

ANSI X12 version 4010 850 Purchase Order

VERSION: 1.0 FINAL

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Trading Partner:	All



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.

Segments:

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

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
150	DTM	Date/Time Reference	O	10			Used

LOOP ID - N1

200

310	N1	Name	M	1			Must use
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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>
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LOOP ID - PO1

100000

010	PO1	Baseline Item Data	M	1		N2/010	Must use
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LOOP ID - PID

1000

050	PID	Product/Item Description	O	1			Used
210	DTM	Date/Time Reference	O	10			Used

LOOP ID - SCH

200

295	SCH	Line Item Schedule	O	1		N2/295	Used
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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>
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LOOP ID - CTT

1

010	CTT	Transaction Totals	M	1		N3/010	Used
030	SE	Transaction Set Trailer	M	1			Must use



08/10/00

Purchase Order - 850

Segments:

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

Notes:

- 2/010 PO102 is required.
- 2/295 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.
- 3/010 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.

ISA Interchange Control Header

Pos:	Max: 1
- Mandatory	
Loop: N/A	Elements: 16

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier Description: Code to identify the type of information in the Authorization Information	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		00 No Authorization Information Present (No Meaningful Information in I02)				
ISA02	I02	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code to identify the type of information in the Security Information	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		00 No Security Information Present (No Meaningful Information in I04)				
ISA04	I04	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		01 Duns (Dun & Bradstreet)				
		09 X.121 (CCITT)				
		12 Phone (Telephone Companies)				
		ZZ Mutually Defined				
ISA06	I06	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use



ISA07	I05	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <u>Code</u> <u>Name</u> 12 Phone (Telephone Companies) 13	M	ID	2/2	Must use
ISA08	I07	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them User Note 1: 2194614000 Production ID 2194614462 Test ID	M	AN	15/15	Must use
ISA09	I08	Interchange Date Description: Date of the interchange	M	DT	6/6	Must use
ISA10	I09	Interchange Time Description: Time of the interchange	M	TM	4/4	Must use
ISA11	I10	Interchange Control Standards Identifier Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.	M	ID	1/1	Must use
ISA12	I11	Interchange Control Version Number Description: This version number covers the interchange control segments <u>Code</u> <u>Name</u> 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M	ID	5/5	Must use
ISA13	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	I13	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1) <u>Code</u> <u>Name</u> 0 No Acknowledgment Requested	M	ID	1/1	Must use
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information <u>Code</u> <u>Name</u> P Production Data T Test Data	M	ID	1/1	Must use
ISA16	I15	Component Element Separator Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M		1/1	Must use

GS

Functional Group Header

Pos:	Max: 1
- Mandatory	
Loop: N/A	Elements: 8

To indicate the beginning of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		PO Purchase Order (850)				
GS02	142	Application Sender's Code Description: Code identifying party sending transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS03	124	Application Receiver's Code Description: Code identifying party receiving transmission. Codes agreed to by trading partners <i>User Note 1: 2194614000 Production 2194614462 Test</i>	M	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M	TM	4/8	Must use
GS06	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	Responsible Agency Code Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard	M	ID	1/2	Must use
		<u>Code</u> <u>Name</u>				
		X Accredited Standards Committee X12				
GS08	480	Version / Release / Industry Identifier Code Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed	M	AN	1/12	Must use



08/10/00

Purchase Order - 850

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Code</u> <u>Name</u>				
	004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997				

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST

Transaction Set Header

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u>				
		850 Purchase Order				
ST02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Semantics:

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

BEG Beginning Segment for Purchase Order

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

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	Transaction Set Purpose Code Description: Code identifying purpose of transaction set	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		00 Original				
BEG02	92	Purchase Order Type Code Description: Code specifying the type of Purchase Order	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		DS Dropship				
		NE New Order				
		SA Stand-alone Order				
BEG03	324	Purchase Order Number Description: Identifying number for Purchase Order assigned by the orderer/purchaser	M	AN	1/22	Must use
BEG05	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use

Semantics:

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

DTM Date/Time Reference

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

To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u>				
		010 Requested Ship				
DTM02	373	Date Description: Date expressed as CCYYMMDD	C	DT	8/8	Used

Syntax:

- DTM02 R020305 -- At least one of DTM02, DTM03 or DTM05 is required.

N1

Name

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

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>										
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must use										
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>BT</td> <td>Bill-to-Party</td> </tr> <tr> <td>ST</td> <td>Ship To</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	BT	Bill-to-Party	ST	Ship To								
<u>Code</u>	<u>Name</u>															
BT	Bill-to-Party															
ST	Ship To															
N102	93	Name Description: Free-form name	C	AN	1/60	Used										
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	C	ID	1/2	Used										
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>D-U-N-S Number, Dun & Bradstreet</td> </tr> <tr> <td>9</td> <td>D-U-N-S+4, D-U-N-S Number with Four Character Suffix</td> </tr> <tr> <td>12</td> <td>Telephone Number (Phone)</td> </tr> <tr> <td>92</td> <td>Assigned by Buyer or Buyer's Agent</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	1	D-U-N-S Number, Dun & Bradstreet	9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	12	Telephone Number (Phone)	92	Assigned by Buyer or Buyer's Agent				
<u>Code</u>	<u>Name</u>															
1	D-U-N-S Number, Dun & Bradstreet															
9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix															
12	Telephone Number (Phone)															
92	Assigned by Buyer or Buyer's Agent															
N104	67	Identification Code Description: Code identifying a party or other code	M	AN	2/80	Must use										
		User Note 1: <i>Mandatory for use with the Ship To (ST) N1 segment</i>														

Syntax:

1. N102 R0203 -- At least one of N102 or N103 is required.
2. N103 P0304 -- If either N103 or N104 are present, then the others are required.

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

PO1 Baseline Item Data

Pos: 010	Max: 1
Detail - Mandatory	
Loop: PO1	Elements: 9

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	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
PO102	330	Quantity Ordered Description: Quantity ordered	M	R	1/15	Must use
PO103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	O	ID	2/2	Used
		<u>Code</u> <u>Name</u>				
		EA Each				
		FT Foot				
		LB Pound				
PO104	212	Unit Price Description: Price per unit of product, service, commodity, etc.	O	R	1/17	Used
PO105	639	Basis of Unit Price Code Description: Code identifying the type of unit price for an item	O	ID	2/2	Used
		<u>Code</u> <u>Name</u>				
		CP Current Price (Subject to Change)				
PO106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		BP Buyer's Part Number				
		UP U.P.C. Consumer Package Code (1-5-5-1)				
PO107	234	Product/Service ID Description: Identifying number for a product or service	M	AN	1/48	Must use
PO108	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
		<u>Code</u> <u>Name</u>				
		BP Buyer's Part Number				
		UP U.P.C. Consumer Package Code (1-5-5-1)				
PO109	234	Product/Service ID Description: Identifying number for a product or service	C	AN	1/48	Used

Syntax:

1. PO103 C0302 -- If PO103 is present, then PO102 is required
2. PO105 C0504 -- If PO105 is present, then PO104 is required
3. PO106 P0607 -- If either PO106 or PO107 are present, then the others are required.
4. PO108 P0809 -- If either PO108 or PO109 are present, then the others are 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: 2

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type Description: Code indicating the format of a description	M	ID	1/1	Must use
		<u>Code</u> <u>Name</u> F Free-form				
PID05	352	Description Description: A free-form description to clarify the related data elements and their content	M	AN	1/80	Must use

Comments:

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

DTM Date/Time Reference

Pos: 210	Max: 10
Detail - Optional	
Loop: PO1	Elements: 2

To specify pertinent dates and times

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u>				
		002 Delivery Requested				
DTM02	373	Date Description: Date expressed as CCYYMMDD	C	DT	8/8	Used

SCH Line Item Schedule

Pos: 295	Max: 1
Detail - Optional	
Loop: SCH	Elements: 4

To specify the data for scheduling a specific line-item

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>
SCH01	380	Quantity Description: Numeric value of quantity	M	R	1/15	Must use
SCH02	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		EA Each				
		FT Foot				
		LB Pound				
SCH05	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u>				
		002 Delivery Requested				
SCH06	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use

Comments:

- SCH05 specifies the interpretation to be used for SCH06.

CTT Transaction Totals

Pos: 010 Max: 1
 Summary - Mandatory
 Loop: CTT Elements: 2

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items Description: Total number of line items in the transaction set	M	N0	1/6	Must use
CTT02	347	Hash Total Description: Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example:-.0018 First occurrence of value being hashed..18 Second occurrence of value being hashed.1.8 Third occurrence of value being hashed.18.01 Fourth occurrence of value being hashed.-----1855 Hash total prior to truncation.855 Hash total after truncation to three-digit field.	O	R	1/10	Used

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

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

Element Summary:

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

Comments:

- SE is the last segment of each transaction set.

GE

Functional Group Trailer

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

To indicate the end of a functional group and to provide control information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	Number of Transaction Sets Included Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	Group Control Number Description: Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

- The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

- The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA

Interchange Control Trailer

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

To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	M	N0	9/9	Must use