



# 850 Purchase Order

X12/V4010/850: 850 Purchase Order

**Version: 1.0**

**Company:**

**JR Simplot Company**

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**Notes:**

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# 850 Purchase Order

Functional Group=**PO**

**Purpose:** 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:

<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	BEG	Beginning Segment for Purchase Order	M	1			Must use
050	REF	Reference Identification	O	>1			Used
150	DTM	Date/Time Reference	O	10			Used
240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used
<b>LOOP ID - N1</b>					<b>200</b>		
310	N1	Name	O	1			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>
<b>LOOP ID - PO1</b>					<b>100000</b>	<b>N2/010L</b>	
010	PO1	Baseline Item Data	M	1		N2/010	Must use
<b>LOOP ID - PID</b>					<b>1000</b>		
050	PID	Product/Item Description	O	1			Used
<b>LOOP ID - PKG</b>					<b>200</b>		
305	PKG	Marking, Packaging, Loading	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>
<b>LOOP ID - CTT</b>					<b>1</b>	<b>N3/010L</b>	
010	CTT	Transaction Totals	O	1		N3/010	Used
030	SE	Transaction Set Trailer	M	1			Must use

## Notes:

2/010L PO102 is required.

2/010 PO102 is required.

3/010L 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.

3/010 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: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Must use

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b>	M	ID	3/3	Must use
		<b>Description:</b> Code uniquely identifying a Transaction Set				
		<b>All valid standard codes are used. (Total Codes: 298)</b>				
ST02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Must use
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

## Semantics:

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

# BEG Beginning Segment for Purchase Order

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

**User Option (Usage):** Must use

**Purpose:** To indicate the beginning of the Purchase Order 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>
BEG01	353	<b>Transaction Set Purpose Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code identifying purpose of transaction set				
		<b>CodeList Summary</b> (Total Codes: 65, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		00		Original		
BEG02	92	<b>Purchase Order Type Code</b>	M	ID	2/2	Must use
		<b>Description:</b> Code specifying the type of Purchase Order				
		<b>CodeList Summary</b> (Total Codes: 69, Included: 1)				
		<u>Code</u>		<u>Name</u>		
		NE		New Order		
BEG03	324	<b>Purchase Order Number</b>	M	AN	1/22	Must use
		<b>Description:</b> Identifying number for Purchase Order assigned by the orderer/purchaser				
BEG05	373	<b>Date</b>	M	DT	8/8	Must use
		<b>Description:</b> Date expressed as CCYYMMDD				
BEG06	367	<b>Contract Number</b>	O	AN	1/30	Used
		<b>Description:</b> Contract number				

## Semantics:

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

# REF Reference Identification

Pos: 050	Max: >1
Heading - Optional	
Loop: N/A	Elements: 3

**User Option (Usage):** Used

**Purpose:** To specify identifying information

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Must use
		<b>Description:</b> Code qualifying the Reference Identification				
		<b>CodeList Summary</b> (Total Codes: 1503, Included: 1)				
		<b>Code Name</b>				
		LOI Logical Observation Identifier Names and Codes (LOINC)				
REF02	127	<b>Reference Identification</b>	X	AN	1/30	Used
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
REF03	352	<b>Description</b>	X	AN	1/80	Used
		<b>Description:</b> 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.

# DTM Date/Time Reference

Pos: 150	Max: 10
Heading - Optional	
Loop: N/A	Elements: 2

**User Option (Usage):** Used

**Purpose:** To specify pertinent dates and times

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
DTM01	374	Date/Time Qualifier	M	ID	3/3	Must use				
<p><b>Description:</b> Code specifying type of date or time, or both date and time</p> <p><b>CodeList Summary</b> (Total Codes: 1112, Included: 1)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>010</td> <td>Requested Ship</td> </tr> </tbody> </table>							<u>Code</u>	<u>Name</u>	010	Requested Ship
<u>Code</u>	<u>Name</u>									
010	Requested Ship									
DTM02	373	Date	X	DT	8/8	Used				
<p><b>Description:</b> Date expressed as CCYYMMDD</p>										

## 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.

# TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 240	Max: 12
Heading - Optional	
Loop: N/A	Elements: 3

**User Option (Usage):** Used

**Purpose:** To specify the carrier and sequence of routing and provide transit time 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>
TD501	133	<b>Routing Sequence Code</b>	O	ID	1/2	Used
<p><b>Description:</b> Code describing the relationship of a carrier to a specific shipment movement</p> <p><b>CodeList Summary</b> (Total Codes: 23, Included: 1)</p> <p><b>Code Name</b></p> <p>B Origin/Delivery Carrier (Any Mode)</p>						
TD502	66	<b>Identification Code Qualifier</b>	X	ID	1/2	Used
<p><b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)</p> <p><b>CodeList Summary</b> (Total Codes: 215, Included: 4)</p> <p><b>Code Name</b></p> <p>2 Standard Carrier Alpha Code (SCAC)</p> <p>91 Assigned by Seller or Seller's Agent</p> <p>92 Assigned by Buyer or Buyer's Agent</p> <p>93 Code assigned by the organization originating the transaction set</p>						
TD503	67	<b>Identification Code</b>	X	AN	2/80	Used
<p><b>Description:</b> Code identifying a party or other code</p>						

## Syntax Rules:

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

## Semantics:

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

## 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.

# N1 Name

Pos: 310	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

**User Option (Usage):** Used

**Purpose:** 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	<b>Entity Identifier Code</b>	M	ID	2/3	Must use
<b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual						
<b>CodeList Summary</b> (Total Codes: 1312, Included: 2)						
<b>Code Name</b>						
SF Ship From						
ST Ship To						
N102	93	<b>Name</b>	X	AN	1/60	Used
<b>Description:</b> Free-form name						
N103	66	<b>Identification Code Qualifier</b>	X	ID	1/2	Used
<b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)						
<b>CodeList Summary</b> (Total Codes: 215, Included: 1)						
<b>Code Name</b>						
ZZ Mutually Defined						
N104	67	<b>Identification Code</b>	X	AN	2/80	Used
<b>Description:</b> 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.

# PO1 Baseline Item Data

Pos: 010	Max: 1
Detail - Mandatory	
Loop: PO1	Elements: 3

**User Option (Usage):** Must use

**Purpose:** To specify basic and most frequently used line item data

## 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>
PO101	350	<b>Assigned Identification</b>	O	AN	1/20	Used
PO102	330	<b>Quantity Ordered</b>	X	R	1/15	Used
PO103	355	<b>Unit or Basis for Measurement Code</b>	O	ID	2/2	Used

**Description:** Alphanumeric characters assigned for differentiation within a transaction set

**Description:** Quantity ordered

**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: 794, Included: 2)

**Code Name**

MP Metric Ton  
TN Net Ton (2,000 LB).

## 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.

# PID Product/Item Description

Pos: 050	Max: 1
Detail - Optional	
Loop: PID	Elements: 4

**User Option (Usage):** Used

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	<b>Item Description Type</b>	M	ID	1/1	Must use
<b>Description:</b> Code indicating the format of a description						
<b>CodeList Summary</b> (Total Codes: 3, Included: 1)						
<b>Code Name</b>						
S Structured (From Industry Code List)						
PID02	750	<b>Product/Process Characteristic Code</b>	O	ID	2/3	Used
<b>Description:</b> Code identifying the general class of a product or process characteristic						
<b>CodeList Summary</b> (Total Codes: 217, Included: 1)						
<b>Code Name</b>						
08 Product						
PID03	559	<b>Agency Qualifier Code</b>	X	ID	2/2	Used
<b>Description:</b> Code identifying the agency assigning the code values						
<b>CodeList Summary</b> (Total Codes: 177, Included: 1)						
<b>Code Name</b>						
FP Fertilizer Products						
PID04	751	<b>Product Description Code</b>	X	AN	1/12	Used
<b>Description:</b> A code from an industry code list which provides specific data about a product characteristic						

## 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.

# PKG Marking, Packaging, Loading

Pos: 305	Max: 1
Detail - Optional	
Loop: PKG	Elements: 4

**User Option (Usage):** Used

**Purpose:** To describe marking, packaging, loading, and unloading requirements

## 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>
PKG01	349	<b>Item Description Type</b>	X	ID	1/1	Used
<p><b>Description:</b> Code indicating the format of a description</p> <p><b>CodeList Summary</b> (Total Codes: 3, Included: 1)</p> <p><b>Code Name</b></p> <p>S    Structured (From Industry Code List)</p>						
PKG02	753	<b>Packaging Characteristic Code</b>	O	ID	1/5	Used
<p><b>Description:</b> Code specifying the marking, packaging, loading and related characteristics being described</p> <p><b>CodeList Summary</b> (Total Codes: 44, Included: 1)</p> <p><b>Code Name</b></p> <p>36    Package Specifications</p>						
PKG03	559	<b>Agency Qualifier Code</b>	X	ID	2/2	Used
<p><b>Description:</b> Code identifying the agency assigning the code values</p> <p><b>CodeList Summary</b> (Total Codes: 176, Included: 1)</p> <p><b>Code Name</b></p> <p>ZZ    Mutually Defined</p>						
PKG04	754	<b>Packaging Description Code</b>	X	AN	1/7	Used
<p><b>Description:</b> A code from an industry code list which provides specific data about the marking, packaging or loading and unloading of a product</p>						

## Syntax Rules:

1. R040506 - At least one of PKG04, PKG05 or PKG06 is required.
2. C0403 - If PKG04 is present, then PKG03 is required.
3. C0501 - If PKG05 is present, then PKG01 is required.

## Semantics:

1. PKG04 should be used for industry-specific packaging description codes.

## Comments:

1. Use the MEA (Measurements) Segment to define dimensions, tolerances, weights, counts, physical restrictions, etc.
2. If PKG01 equals "F", then PKG05 is used. If PKG01 equals "S", then PKG04 is used. If PKG01 equals "X", then both PKG04 and PKG05 are used.
3. Use PKG03 to indicate the organization that publishes the code list being referred to.
4. Special marking or tagging data can be given in PKG05 (description).

# CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: CTT	Elements: 1

**User Option (Usage):** Used

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items	M	NO	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: 030	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Must use

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

## Element Summary:

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

## Comments:

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