850   Purchase Order

Functional Group=PO

This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Transaction Set (850) 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 placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
0100	ST	Transaction Set Header	M	1			Must use
0200	BEG	Beginning Segment for Purchase Order	M	1			Must use
0400	CUR	Currency	O	1			Used
0500	REF	Reference Identification	O	>1			Used
0700	TAX	Tax Reference	O	>1			Used
0800	FOB	F.O.B. Related Instructions	O	>1			Used
1300	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
1500	DTM	Date/Time Reference	O	10			Used
1850	SI	Service Characteristic Identification	O	>1			Used
2400	TD5	Carrier Details (Routing Sequence/Transit Time)	O	>1			Used
2800	CTB	Restrictions/Conditions	O	5			Used
LOOP ID - N1					**200**		
3100	N1	Name	O	1			Used
3200	N2	Additional Name Information	O	2			Used
3300	N3	Address Information	O	2			Used
3400	N4	Geographic Location	O	>1			Used
3600	PER	Administrative Communications Contact	O	>1			Used

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - PO1					**100000**	**N2/0100L**	
0100	PO1	Baseline Item Data	M	1		N2/0100	Must use
0180	SI	Service Characteristic Identification	O	>1			Used
LOOP ID - PID					**1000**		
0500	PID	Product/Item Description	O	1			Used
1000	REF	Reference Identification	O	>1			Used
LOOP ID - SCH					**200**	**N2/2950L**	
2950	SCH	Line Item Schedule	O	1		N2/2950	Used
LOOP ID - N1					**200**		
3500	N1	Name	O	1			Used
3600	N2	Additional Name Information	O	2			Used
3700	N3	Address Information	O	2			Used
3800	N4	Geographic Location	O	1			Used
4000	PER	Administrative Communications Contact	O	3			Used

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - CTT					**1**	**N3/0100L**	
0100	CTT	Transaction Totals	O	1		N3/0100	Used
0300	SE	Transaction Set Trailer	M	1			Must use

Notes:

2/0100L   PO102 is required.

2/0100   PO102 is required.

2/2950L   The SCH segment is used to specify various quantities of items ordered that are to be scheduled. When this segment is used the unit of measurement code (SCH02) should always be identical to the unit of measurement code in the associated PO1 segment (PO103) and the sum of values of quantity (SCH01) should always equal the quantity ordered (PO102) in the PO1 segment.

2/2950   The SCH segment is used to specify various quantities of items ordered that are to be scheduled. When this segment is used the unit of measurement code (SCH02) should always be identical to the unit of measurement code in the associated PO1 segment (PO103) and the sum of values of quantity (SCH01) should always equal the quantity ordered (PO102) in the PO1 segment.

3/0100L   The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

3/0100   The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 segment.

ST Transaction Set Header

Pos: 0100	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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use
		Description: Code uniquely identifying a Transaction Set				
		Code Name				
		850 Purchase Order				
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				
		Must be unique within the group.				

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).

BEG Beginning Segment for Purchase Order

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 6

User Option (Usage): Must use

To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BEG01	353	**Transaction Set Purpose Code**	M	ID	2/2	Must use

Description: Code identifying purpose of transaction set

Code	Name
00	Original
05	Replace
06	Confirmation

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BEG02	92	**Purchase Order Type Code**	M	ID	2/2	Must use

Description: Code specifying the type of Purchase Order

Code	Name
BK	Blanket Order (Quantity firm)
CN	Consigned Order
RR	Repair and Return
SA	Stand-alone Order
SO	Shipped Order
SS	Supply or Service Order
UE	Unit Exchange
WO	Warranty Order

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BEG03	324	**Purchase Order Number**	M	AN	1/22	Must use

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BEG04	328	**Release Number**	O	AN	1/30	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BEG05	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BEG06	367	**Contract Number**	O	AN	1/30	Used

Description: Contract number

Semantics:

1. BEG05 is the date assigned by the purchaser to purchase order.

CUR Currency

Pos: 0400	Max: 1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

To specify the currency (dollars, pounds, pesos, etc.) used in a transaction.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR01	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		Code Name				
		BY Buying Party (Purchaser)				
CUR02	100	**Currency Code**	M	ID	3/3	Must use
		Description: Code (Standard ISO) for country in whose currency the charges are specified				
		CAD Canadian Dollar				
		MEX Mexican Peso				
		USA US Dollar				

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

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

REF   Reference Identification

Pos: 0500	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

To specify identifying information

Element Summary:

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

Code Name

L1   Letters or Notes

If this code is sent, manual intervention is required and the Rail Industry expects interpretation and compliance.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	C	AN	1/50	Used
		Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
REF03	352	**Description**	C	AN	1/80	Used
		Description: A free-form description to clarify the related data elements and their content				

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.

TAX   Tax Reference

Pos: 0700	**Max: >1**
Heading - Optional	
Loop: N/A	**Elements: 4**

User Option (Usage): Used

To provide data required for proper notification/determination of applicable taxes applying to the transaction or business described in the transaction

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TAX01	325	**Tax Identification Number**	C	AN	1/20	Used
		Description: Number assigned to a purchaser (buyer, orderer) by a taxing jurisdiction (state, county, etc.); often called a tax exemption number or certificate number				
TAX02	309	**Location Qualifier**	C	ID	1/2	Used
		Description: Code identifying type of location				
		Code Name				
		SP State/Province				
TAX03	310	**Location Identifier**	C	AN	1/30	Used
		Description: Code which identifies a specific location				
TAX12	441	**Tax Exempt Code**	O	ID	1/1	Used
		Description: Code identifying exemption status from sales and use tax				
		Code Name				
		5 Exempt (Not For Resale)				

Syntax Rules:

1. R0103 - At least one of TAX01 or TAX03 is required.
2. P0203 - If either TAX02 or TAX03 is present, then the other is required.
3. P0405 - If either TAX04 or TAX05 is present, then the other is required.
4. P0607 - If either TAX06 or TAX07 is present, then the other is required.
5. P0809 - If either TAX08 or TAX09 is present, then the other is required.
6. P1011 - If either TAX10 or TAX11 is present, then the other is required.

Comments:

1. Tax ID number is, in many instances, referred to as a Tax Exemption Number. The paired (combined) use of data elements 309 and 310 provides for the designation of five taxing jurisdictions.
2. TAX01 is required if tax exemption is being claimed.

FOB   F.O.B. Related Instructions

Pos: 0800	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

To specify transportation instructions relating to shipment

Element Summary:

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

Description: Code identifying payment terms for transportation charges

Code	Name
CC	Collect
DF	Defined by Buyer and Seller

Code "DF" indicates that the method of payment is not specified.

Code	Name
PC	Prepaid but Charged to Customer
PP	Prepaid (by Seller)
PU	Pickup

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FOB06	309	**Location Qualifier**	C	ID	1/2	Used

Description: Code identifying type of location

Code	Name
CI	City
DE	Destination (Shipping)
OR	Origin (Shipping Point)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
FOB07	352	**Description**	O	AN	1/80	Used

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

Syntax Rules:

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

Semantics:

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

ITD Terms of Sale/Deferred Terms of Sale

Pos: 1300	Max: >1
Heading - Optional	
Loop: N/A	Elements: 6

User Option (Usage): Used

To specify terms of sale

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD01	336	**Terms Type Code**	O	ID	2/2	Used

Description: Code identifying type of payment terms

Code	Name
05	Discount Not Applicable
08	Basic Discount Offered

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD02	333	**Terms Basis Date Code**	O	ID	1/2	Used

Description: Code identifying the beginning of the terms period

Code	Name
3	Invoice Date
5	Invoice Receipt Date

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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

2% = 2 or 2.0

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD05	351	**Terms Discount Days Due**	C	N0	1/3	Used

Description: Number of days in the terms discount period by which payment is due if terms discount is earned

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD07	386	**Terms Net Days**	O	N0	1/3	Used

Description: Number of days until total invoice amount is due (discount not applicable)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ITD13	765	**Day of Month**	C	N0	1/2	Used

Description: The numeric value of the day of the month between 1 and the maximum day of the month being referenced

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.

The following explains the use of the elements:
If ITD01 = "05"

ITD07 is required
ITD03, ITD05, and ITD13 must not be sent
If ITD01 = "08"
ITD03, ITD05, and ITD 07 are required
ITD13 must not be sent
ITD03 must be greater than zero
If ITD01 = "09"
ITD13 is required
ITD03 is required for other than net proximo terms
ITD05 and ITD07 must not be sent,

DTM Date/Time Reference

Pos: 1500	**Max: 10**
Heading - Optional	
Loop: N/A	**Elements: 2**

User Option (Usage): Used

To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		Code "002" implies that shipment is expected as indicated; not before, not after.				
		Code Name				
		002 Delivery Requested				
DTM02	373	**Date**	C	DT	8/8	Used
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of 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.

SI Service Characteristic Identification

Pos: 1850	**Max: >1**
Heading - Optional	
Loop: N/A	**Elements: 5**

User Option (Usage): Used

To specify service characteristic data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI01	559	**Agency Qualifier Code**	M	ID	2/2	Must use

Description: Code identifying the agency assigning the code values

Code **Name**
ZZ   Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI02	1000	**Service Characteristics Qualifier**	M	AN	2/3	Must use

Description: Code from an industry code list qualifying the type of service characteristics

The following codes will be accepted:

EQUIPMENT TYPE (position 1)
L = Locomotive
C = Car
M = Maintenance of Way Equipment
O = Other
N = None - no equipment number furnished

EMERGENCY TYPE (position 2)
O = Equipment out of service
S = Safety emergency
G = Gang or other personnel down and not working
I = Inventory Stockout
N = Not an emergency - this should be used to send equipment number for non-emergency orders

Level of EMERGENCY (position 3)
1 = Causing immediate service delay
2 = Will cause service delays in 1-2 days
3 = Will cause service delays within 1 week
N = Not an emergency

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI03	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service

Equipment Identification Number should appear here

SI04 and SI05 are repeated pairs of data elements 1000 and 234.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI04	1000	**Service Characteristics Qualifier**	C	AN	2/2	Used

Description: Code from an industry code list qualifying the type of service characteristics

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI05	234	**Product/Service ID**	C	AN	1/48	Used

Description: Identifying number for a product or service

User Note 2: *SI05 is repeated pairs of data*

Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
		elements 1000 and 234.				

Syntax Rules:

1. P0405 - If either SI04 or SI05 is present, then the other is required.
2. P0607 - If either SI06 or SI07 is present, then the other is required.
3. P0809 - If either SI08 or SI09 is present, then the other is required.
4. P1011 - If either SI10 or SI11 is present, then the other is required.
5. P1213 - If either SI12 or SI13 is present, then the other is required.
6. P1415 - If either SI14 or SI15 is present, then the other is required.
7. P1617 - If either SI16 or SI17 is present, then the other is required.
8. P1819 - If either SI18 or SI19 is present, then the other is required.
9. P2021 - If either SI20 or SI21 is present, then the other is required.

Comments:

1. SI01 defines the source for each of the service characteristics qualifiers.
2. If the SI is sent, the equipment number from the SI03 must be displayed on the packing list.

TD5   Carrier Details (Routing Sequence/Transit Time)

Pos: 2400	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TD502	66	**Identification Code Qualifier**	C	ID	1/2	Used
		Description: Code designating the system/method of code structure used for Identification Code (67)				
		Code **Name**				
		2 Standard Carrier Alpha Code (SCAC)				
TD503	67	**Identification Code**	C	AN	2/80	Used
		Description: Code identifying a party or other code				
TD505	387	**Routing**	C	AN	1/35	Used
		Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity				

Syntax Rules:

1. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. C0203 - If TD502 is present, then TD503 is required.

Semantics:

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

Comments:

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

Routing Information is to be determined in the following order of priority:
* Segment TD5
* General letter of routing instructions furnished by the buyer
* Customary routing

CTB Restrictions/Conditions

Pos: 2800	**Max: 5**
Heading - Optional	
Loop: N/A	**Elements: 4**

User Option (Usage): Used

To specify restrictions/conditions (such as shipping, ordering)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTB01	688	**Restrictions/Conditions Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type of restriction/condition

Code	Name
OR	Ordering

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTB02	352	**Description**	C	AN	1/80	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTB03	673	**Quantity Qualifier**	C	ID	2/2	Used

Description: Code specifying the type of quantity

Code	Name
04	Discrete Quantity - Rejected Material: Disposition Replacement
05	Discrete Quantity - Rejected Material: Disposition Credit

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTB04	380	**Quantity**	C	R	1/15	Used

Description: Numeric value of quantity

Syntax Rules:

1. R020406 - At least one of CTB02, CTB04 or CTB06 is required.
2. P0304 - If either CTB03 or CTB04 is present, then the other is required.

This segment must be sent only when BEG02 = "WO".

Loop N1

Pos: 3100	**Repeat: 200**
Optional	
Loop: N1	**Elements: N/A**

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
3100	N1	Name	O	1		Used
3200	N2	Additional Name Information	O	2		Used
3300	N3	Address Information	O	2		Used
3400	N4	Geographic Location	O	>1		Used
3600	PER	Administrative Communications Contact	O	>1		Used

Four N1 loops are required for each PO: One each for N101 = "BT", "BY", "SE", and "ST". The "SF" loop is optional and may be sent to one or more roads. The "ST" loop can be used for either permanent or non-permanent shipping addresses. The use of various segments and elements for each of the loops can be found in Table I of the Appendix.

The Buyer expects the "BT" loop to be returned on any invoice exactly as transmitted on the Purchase Order. (See Guideline for 810 RIFMAT).

N1 Name

Pos: 3100	**Max: 1**
Heading - Optional	
Loop: N1	**Elements: 4**

User Option (Usage): Used

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

Element Summary:

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

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

Code Name
BT   Bill-to-Party
BY   Buying Party (Purchaser)
SE   Selling Party
SF   Ship From
ST   Ship To

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	C	AN	1/60	Used

Description: Free-form name

If N101 = "BY", N102 will contain the legal name of the buyer.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	C	ID	1/2	Used

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

Absence of code value in N103 when N101 = "ST" indicates that this address is not a permanent address. The seller is expected to utilize the information in segments N1, N2, N3, and N4, to package, label, and consign the material.

Code Name
92   Assigned by Buyer or Buyer's Agent

Use of code value "92" in N103 when N101 = "ST" notifies the supplier that the value in N104 is a code for a "permanent" ship to address, and that the information in segments N2, N3 and N4 is expected to change very infrequently. A receiver may elect to capture the N1 data on an internal table. However, the receiver is expected to compare the information as transmitted with the table data. If no table data is found, a new table record may be created. If table data is found and changes are detected, the use of code value "92" implies that the changes are permanent, that the table data can be changed, and that all open orders to this location can be adjusted to the new address.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	C	AN	2/80	Used

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.

Four N1 loops are required for each PO: One each for N101 = "BT", "BY", "SE", and "ST". The "SF" loop is optional and may be sent to one or more roads. The "ST" loop can be used for either permanent or non-permanent shipping addresses. The use of various segments and elements for each of the loops can be found in Table I of the Appendix.

The Buyer expects the "BT" loop to be returned on any invoice exactly as transmitted on the Purchase Order. (See Guideline for 810 RIFMAT).

N2 Additional Name Information

Pos: 3200	**Max: 2**
Heading - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

To specify additional names

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

See Table I of the Appendix.

N3   Address Information

Pos: 3300	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

To specify the location of the named party

Element Summary:

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

See Table I of the Appendix.

N4 Geographic Location

Pos: 3400   Max: >1
Heading - Optional
Loop: N1   Elements: 4

User Option (Usage): Used

To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
N402	156	**State or Province Code**	C	ID	2/2	Used
		Description: Code (Standard State/Province) as defined by appropriate government agency				
		See Table III of the Appendix for Canadian provinces and US State codes.				
N403	116	**Postal Code**	O	ID	3/15	Used
		Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	**Country Code**	C	ID	2/3	Used
		Description: Code identifying the country				
		CA Canada				
		MX Mexico				
		US United States				

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.

See Table I of the Appendix.

PER Administrative Communications Contact

Pos: 3600	**Max: >1**
Heading - Optional	
Loop: N1	**Elements: 6**

User Option (Usage): Used

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				
		Code **Name**				
		BD Buyer Name or Department				
		RD Receiving Dock				
PER02	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				
PER03	365	**Communication Number Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code **Name**				
		EM Electronic Mail				
		FX Facsimile				
		TE Telephone				
PER04	364	**Communication Number**	C	AN	1/256	Used
		Description: Complete communications number including country or area code when applicable				
PER05	365	**Communication Number Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type of communication number				
		Code **Name**				
		EM Electronic Mail				
		FX Facsimile				
		TE Telephone				
PER06	364	**Communication Number**	C	AN	1/256	Used
		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.

See Table I of the Appendix.

If the PER segment is sent and N101 = "BY", then PER01 = "BD"; if N101 = "ST", then PER01 = "RD".

Loop PO1

Pos: 0100	Repeat: 100000
Mandatory	
Loop: PO1	**Elements: N/A**

To specify basic and most frequently used line item data

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0100	PO1	Baseline Item Data	M	1		Must use
0180	SI	Service Characteristic Identification	O	>1		Used
0500		Loop PID	O		1000	Used
1000	REF	Reference Identification	O	>1		Used
2950		Loop SCH	O		200	Used
3500		Loop N1	O		200	Used

PO1 Baseline Item Data

Pos: 0100	Max: 1
Detail - Mandatory	
Loop: PO1	Elements: 11

User Option (Usage): Must use

To specify basic and most frequently used line item data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO101	350	**Assigned Identification**	O	AN	1/20	Used
		Description: Alphanumeric characters assigned for differentiation within a transaction set				
PO102	330	**Quantity Ordered**	C	R	1/15	Used
		Description: Quantity ordered				
PO103	355	**Unit or Basis for Measurement Code**	O	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken				
		See Table IV of the Appendix for unit or basis for measurement codes.				
PO104	212	**Unit Price**	C	R	1/17	Used
		Description: Price per unit of product, service, commodity, etc.				
		Unit price will be expressed in the Unit Of Measure Code as specified in PO103. Unit Price will be net of gross price, trade discounts and item-specific mark-ups, but will not be adjusted for payment terms or any order-specific charges.				
PO105	639	**Basis of Unit Price Code**	O	ID	2/2	Used
		Description: Code identifying the type of unit price for an item				

Code Name
CA Catalog
CT Contract
ES Estimated
QT Quoted

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO106	235	**Product/Service ID Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		PO106 through PO111 are repeated pairs of data elements 235 and 234.				

Code Name
MF Manufacturer
PI Purchaser's Item Code
VP Vendor's (Seller's) Part Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO107	234	**Product/Service ID**	C	AN	1/48	Used
		Description: Identifying number for a product or service				
PO108	235	**Product/Service ID Qualifier**	C	ID	2/2	Used
		Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)				

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PO109	234	**Product/Service ID** **Description:** Identifying number for a product or service	C	AN	1/48	Used
PO110	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
PO111	234	**Product/Service ID** **Description:** Identifying number for a product or service	C	AN	1/48	Used

Syntax Rules:

1. C0302 - If PO103 is present, then PO102 is required.
2. C0504 - If PO105 is present, then PO104 is required.
3. P0607 - If either PO106 or PO107 is present, then the other is required.
4. P0809 - If either PO108 or PO109 is present, then the other is required.
5. P1011 - If either PO110 or PO111 is present, then the other is required.
6. P1213 - If either PO112 or PO113 is present, then the other is required.
7. P1415 - If either PO114 or PO115 is present, then the other is required.
8. P1617 - If either PO116 or PO117 is present, then the other is required.
9. P1819 - If either PO118 or PO119 is present, then the other is required.
10. P2021 - If either PO120 or PO121 is present, then the other is required.
11. P2223 - If either PO122 or PO123 is present, then the other is required.
12. P2425 - If either PO124 or PO125 is present, then the other is required.

Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. PO101 is the line item identification.
3. PO106 through PO125 provide for ten different product/service IDs per each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

SI Service Characteristic Identification

Pos: 0180	Max: >1
Detail - Optional	
Loop: PO1	Elements: 5

User Option (Usage): Used

To specify service characteristic data

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI01	559	**Agency Qualifier Code**	M	ID	2/2	Must use

Description: Code identifying the agency assigning the code values

Code Name
ZZ   Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI02	1000	**Service Characteristics Qualifier**	M	AN	2/2	Must use

Description: Code from an industry code list qualifying the type of service characteristics

User Note 2: The following codes will be accepted:
EQUIPMENT TYPE (position 1)
L = Locomotive
C = Car
M = Maintenance of Way Equipment
O = Other
N = None - no equipment number furnished

EMERGENCY TYPE (position 2)
O = Equipment out of service
S = Safety emergency
G = Gang or other personnel down and not
*   working*
I = Inventory Stockout
N = Not an emergency - this should be used
*   to send equipment number for non-*
*   emergency orders*
Level of EMERGENCY (position 3)
1 = Causing immediate service delay
2 = Will cause service delays in 1-2 days
3 = Will cause service delays within 1 week
N = Not an emergency

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI03	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service

Identifying number for a product or service

SI04 and SI05 are repeated pairs of data elements 1000 and 234.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI04	1000	**Service Characteristics Qualifier**	C	AN	2/2	Used

Description: Code from an industry code list qualifying the type of service characteristics

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SI05	234	**Product/Service ID**	C	AN	1/48	Used

Description: Identifying number for a product or service

Syntax Rules:

1. P0405 - If either SI04 or SI05 is present, then the other is required.
2. P0607 - If either SI06 or SI07 is present, then the other is required.
3. P0809 - If either SI08 or SI09 is present, then the other is required.
4. P1011 - If either SI10 or SI11 is present, then the other is required.
5. P1213 - If either SI12 or SI13 is present, then the other is required.
6. P1415 - If either SI14 or SI15 is present, then the other is required.
7. P1617 - If either SI16 or SI17 is present, then the other is required.
8. P1819 - If either SI18 or SI19 is present, then the other is required.
9. P2021 - If either SI20 or SI21 is present, then the other is required.

Comments:

1. SI01 defines the source for each of the service characteristics qualifiers.
2. If the SI is sent, the equipment number from the SI03 must be displayed on the packing list.

Loop PID

Pos: 0500	Repeat: 1000
	Optional
Loop: PID	Elements: N/A

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0500	PID	Product/Item Description	O	1		Used

PID Product/Item Description

Pos: 0500	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

User Option (Usage): Used

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	Used
		Description: Code indicating the format of a description				
		Code Name				
		F Free-form				
PID05	352	**Description**	C	AN	1/80	Used
		Description: A free-form description to clarify the related data elements and their content				

Syntax Rules:

1. R0405 - At least one of PID04 or PID05 is required.

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: 1000   Max: >1
Detail - Optional
Loop: PO1   Elements: 3

User Option (Usage): Used

To specify identifying information

Element Summary:

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

Description: Code qualifying the Reference Identification

If code "C1" or "98" is sent, the date of the specification may be sent in REF03 in the format MMDDYYYY.

Code Name
98   Container/Packaging Specification Number
      Description: A numeric or alphanumeric identification assigned to a unique packaging/container configuration
BO   Bin Location Number
C1   Customer material specification number
JB   Job (Project) Number
KD   Special Instructions Number
L1   Letters or Notes
PW   Prior purchase order number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	C	AN	1/50	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF03	352	**Description**	C	AN	1/80	Used

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

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 SCH

Pos: 2950	Repeat: 200
Optional	
Loop: SCH	Elements: N/A

To specify the data for scheduling a specific line-item

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
2950	SCH	Line Item Schedule	O	1		Used

Use of this segment will override the use of segment CSH and DTM (if sent) for this line item.

SCH Line Item Schedule

Pos: 2950	**Max: 1**
Detail - Optional	
Loop: SCH	**Elements: 4**

User Option (Usage): Used

To specify the data for scheduling a specific line-item

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SCH01	380	**Quantity**	M	R	1/15	Must use
		Description: Numeric value of quantity				
SCH02	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				
		See Table IV of the Appendix for unit or basis for measurement codes.				
SCH05	374	**Date/Time Qualifier**	M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time				
		Codes "002", "010', and "077" imply that shipment/delivery is expected as indicated; not before, not after. Code "074" implies that shipment is expected upon reciept of order, with delivery expected no later then SCH06.				

Code	Name
002	Delivery Requested
010	Requested Ship
037	Requested Ship Not Before
038	Requested Ship No Later Than
039	Requested Ship Week of
074	Requested for Delivery (Prior to and Including)
176	Expedited on

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SCH06	373	**Date**	M	DT	8/8	Must use
		Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year				

Semantics:
1. SCH12 is the schedule identification.

Comments:
1. SCH05 specifies the interpretation to be used for SCH06 and SCH07.

Use of this segment will override the use of segment CSH and DTM (if sent) for this line item.

Loop N1

Pos: 3500	**Repeat: 200**
Optional	
Loop: N1	**Elements: N/A**

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
3500	N1	Name	O	1		Used
3600	N2	Additional Name Information	O	2		Used
3700	N3	Address Information	O	2		Used
3800	N4	Geographic Location	O	1		Used
4000	PER	Administrative Communications Contact	O	3		Used

N1 Name

Pos: 3500	**Max: 1**
Detail - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N101	98	**Entity Identifier Code**	M	ID	2/3	Must use
		Description: Code identifying an organizational entity, a physical location, property or an individual				
		Code Name				
		ST Ship To				
N102	93	**Name**	C	AN	1/60	Used
		Description: Free-form name				

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

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

N2 Additional Name Information

Pos: 3600	Max: 2
Detail - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

To specify additional names

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

N3   Address Information

Pos: 3700	**Max: 2**
Detail - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

To specify the location of the named party

Element Summary:

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

N4 Geographic Location

Pos: 3800	**Max: 1**
Detail - Optional	
Loop: N1	**Elements: 4**

User Option (Usage): Used

To specify the geographic place of the named party

Element Summary:

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

CA   Canada
MX   Mexico
US   United States

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.

PER Administrative Communications Contact

Pos: 4000	**Max: 3**
Detail - Optional	
Loop: N1	**Elements: 6**

User Option (Usage): Used

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

Code **Name**
BD   Buyer Name or Department
RD   Receiving Dock

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

Description: Free-form name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER03	365	**Communication Number Qualifier**	C	ID	2/2	Used

Description: Code identifying the type of communication number

Code **Name**
EM   Electronic Mail
FX   Facsimile
TE   Telephone

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER04	364	**Communication Number**	C	AN	1/256	Used

Description: Complete communications number including country or area code when applicable

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER05	365	**Communication Number Qualifier**	C	ID	2/2	Used

Description: Code identifying the type of communication number

Code **Name**
EM   Electronic Mail
FX   Facsimile
TE   Telephone

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PER06	364	**Communication Number**	C	AN	1/256	Used

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 CTT

Pos: 0100	Repeat: 1
Optional	
Loop: CTT	**Elements: N/A**

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
0100	CTT	Transaction Totals	O	1		Used

CTT Transaction Totals

Pos: 0100   Max: 1
Summary - Optional
Loop: CTT   Elements: 1

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use
		Description: Total number of line items in the transaction set				

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: 0300	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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use
		Description: Total number of segments included in a transaction set including ST and SE segments				
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				
		Must be identical to the transaction set control number in the ST segment.				

Comments:

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

Table of Contents