	Elements: 5

User Option (Usage): Recommended

Purpose: To specify transportation details for the transaction

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CAD01	91	Transportation Method/Type Code	O	ID	1/2	Recommended
		Description: Code specifying the method or type of transportation for the shipment				
CAD04	140	Standard Carrier Alpha Code	X	ID	2/4	Recommended
		Description: Standard Carrier Alpha Code				
CAD05	387	Routing	X	AN	1/35	Recommended
		Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity				
CAD07	128	Reference Identification Qualifier	O	ID	2/3	Recommended
		Description: Code qualifying the Reference Identification				
CAD08	127	Reference Identification	X	AN	1/30	Recommended
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				

Syntax Rules:

1. R0504 - At least one of CAD05 or CAD04 is required.
2. C0708 - If CAD07 is present, then CAD08 is required.

Loop Service, Promotion, Allowance, or Charge Information

Pos: 040	Repeat: 25
Optional	
Loop: SAC	Elements: N/A

User Option (Usage): Recommended

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
040	SAC	Service, Promotion, Allowance, or Charge Information	O	1		Recommended

SAC Service, Promotion, Allowance, or Charge Information

Pos: 040	Max: 1
Summary - Optional	
Loop: SAC	Elements: 16

User Option (Usage): Recommended

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator	M	ID	1/1	Must use
Description: Code which indicates an allowance or charge for the service specified						
Code List Summary (Total Codes: 7, Included: 2)						
<u>Code</u> <u>Name</u>						
A Allowance						
C Charge						
SAC02	1300	Service, Promotion, Allowance, or Charge Code	X	ID	4/4	Recommended
Description: Code identifying the service, promotion, allowance, or charge						
User Note 1: Accepted codes are dependant upon the trading relationship. Please confirm code acceptance with trading partner.						
SAC03	559	Agency Qualifier Code	X	ID	2/2	Recommended
Description: Code identifying the agency assigning the code values						
SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	X	AN	1/10	Recommended
Description: Agency maintained code identifying the service, promotion, allowance, or charge						
SAC05	610	Amount	O	N2	1/15	Recommended
Description: Monetary amount						
SAC06	378	Allowance/Charge Percent Qualifier	X	ID	1/1	Recommended
Description: Code indicating on what basis allowance or charge percent is calculated						
SAC07	332	Percent	X	R	1/6	Recommended
Description: Percent expressed as a percent						
SAC08	118	Rate	O	R	1/9	Recommended
Description: Rate expressed in the standard monetary denomination for the currency specified						
SAC09	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken						
SAC10	380	Quantity	X	R	1/15	Recommended

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		Description: Numeric value of quantity				
SAC11	380	Quantity	O	R	1/15	Recommended
		Description: Numeric value of quantity				
SAC12	331	Allowance or Charge Method of Handling Code	O	ID	2/2	Recommended
		Description: Code indicating method of handling for an allowance or charge				
SAC13	127	Reference Identification	X	AN	1/30	Recommended
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
SAC14	770	Option Number	O	AN	1/20	Recommended
		Description: A unique number identifying available promotion or allowance options when more than one is offered				
SAC15	352	Description	X	AN	1/80	Recommended
		Description: A free-form description to clarify the related data elements and their content				
SAC16	819	Language Code	O	ID	2/3	Recommended
		Description: Code designating the language used in text, from a standard code list maintained by the International Standards Organization (ISO 639)				

Syntax Rules:

1. R0203 - At least one of SAC02 or SAC03 is required.
2. P0304 - If either SAC03 or SAC04 is present, then the other is required.
3. P0607 - If either SAC06 or SAC07 is present, then the other is required.
4. P0910 - If either SAC09 or SAC10 is present, then the other is required.
5. C1110 - If SAC11 is present, then SAC10 is required.
6. L130204 - If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. C1413 - If SAC14 is present, then SAC13 is required.
8. C1615 - If SAC16 is present, then SAC15 is required.

Semantics:

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

Comments:

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Loop Invoice Shipment Summary

Pos: 060	Repeat: >1
Optional	
Loop: ISS	Elements: N/A

User Option (Usage): Recommended

Purpose: To specify summary details of total items shipped in terms of quantity, weight, and volume

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
060	ISS	Invoice Shipment Summary	O	1		Recommended

ISS Invoice Shipment Summary

Pos: 060	Max: 1
Summary - Optional	
Loop: ISS	Elements: 8

User Option (Usage): Recommended

Purpose: To specify summary details of total items shipped in terms of quantity, weight, and volume

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISS01	382	Number of Units Shipped	X	R	1/10	Recommended
		Description: Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set				
ISS02	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
ISS03	81	Weight	X	R	1/10	Recommended
		Description: Numeric value of weight				
ISS04	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
ISS05	183	Volume	X	R	1/8	Recommended
		Description: Value of volumetric measure				
ISS06	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
ISS07	380	Quantity	O	R	1/15	Recommended
		Description: Numeric value of quantity				
ISS08	81	Weight	O	R	1/10	Recommended
		Description: Numeric value of weight				

Syntax Rules:

1. R010305 - At least one of ISS01, ISS03 or ISS05 is required.
2. P0102 - If either ISS01 or ISS02 is present, then the other is required.
3. P0304 - If either ISS03 or ISS04 is present, then the other is required.
4. P0506 - If either ISS05 or ISS06 is present, then the other is required.

Semantics:

1. ISS07 is the quantity of third party pallets.
2. ISS08 is the gross weight of third party pallets in pounds.

CTT Transaction Totals

Pos: 070	Max: 1
Summary - Optional	
Loop: N/A	Elements: 7

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	N0	1/6	Must use
		Description: Total number of line items in the transaction set				
CTT02	347	Hash Total	O	R	1/10	Recommended
		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.				
CTT03	81	Weight	X	R	1/10	Recommended
		Description: Numeric value of weight				
CTT04	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
CTT05	183	Volume	X	R	1/8	Recommended
		Description: Value of volumetric measure				
CTT06	355	Unit or Basis for Measurement Code	X	ID	2/2	Recommended
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
CTT07	352	Description	O	AN	1/80	Recommended
		Description: A free-form description to clarify the related data elements and their content				

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: 080	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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				

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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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				
IEA02	I12	Interchange Control Number	M	N0	9/9	Must use
		Description: A control number assigned by the interchange sender				