

Northeast Utilities ANSI X-12
4010
810 Invoice
Version: 1.0

Publication: June 15, 2002

810

Invoice

Functional Group=IN

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
050	REF	Reference Identification	O	12			Used
060	PER	Administrative Communications Contact	O	3			Used

<u>LOOP ID - N1</u>					<u>200</u>		
070	N1	Name	O	1			Must use
080	N2	Additional Name Information	O	2			Used
090	N3	Address Information	O	2			Used
100	N4	Geographic Location	O	1			Used
130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
140	DTM	Date/Time Reference	O	10			Used
160	PID	Product/Item Description	O	200			Used

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>
<u>LOOP ID - IT1</u>					<u>200000</u>		
010	IT1	Baseline Item Data (Invoice)	O	1			Must use
040	TXI	Tax Information	O	10			Used
<u>LOOP ID - PID</u>					<u>1000</u>		
060	PID	Product/Item Description	O	1			Must use
120	REF	Reference Identification	O	>1			Used
150	DTM	Date/Time Reference	O	10			Used
<u>LOOP ID - SAC</u>					<u>25</u>		
180	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used

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
020	TXI	Tax Information	O	10			Used
030	CAD	Carrier Detail	O	1			Used
<u>LOOP ID - SAC</u>					<u>25</u>		
040	SAC	Service, Promotion, Allowance, or Charge Information	O	1			Used
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: 16

User Option (Usage): Must use

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 Description: Code to identify the type of information in the Authorization Information <u>Code</u> <u>Name</u> 00 No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2	Must use
ISA02	I02	Authorization Information 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)	M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code to identify the type of information in the Security Information <u>Code</u> <u>Name</u> 00 No Security Information Present (No Meaningful Information in I04)	M	ID	2/2	Must use
ISA04	I04	Security Information 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)	M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID	2/2	Must use
ISA06	I06	Interchange Sender ID 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	M	AN	15/15	Must use
ISA07	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <u>Code</u> <u>Name</u> ZZ Mutually Defined	M	ID	2/2	Must use
ISA08	I07	Interchange Receiver ID 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 <i>NOESTUT</i>	M	AN	15/15	Must use
ISA09	I08	Interchange Date Description: Date of the interchange	M	DT	6/6	Must use
ISA10	I09	Interchange Time	M	TM	4/4	Must use

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA11	I10	<p>Description: Time of the interchange</p> <p>Interchange Control Standards Identifier</p> <p>Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer</p> <p>Code Name</p> <p>U U.S. EDI Community of ASC X12, TDCC, and UCS</p>	M	ID	1/1	Must use
ISA12	I11	<p>Interchange Control Version Number</p> <p>Description: This version number covers the interchange control segments</p> <p>Code Name</p> <p>00400 Standard Issued as ANSI X12.5-1997</p>	M	ID	5/5	Must use
ISA13	I12	<p>Interchange Control Number</p> <p>Description: A control number assigned by the interchange sender</p>	M	N0	9/9	Must use
ISA14	I13	<p>Acknowledgment Requested</p> <p>Description: Code sent by the sender to request an interchange acknowledgment (TA1)</p> <p>Code Name</p> <p>0 No Acknowledgment Requested</p>	M	ID	1/1	Must use
ISA15	I14	<p>Usage Indicator</p> <p>Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information</p> <p>Code Name</p> <p>P Production Data</p>	M	ID	1/1	Must use
ISA16	I15	<p>Component Element Separator</p> <p>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</p>	M		1/1	Must use

GS**Functional Group Header**

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

User Option (Usage): Must use

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 Description: Code identifying a group of application related transaction sets	M	ID	2/2	Must use
		Code Name IN Invoice Information (810,819)				
GS02	142	Application Sender's Code Description: Code identifying party sending transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS03	124	Application Receiver's Code Description: Code identifying party receiving transmission. Codes agreed to by trading partners <i>NOESTUT</i>	M	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M	TM	4/8	Must use
GS06	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	NO	1/9	Must use
GS07	455	Responsible Agency Code Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard	M	ID	1/2	Must use
		Code Name X Accredited Standards Committee X12				
GS08	480	Version / Release / Industry Identifier Code 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	M	AN	1/12	Must use
		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

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 Description: Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u> 810 Invoice				
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Semantics:

- 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: 4

User Option (Usage): Must use

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 Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
		<i>Invoice Date</i>				
BIG02	76	Invoice Number Description: Identifying number assigned by issuer	M	AN	1/22	Must use
BIG04	324	Purchase Order Number Description: Identifying number for Purchase Order assigned by the orderer/purchaser	O	AN	1/22	Must use
BIG05	328	Release Number Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction <i>Must be used if sent on Purchase order</i>	O	AN	1/30	Used

Semantics:

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

Comments:

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

REF Reference Identification

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

User Option (Usage): Used

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 Description: Code qualifying the Reference Identification <i>Use any Standard Codes</i>	M	ID	2/3	Must use
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used

Will be treated as a Invoice Header Note

Syntax:

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

Semantics:

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

PER Administrative Communications Contact

Pos: 060	Max: 3
Heading - Optional	
Loop: N/A	Elements: 4

User Option (Usage): Used

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 Description: Code identifying the major duty or responsibility of the person or group named	M	ID	2/2	Must use
		Code Name IC Information Contact				
PER02	93	Name Description: Free-form name	O	AN	1/60	Must use
PER03	365	Communication Number Qualifier Description: Code identifying the type of communication number	C	ID	2/2	Used
		Code Name TE Telephone				
PER04	364	Communication Number Description: Complete communications number including country or area code when applicable	C	AN	1/80	Used

Syntax:

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

Loop N1

Pos: 070	Repeat: 200
Optional	
Loop: N1	Elements: N/A

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
080	N2	Additional Name Information	O	2		Used
090	N3	Address Information	O	2		Used
100	N4	Geographic Location	O	1		Used

N1

Name

Pos: 070	Max: 1
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Must use

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

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>
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must use
		Code Name RE Party to receive commercial invoice remittance				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N102	93	Name Description: Free-form name	C	AN	1/60	Must use

Syntax:

1. R0203 - At least one of N102,N103 is required
2. P0304 - If either N103,N104 is present, then all are 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: 080	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

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

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>
N201	93	Name Description: Free-form name	M	AN	1/60	Must use
N202	93	Name Description: Free-form name	O	AN	1/60	Used

N3

Address Information

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

User Option (Usage): Used

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 Description: Address information	M	AN	1/55	Must use
N302	166	Address Information Description: Address information	O	AN	1/55	Used

N4**Geographic Location**

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

User Option (Usage): Used

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

Syntax:

1. C0605 - If N406 is present, then all of N405 are 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.

ITD

Terms of Sale/Deferred Terms of Sale

Pos: 130	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

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 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	O	R	1/6	Used
ITD05	351	Terms Discount Days Due Description: Number of days in the terms discount period by which payment is due if terms discount is earned	C	N0	1/3	Used
ITD07	386	Terms Net Days Description: Number of days until total invoice amount is due (discount not applicable)	O	N0	1/3	Used

Syntax:

1. L03040513 - If ITD03 is present, then at least one of ITD04,ITD05,ITD13 is required
2. L08040513 - If ITD08 is present, then at least one of ITD04,ITD05,ITD13 is required
3. L091011 - If ITD09 is present, then at least one of ITD10,ITD11 is required

Semantics:

1. ITD15 is the percentage applied to a base amount used to determine a late payment charge.

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): Used

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 Description: Code specifying type of date or time, or both date and time <i>Use any Standard Codes</i>	M	ID	3/3	Must use
DTM02	373	Date Description: Date expressed as CCYYMMDD <i>Will be treated as a Invoice Header Note</i>	C	DT	8/8	Used

Syntax:

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

PID Product/Item Description

Pos: 160	Max: 200
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

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 Description: Code indicating the format of a description	M	ID	1/1	Must use
		<u>Code</u> <u>Name</u> F Free-form				
PID05	352	Description Description: A free-form description to clarify the related data elements and their content <i>Will be treated as a Invoice Header Note</i>	C	AN	1/80	Used

Syntax:

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

Loop IT1

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

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
040	TXI	Tax Information	O	10		Used
060		Loop PID	O		1000	Must use
120	REF	Reference Identification	O	>1		Used
150	DTM	Date/Time Reference	O	10		Used
180		Loop SAC	O		25	Used

IT1

Baseline Item Data (Invoice)

Pos: 010	Max: 1
Detail - Optional	
Loop: IT1	Elements: 12

User Option (Usage): Must use

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 Description: Alphanumeric characters assigned for differentiation within a transaction set <i>Must be line item number from NU's Purchase Order</i>	O	AN	1/20	Must use
IT102	358	Quantity Invoiced Description: Number of units invoiced (supplier units)	C	R	1/10	Must use
IT103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken <i>This unit of measure should be the same as is on NU's purchase order.</i>	C	ID	2/2	Must use
IT104	212	Unit Price Description: Price per unit of product, service, commodity, etc.	C	R	1/17	Must use
IT106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <i>Must be used if there is a Stock Code on the Purchase Order</i>	C	ID	2/2	Used
		<u>Code</u> <u>Name</u> CB Buyer's Catalog Number				
IT107	234	Product/Service ID Description: Identifying number for a product or service <i>Northeast Utilities Catalog Number</i> <i>Must be used if there is a Northeast Utilities Catalog Number on the Purchase Order</i>	C	AN	1/48	Used
IT108	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <u>Code</u> <u>Name</u> MF Manufacturer	C	ID	2/2	Used
IT109	234	Product/Service ID Description: Identifying number for a product or service <i>Manufacturer Name</i>	C	AN	1/48	Used
IT110	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <u>Code</u> <u>Name</u> MG Manufacturer's Part Number	C	ID	2/2	Used
IT111	234	Product/Service ID	C	AN	1/48	Used

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>
IT112	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	C	ID	2/2	Used
		<i>Manufacturers Part Number</i>				
		Code Name				
		MN Model Number				
IT113	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/48	Used
		<i>Manufacturers Model Number</i>				

Syntax:

1. P020304 - If either IT102,IT103,IT104 is present, then all are required
2. P0607 - If either IT106,IT107 is present, then all are required
3. P0809 - If either IT108,IT109 is present, then all are required
4. P1011 - If either IT110,IT111 is present, then all are required
5. P1213 - If either IT112,IT113 is present, then all are required
6. P1415 - If either IT114,IT115 is present, then all are required
7. P1617 - If either IT116,IT117 is present, then all are required
8. P1819 - If either IT118,IT119 is present, then all are required
9. P2021 - If either IT120,IT121 is present, then all are required
10. P2223 - If either IT122,IT123 is present, then all are required
11. P2425 - If either IT124,IT125 is present, then all are 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.

TXI

Tax Information

Pos: 040	Max: 10
Detail - Optional	
Loop: IT1	Elements: 2

User Option (Usage): Used

To specify tax 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>
TXI01	963	Tax Type Code Description: Code specifying the type of tax	M	ID	2/2	Must use
TXI02	782	Monetary Amount Description: Monetary amount	C	R	1/18	Used

Syntax:

1. R020306 - At least one of TXI02, TXI03, TXI06 is required
2. P0405 - If either TXI04, TXI05 is present, then all are required
3. C0803 - If TXI08 is present, then all of TXI03 are required

Semantics:

1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

Loop PID

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

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		Must use

PID Product/Item Description

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

User Option (Usage): Must use

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 Description: Code indicating the format of a description	M	ID	1/1	Must use
		<u>Code</u> <u>Name</u> F Free-form				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID05	352	Description Description: A free-form description to clarify the related data elements and their content <i>The first two PID segments will display in the line item description fields. After that they will display in the line item notes.</i>	C	AN	1/80	Must use
		<i>On NU Internal system orders the discription should start with the internal system Reference Number, space followed by description. The internal system reference number is sent in the REF segment of the 850 with a qualifier of CR.</i>				

Syntax:

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

REF Reference Identification

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

User Option (Usage): Used

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 Description: Code qualifying the Reference Identification <i>All codes other than 12 will be treated as a line item note.</i>	M	ID	2/3	Must use
		Code Name				
		12 Billing Account				
		PK Packing List Number				
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <i>NU Billing Account Distribution</i> <i>Packing List number</i>	C	AN	1/30	Must use
REF03	352	Description Description: A free-form description to clarify the related data elements and their content	C	AN	1/80	Used

Syntax:

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

Semantics:

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

DTM Date/Time Reference

Pos: 150	Max: 10
Detail - Optional	
Loop: IT1	Elements: 2

User Option (Usage): Used

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 Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must use
DTM02	373	Date Description: Date expressed as CCYYMMDD <i>Will be treated as a Invoice Line Note</i>	C	DT	8/8	Used

Syntax:

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

Loop SAC

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

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		Used

SAC Service, Promotion, Allowance, or Charge Information

Pos: 180	Max: 1
Detail - Optional	
Loop: SAC	Elements: 4

User Option (Usage): Used

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 Description: Code which indicates an allowance or charge for the service specified	M	ID	1/1	Must use
		Code Name				
		A Allowance				
		C Charge				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC02	1300	Service, Promotion, Allowance, or Charge Code Description: Code identifying the service, promotion, allowance, or charge	C	ID	4/4	Used
		Code Name				
		A010 Absolute Minimum Charge				
		A310 Air Express Charge				
		A320 Air Transportation Charge				
		A480 Assembly				
		A720 Broken Package Charge				
		B940 Cutting Charge				
		C040 Delivery				
		C690 Escalation				
		C700 Escort Service				
		C870 Expediting Fee				
		D240 Freight				
		D760 Income Freight (Manufacturing to Shipping Point)				
		D860 Inspection Fee				
		D920 Insurance Fee				
		E190 Labor Charges				
		E610 Messenger Service				
		F340 Pick/Up				
		F730 Priority Service				
		G140 Recurring License Fee				
		G200 Reel Deposit				
		G470 Restocking Charge				
		G620 Saturday Pick-up or Delivery Charge				
		G750 Service Upgrade				
		G830 Shipping and Handling				
		H040 Special Delivery				
		H090 Special Handling				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC05	610	Amount Description: Monetary amount	O	N2	1/15	Used
SAC12	331	Allowance or Charge Method of Handling Code Description: Code indicating method of handling for an	O	ID	2/2	Used

allowance or charge

<u>Code</u>	<u>Name</u>
02	Off Invoice
06	Charge to be Paid by Customer

Syntax:

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

TDS Total Monetary Value Summary

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

User Option (Usage): Must use

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 Description: Monetary amount	M	N2	1/15	Must use

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.

TXI Tax Information

Pos: 020	Max: 10
Summary - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

To specify tax 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>
TXI01	963	Tax Type Code Description: Code specifying the type of tax	M	ID	2/2	Must use
TXI02	782	Monetary Amount Description: Monetary amount	C	R	1/18	Used

Syntax:

1. R020306 - At least one of TXI02, TXI03, TXI06 is required
2. P0405 - If either TXI04, TXI05 is present, then all are required
3. C0803 - If TXI08 is present, then all of TXI03 are required

Semantics:

1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

CAD Carrier Detail

Pos: 030	Max: 1
Summary - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

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>
CAD04	140	Standard Carrier Alpha Code Description: Standard Carrier Alpha Code	C	ID	2/4	Used
CAD07	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	O	ID	2/3	Used
		<u>Code</u> <u>Name</u> CN Carrier's Reference Number (PRO/Invoice)				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CAD08	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used

Syntax:

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

Loop SAC

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

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		Used

SAC Service, Promotion, Allowance, or Charge Information

Pos: 040	Max: 1
Summary - Optional	
Loop: SAC	Elements: 4

User Option (Usage): Used

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 Description: Code which indicates an allowance or charge for the service specified	M	ID	1/1	Must use
		Code Name				
		A Allowance				
		C Charge				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC02	1300	Service, Promotion, Allowance, or Charge Code Description: Code identifying the service, promotion, allowance, or charge	C	ID	4/4	Used
		Code Name				
		A010 Absolute Minimum Charge				
		A310 Air Express Charge				
		A320 Air Transportation Charge				
		A480 Assembly				
		A720 Broken Package Charge				
		B940 Cutting Charge				
		C040 Delivery				
		C690 Escalation				
		C700 Escort Service				
		C870 Expediting Fee				
		D240 Freight				
		D760 Income Freight (Manufacturing to Shipping Point)				
		D860 Inspection Fee				
		D920 Insurance Fee				
		E190 Labor Charges				
		E610 Messenger Service				
		F340 Pick/Up				
		F730 Priority Service				
		G140 Recurring License Fee				
		G200 Reel Deposit				
		G470 Restocking Charge				
		G620 Saturday Pick-up or Delivery Charge				
		G750 Service Upgrade				
		G830 Shipping and Handling				
		H040 Special Delivery				
		H090 Special Handling				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC05	610	Amount Description: Monetary amount	O	N2	1/15	Used
SAC12	331	Allowance or Charge Method of Handling Code Description: Code indicating method of handling for an	O	ID	2/2	Used

allowance or charge

<u>Code</u>	<u>Name</u>
02	Off Invoice
06	Charge to be Paid by Customer

Syntax:

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

CTT Transaction Totals

Pos: 070	Max: 1
Summary - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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 Description: Total number of line items in the transaction set	M	N0	1/6	Must use
CTT02	347	Hash Total Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value beinghashed..18 Second occurrence of value beinghashed.1.8 Third occurrence of value beinghashed.18.01 Fourth occurrence of value beinghashed.-----1855 Hash total prior to truncation.855 Hash total after truncation tothree-digit field.	O	R	1/10	Used

Syntax:

1. P0304 - If either CTT03,CTT04 is present, then all are required
2. P0506 - If either CTT05,CTT06 is present, then all are 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

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

Comments:

- 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

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 Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

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

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 Description: A count of the number of functional groups included in an interchange	M	NO	1/5	Must use
IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	NO	9/9	Must use