# Market Lab 21810 Invoice <br> X12/V5010/810: 810 Invoice 

| Author: | SPS Commerce |
| :--- | :--- |
| Company: | Market Lab |

## 810 Invoice

## Functional Group=|N

Purpose: This X12 Transaction Set 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.

Heading:

| Pos | $\underline{\text { Id }}$ | Segment Name | Req | Max Use | Repeat | Notes | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0100 | ST | Transaction Set Header | M | 1 |  |  | Must use |
| 0200 | BIG | Beginning Segment for Invoice | M | 1 |  |  | Must use |
| 0500 | REF | Reference Information | M | 3 |  |  | Must use |
| 0600 | PER | Administrative Communications Contact | O | 1 |  |  | Used |
| LOOP ID - N1 |  |  |  |  | $\underline{2}$ |  |  |
| 0700 | N1 | Party Identification | M | 1 |  |  | Must use |
| 0900 | N3 | Party Location | 0 | 2 |  |  | Used |
| 1000 | N4 | Geographic Location | 0 | 1 |  |  | Used |
| 1300 | ITD | Terms of Sale/Deferred Terms of Sale | M | 1 |  |  | Must use |
| 1400 | DTM | Date/Time Reference | 0 | 1 |  |  | Used |
| LOOP ID - N9 |  |  |  |  | 1 |  |  |
| 2400 | N9 | Extended Reference Information | M | 1 |  |  | Must use |
| 2500 | MSG | Message Text | M | 1 |  |  | Must use |

Detail:

| Pos | Id | Segment Name | Req | Max Use | Repeat | Notes | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L00P ID - IT1 |  |  |  |  | $\underline{200000}$ |  |  |
| 0100 | IT1 | Baseline Item Data (Invoice) | M | 1 |  |  | Must use |
| LOOP ID - PID |  |  |  |  | $\underline{5}$ |  |  |
| 0600 | PID | Product/Item Description | M | 1 |  |  | Must use |
| LOOP ID - SAC |  |  |  |  | $\underline{25}$ |  |  |
| 1800 | SAC | Service, Promotion, Allowance, or Charge Information | 0 | 1 |  |  | Used |

## Summary:

| Pos | Id | Segment Name | Req | Max Use | Repeat | Notes | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0100 | TDS | Total Monetary Value Summary | M | 1 |  |  | Must use |
| 0200 | TXI | Tax Information | 0 | 10 |  |  | Used |
| LOOP ID - SAC |  |  |  |  | $\underline{25}$ |  |  |
| 0400 | SAC | Service, Promotion, Allowance, or Charge Information | 0 | 1 |  |  | Used |


| Pos | Id | Segment Name | Req | Max Use | Repeat | Notes | Usage |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 0700 | CTT | Transaction Totals | O | 1 |  |  | N3/0700 |

Notes:
3/0700 Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used CTT02 is the hash total of the quantities invoiced (IT102) for each IT1 segment.

## General Usage:

Invoice (810)- Market Lab is requiring suppliers to provide electronic Invoices for all orders shipped. This information will be used to automate the receipt of invoices, use the three way matching functionality against the Inventory receipt and Purchase order and apply the invoice into their accounts payable system for timely payments to the suppliers. The suppliers are to create one debit invoice per single PO.

## ST Transaction Set Header

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

User Option (Usage): Must use
Purpose: To indicate the start of a transaction set and to assign a control number
Element Summary:

| Ref | $\underline{\text { Id }}$ | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ST01 | 143 | Transaction Set Identifier Code | M | ID | 3/3 | Must use |
|  |  | Description: Code uniquely identifying a Transaction Set |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 318, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | 810 Invoice |  |  |  |  |
| ST02 | 329 | Transaction Set Control Number | M | AN | 4/9 | Must use |
|  |  | Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set |  |  |  |  |

## Semantics:

1. The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
2. The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition. When used, this implementation convention reference takes precedence over the implementation reference specified in the GS08.

## BIG Beginning Segment for Invoice

| Pos: 0200 | 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:


## Semantics:

1. BIG01 is the invoice issue date.
2. BIG03 is the date assigned by the purchaser to purchase order.
3. BIG10 is the consolidated invoice number associated with the invoice identified in BIG02. When BIG07 contains code Cl (Consolidated Invoice), BIG02 will contain the consolidated invoice number and BIG10 is not used.

## Comments:

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

## REF Reference Information

| Pos: 0500 | Max: 3 |
| :---: | :---: |
| Heading | Mandatory |
| Loop: N/A | Elements: 2 |

User Option (Usage): Must use
Purpose: To specify identifying information
Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REF01 | 128 | Reference Identification Qualifier | M | ID | 2/3 | Must use |
|  |  | Description: Code qualifying the Reference Identification |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 1731, Included: 5) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | Tracking Number |  |  |  |  |
|  |  | Bill of Lading Number |  |  |  |  |
|  |  | Carrier's Reference Number (PRO/Invoice) |  |  |  |  |
|  |  | Customer Order Number |  |  |  |  |
|  |  | User Note 1: |  |  |  |  |
|  |  | Required if present on the 850 Purchase Order |  |  |  |  |
|  |  | IA Internal Vendor NumberUser Note 1: |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Market Lab assigned Vendor ID - Mandatory |  |  |  |  |
| REF02 | 127 | Reference Identification | M | AN | 1/50 | Must use |
|  |  | Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier |  |  |  |  |

## Syntax Rules:

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

## Semantics:

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

## User Note 1:

One of Bill of Lading Number (REF01 = BM), CarrierProNumber (REF01 = CN) or Tracking Number (2l) is required. (Both a carrier pro number and tracking number should not be sent). Which ever reference number is provided, it should match what was included on the 856 Advance ship notice.

## PER Administrative Communications Contact

| Pos: 0600 | Max: 1 |
| :---: | :---: |
| Heading | Optional |
| Loop: N/A | Elements: 6 |

User Option (Usage): Used
Purpose: To identify a person or office to whom administrative communications should be directed
Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PER01 | 366 | Contact Function Code | M | ID | 2/2 | Must use |
|  |  | Description: Code identifying the major duty or responsibility of the person or group named |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 238, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | IC Information Contact |  |  |  |  |
| PER02 | 93 | Name | 0 | AN | 1/60 | Used |
|  |  | Description: Free-form name |  |  |  |  |
| PER03 | 365 | Communication Number Qualifier | 0 | ID | 2/2 | Used |
|  |  | Description: Code identifying the type of communication number |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 42, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | EM Electronic Mail |  |  |  |  |
|  |  | TE Telephone |  |  |  |  |
| PER04 | 364 | Communication Number | O | AN | 1/256 | Used |
|  |  | Description: Complete communications number including country or area code when applicable |  |  |  |  |
| PER05 | 365 | Communication Number Qualifier | 0 | ID | 2/2 | Used |
|  |  | Description: Code identifying the type of communication number |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 42, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | EM Electronic Mail |  |  |  |  |
|  |  | TE Telephone |  |  |  |  |
| PER06 | 364 | Communication Number <br> 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.

## Loop Party Identification

| Pos: 0700 |
| :---: |
| Conditional |
| Loop: N1 |

User Option (Usage): Used
Purpose: To identify a party by type of organization, name, and code
Loop Summary:

| $\underline{\text { Pos }}$ | $\frac{\text { Id }}{}$ | Segment Name | $\frac{\text { Req }}{\text { S }}$ | $\frac{\text { Max Use }}{1}$ | Repeat | Usage |
| :--- | :--- | :--- | :---: | :---: | ---: | ---: |
| 0700 | N1 | Party Identification | M | 1 |  | Must use |
| 0900 | N3 | Party Location | O | 2 |  | Used |
| 1000 | N4 | Geographic Location | O | 1 | Used |  |

## User Note 1:

Two iterations of the N1 loop are required for the Ship To and Remit To addresses.

## N1 Party Identification

| Pos: 0700 | Max: 1 |
| :---: | :---: |
| Heading | Mandatory |
| Loop: N1 | Elements: 4 |

User Option (Usage): Must use
Purpose: To identify a party by type of organization, name, and code
Element Summary:


## 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.

\section*{N3 Party Location <br> | Pos: 0900 | Max: 2 |
| :---: | :---: |
| Heading | Optional |
| Loop: N1 | Elements: 2 |}

User Option (Usage): Used
Purpose: To specify the location of the named party

## Element Summary:

| Ref | Id | Element Name | $\frac{\text { Req }}{\text { N301 }}$ | 166 | $\frac{\text { Type }}{\text { Address Information }}$ | $\frac{\text { Min/Max }}{\text { Description: Address information }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## N4 Geographic Location

| Pos: 1000 | Max: 1 |
| :---: | :---: |
| Heading | Optional |
| Loop: N1 | Elements: 4 |

User Option (Usage): Used
Purpose: To specify the geographic place of the named party
Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N401 | 19 | City Name | M | AN | 2/30 | Must use |
|  |  | Description: Free-form te |  |  |  |  |
| N402 | 156 | State or Province Code | 0 | ID | 2/2 | Used |
|  |  | Description: Code (Standard State/Province) as defined by appropriate government agency |  |  |  |  |
| N403 | 116 | Postal Code | M | ID | 3/15 | Must use |
|  |  | Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States) |  |  |  |  |
| N404 | 26 | Country Code | 0 | ID | 2/3 | Used |
|  |  | Description: Code identif |  |  |  |  |

## Syntax Rules:

1. E0207-Only one of N402 or N407 may be present.
2. C0605-If N406 is present, then N405 is required.
3. C0704-If N407 is present, then N404 is required.

## Comments:

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

## ITD Terms of Sale/Deferred Terms of Sale <br> Pos: $1300 \quad$ Max: 1 <br> Heading - Mandatory <br> Loop: N/A Elements: 1

User Option (Usage): Must use
Purpose: To specify terms of sale
Element Summary:

| Ref $\frac{\text { Id }}{}$ Element Name <br> ITD12 352 Req <br> Description <br>   Description: A free-form description to clarify the related data elements and their content | $\frac{\text { Min/Max }}{\text { DN }}$ | $\underline{\text { Usage }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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.
3. L091011 - If ITD09 is present, then at least one of ITD10 or 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.

\section*{DTM Date/Time Reference <br> | Pos: 1400 | Max: 1 |
| :---: | :---: |
| Heading | Optional |
| Loop: N/A | Elements: 2 |}

User Option (Usage): Used
Purpose: To specify pertinent dates and times
Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DTM01 | 374 | Date/Time Qualifier | M | ID | 3/3 | Must use |
|  |  | Description: Code specifying type of date or time, or both date and time |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 1280, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | 011 Shipped |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| DTM02 | 373 | Date | M | DT | 8/8 | Must use |
|  |  | Description: Date expressed as CCYYMMDD where CC represents the first two digits o the calendar year |  |  |  |  |

## Syntax Rules:

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

## Loop Extended Reference Information <br> Pos: 2400 <br> Repeat: 1 <br> Optional <br> Loop: N9 Elements: N/A

User Option (Usage): Used
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier
Loop Summary:

| Pos | Id | Segment Name | Req | Max Use | Repeat | Usage |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 2400 | N9 | Extended Reference Information | M | 1 |  | Must use |
| 2500 | MSG | Message Text | $M$ | 1 |  | Must use |

## N9 Extended Reference Information

| Pos: 2400 | Max: 1 |
| :---: | :---: |
| Heading | Mandatory |
| Loop: N9 | Elements: 2 |

User Option (Usage): Must use
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

## Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N901 | 128 | Reference Identification Qualifier | M | ID | 2/3 | Must use |
|  |  | Description: Code qualifying the Reference Identification |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 1731, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | L1 Letters or Notes |  |  |  |  |
| N902 | 127 | Reference Identification | M | AN | 1/50 | Must use |
|  |  | Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier |  |  |  |  |
|  |  | User Note 1: |  |  |  |  |
|  |  | N902 must contain the following 3 character code to identify the type of note to follow in MSG01. |  |  |  |  |
|  |  | GEN: General Note |  |  |  |  |

## Syntax Rules:

1. R0203 - At least one of N902 or N903 is required.
2. C0605-If N906 is present, then N905 is required.

## Semantics:

1. N906 reflects the time zone which the time reflects.
2. N907 contains data relating to the value cited in N902.

\section*{MSG Message Text <br> | Pos: 2500 | Max: 1 |
| :---: | :---: |
| Heading | Mandatory |
| Loop: N9 | Elements: 1 |}

User Option (Usage): Must use
Purpose: To provide a free-form format that allows the transmission of text information

## Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MSG01 | 933 | Free-form Message Text | M | AN | 1/264 | Must use |
|  |  | Description: Free-form message text |  |  |  |  |
|  |  | User Note 1: <br> If N902 = <br> GEN - MSG01 is a General Note |  |  |  |  |

## Syntax Rules:

1. C0302-If MSG03 is present, then MSG02 is required.

## Semantics:

1. MSG03 is the number of lines to advance before printing.

## Comments:

1. MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.
2. If MSG02 is "AA - Advance the specified number of lines before print" then MSG03 is required.

\section*{Loop Baseline Item Data (Invoice) <br> Pos: $0100 \quad$| Repeat: |
| ---: |
| 200000 |

Mandatory
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:

| Pos | Id | Segment Name | $\frac{\text { Req }}{M}$ | $\frac{\text { Max Use }}{1}$ | Repeat | Usage |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0100 | IT1 | Baseline Item Data (Invoice) | M | 1 |  | Must use |
| 0600 |  | Loop PID | M |  | 5 | Must use |
| 1800 |  | Loop SAC | O |  | 25 | Used |


\section*{IT1 Baseline Item Data (Invoice) <br> | Pos: 0100 | Max: 1 |
| :---: | :---: |
| Detail - Mandatory |  |
| Loop: IT1 | Elements: 10 |}

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:

| Ref <br> IT101 | $\frac{\text { Id }}{350}$ | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assigned Identification | 0 | AN | 1/20 | Used |
|  |  | Description: Alphanumeric characters assigned for differentiation within a transaction set |  |  |  |  |
| IT102 | 358 | Quantity Invoiced | M | R | 1/15 | Must use |
|  |  | Description: Number of units invoiced (supplier units) |  |  |  |  |
| IT103 | 355 | Unit or Basis for Measurement Code | M | ID | 2/2 | Must use |
|  |  | Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 844, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | EA Each |  |  |  |  |
|  |  | PH Pack (PAK) |  |  |  |  |
| IT104 | 212 | Unit Price <br> Description: Price per unit of product, service, commodity, etc. |  |  |  |  |
|  |  |  |  |  |  |  |
| IT106 | 235 | Product/Service ID Qualifier | M | ID | 2/2 | Must use |
|  |  | Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 519, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | VN Vendor's (Seller's) Item Number |  |  |  |  |
| IT107 | 234 | Product/Service ID M AN $1 / 48$ <br> Description: Identifying number for a product or service |  |  |  | Must use |
|  |  |  |  |  |  |  |
| IT108 | 235 | Product/Service ID Qualifier | 0 | ID | 2/2 | Used |
|  |  | Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 519, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | $\begin{array}{ll}\text { SK } & \text { Stock Keeping Unit (SKU) } \\ \\ \text { User Note 1: } \\ & \text { Market Lab assigned SKU }\end{array}$ |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | UP UCC-12 |  |  |  |  |
| IT109 | 234 | Product/Service ID | 0 | AN | 1/48 | Used |


| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Description: Identifying number for a product or service |  |  |  |  |
| IT110 | 235 | Product/Service ID Qualifier | 0 | ID | 2/2 | Used |
|  |  | Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 519, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | $\begin{array}{ll}\text { SK } & \text { Stock Keeping Unit (SKU) } \\ \text { User Note 1: } \\ & \text { Market Lab assigned SKU }\end{array}$ |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | UP UCC |  |  |  |  |
| IT111 | 234 | Product/Service ID | 0 | AN | 1/48 | Used |
|  |  | Description: Identifying number for a product or service |  |  |  |  |

## 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.
5. P1213 - If either IT112 or IT113 is present, then the other is required.
6. P1415 - If either IT114 or IT115 is present, then the other is required.
7. P1617 - If either IT116 or IT117 is present, then the other is required.
8. P1819 - If either IT118 or IT119 is present, then the other is required.
9. P2021 - If either IT120 or IT121 is present, then the other is required.
10. P2223 - If either IT122 or IT123 is present, then the other is required.
11. P2425-If either IT124 or IT125 is present, then the other is required.

## Semantics:

1. IT101 is the 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.

## Loop Product/tem Description

| Pos: 0600 | Repeat: 5 |
| :---: | :---: |
| Mandatory |  |
| Loop: PID | Elements: N/A |

User Option (Usage): Must use
Purpose: To describe a product or process in coded or free-form format
Loop Summary:

| $\frac{\text { Pos }}{0600}$ | $\underline{\text { Id }}$ | $\underline{\text { Segment Name }}$ | $\frac{\text { Req }}{\mathrm{M}}$ | $\frac{\text { Max Use }}{1}$ | $\underline{\text { Repeat }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$| Usage |
| :--- |
| Product/Item Description |

## PID Product/Item Description

| Pos: 0600 | Max: 1 |
| :---: | :---: |
| Detail | Mandatory |
| Loop: PID | Elements: 3 |

User Option (Usage): Must use
Purpose: To describe a product or process in coded or free-form format
Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PID01 | 349 | Item Description Type | M | ID | 1/1 | Must use |
|  |  | Description: Code indicating the format of a description |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 3, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | F Free-form |  |  |  |  |
| PID02 | 750 | Product/Process Characteristic Code | M | ID | 2/3 | Must use |
|  |  | Description: Code identifying the general class of a product or process characteristic |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 238, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | 08 Product |  |  |  |  |
| PID05 | 352 | DescriptionDescription: A free-form description to c | M | AN | 1/80 | Must use |
|  |  |  | fy the | lated | a elemen | their conte |

## Syntax Rules:

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

## Semantics:

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

## Comments:

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

## Loop Service, Promotion, Allowance, or Charge Information <br> Pos: 1800 <br> Repeat: 25 Optional <br> Loop: SAC Elements: N/A

## User Option (Usage): Used

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:

| $\frac{\text { Pos }}{1800}$ | $\frac{\text { Id }}{\text { SAC }}$ | Segment Name <br> Service, Promotion, Allowance, or Charge <br> Information | $\frac{\text { Req }}{O}$ | $\frac{\text { Max Use }}{1}$ | Repeat |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$| Usage |
| :--- |
| Used |

## SAC Service, Promotion, Allowance, or Charge Information

| Pos: 1800 | Max: 1 |
| :---: | :---: |
| Detail | Optional |
| Loop: SAC | Elements: 4 |
|  |  |

## User Option (Usage): Used

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:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAC01 | 248 | Allowance or Charge Indicator | M | ID | 1/1 | Must use |
|  |  | Description: Code which indicates an allowance or charge for the service specified |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 7, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | A Allowance |  |  |  |  |
|  |  | C Charge |  |  |  |  |
| SAC02 | 1300 | Service, Promotion, Allowance, or Charge Code | M | ID | 4/4 | Must use |
|  |  | Description: Code identifying the service, promotion, allowance, or charge |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 1090, Included: 4) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | C310 Discount |  |  |  |  |
|  |  | D240 Freight |  |  |  |  |
|  |  | D500 Handling |  |  |  |  |
|  |  | F050 Other (See related description) |  |  |  |  |
| SAC05 | 610 | Amount | M | N2 | 1/15 | Must use |
|  |  | Description: Monetary amount |  |  |  |  |
| SAC15 | 352 | Description | M | AN | 1/80 | Must use |
|  |  | Description: A free-form description to clarify the related data elements and their conte |  |  |  |  |

## 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. C1413-If SAC14 is present, then SAC13 is required.
7. C1615-If SAC16 is present, then SAC15 is required.
8. R0507 - At least one of SAC05 or SAC07 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 with SAC03 to further define 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: 0100 | 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:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TDS01 | 610 | Amount | M | N2 | 1/15 | Must use |
|  |  | Description: Monetary amount |  |  |  |  |
|  |  | User Note 1: Total Invoice Amount (including charges, less allowances, plus taxes) before terms discount (if discount is applicable). |  |  |  |  |
| TDS02 | 610 | Amount | 0 | N2 | 1/15 | Used |
|  |  | Description: Monetary amount |  |  |  |  |
|  |  | User Note 1: Merchandise Total (does not includes charges/allowances/taxes) total upon which terms discount amount is calculated |  |  |  |  |
| TDS03 | 610 | Amount | 0 | N2 | 1/15 | Used |
|  |  | Description: Monetary amount |  |  |  |  |
|  |  | User Note 1: Invoice amount due if paid by terms discount due date - TDS01 less cash discount |  |  |  |  |
| TDS04 | 610 | Amount | O | N2 | 1/15 | Used |
|  |  | Description: Mo |  |  |  |  |
|  |  | User Note 1: Ter |  |  |  |  |

## 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: 0200 | Max: 10 |
| :---: | :---: |
| Summary | Optional |
| Loop: N/A | Elements: 2 |

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

## Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TXI01 | 963 | Tax Type Code | M | ID | 2/2 | Must use |
|  |  | Description: Code specifying the type of tax |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 102, Included: 1) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | GS Goods and Services Tax |  |  |  |  |
| TXI02 | 782 | Monetary Amount <br> Description: Monetary amount | M | R | 1/18 | Must use |
|  |  |  |  |  |  |  |

## Syntax Rules:

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

## Semantics:

1. TXIO2 is the monetary amount of the tax.
2. TXIO3 is the tax percent expressed as a decimal.
3. TXIO7 is a code indicating the relationship of the price or amount to the associated segment.

## Loop Service, Promotion, Allowance, or Charge Information <br> Pos: $0400 \quad$ Repeat: 25 <br> Optional <br> Loop: SAC Elements: N/A

## User Option (Usage): Used

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:

| Pos | $\frac{\text { Id }}{0400}$ | Segment Name <br> SAC | Req <br> Service, Promotion, Allowance, or Charge <br> Information | $\frac{\text { Max Use }}{1}$ |
| :--- | :--- | :--- | :--- | :--- | Repeat $\quad$| Usage |
| :--- |
| Used |

## SAC Service, Promotion, Allowance, or Charge Information

$\left[\begin{array}{cc}\text { Pos: } 0400 & \text { Max: } 1 \\ \text { Summary } & \text { Optional } \\ \text { Loop: SAC } & \text { Elements: } 4 \\ & \\ \end{array}\right.$

## User Option (Usage): Used

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:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAC01 | 248 | Allowance or Charge Indicator | M | ID | 1/1 | Must use |
|  |  | Description: Code which indicates an allowance or charge for the service specified |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 7, Included: 2) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | A Allowance |  |  |  |  |
|  |  | C Charge |  |  |  |  |
| SAC02 | 1300 | Service, Promotion, Allowance, or Charge Code | M | ID | 4/4 | Must use |
|  |  | Description: Code identifying the service, promotion, allowance, or charge |  |  |  |  |
|  |  | CodeList Summary (Total Codes: 1090, Included: 4) |  |  |  |  |
|  |  | Code Name |  |  |  |  |
|  |  | C310 Discount |  |  |  |  |
|  |  | D240 Freight |  |  |  |  |
|  |  | D500 Handling |  |  |  |  |
|  |  | F050 Other (See related description) |  |  |  |  |
| SAC05 | 610 | Amount | M | N2 | 1/15 | Must use |
|  |  | Description: Monetary amount |  |  |  |  |
| SAC15 | 352 | Description | M | AN | 1/80 | Must use |
|  |  | 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. C1413-If SAC14 is present, then SAC13 is required.
7. C1615-If SAC16 is present, then SAC15 is required.
8. R0507 - At least one of SAC05 or SAC07 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 with SAC03 to further define 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: 0700 | Max: 1 |
| :---: | :---: |
| Summary | Optional |
| Loop: N/A | Elements: 2 |

User Option (Usage): Used
Purpose: To transmit a hash total for a specific element in the transaction set
Element Summary:

| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CTT01 | 354 | Number of Line Items | M | NO | 1/6 | Must use |
| Description: Total number of line items in the transaction set |  |  |  |  |  |  |
| CTT02 | 347 | Hash Total | 0 | R | 1/10 | Used |

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. 18E2 Fifth occurrence of value being hashed. -------- 1873 Hash Total

## 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: 0800 | Max: 1 |
| :---: | :---: |
| Summary | Mandatory |
| Loop: N/A | Elements: 2 |

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

| Element Summary: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ref | Id | Element Name | Req | Type | Min/Max | Usage |
| SE01 | 96 | Number of Included Segments | M | No | 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. $S E$ is the last segment of each transaction set.
