



thyssenkrupp

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EDI Guidelines

for

Purchase Order (850) v. 4010

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22355 West Eleven Mile Road
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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.

Not Defined:

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

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	BEG	Beginning Segment for Purchase Order	M	1			Must use
040	CUR	Currency	O	1			Used
050	REF	Reference Identification	O	>1			Used
060	PER	Administrative Communications Contact	O	3			Used
070	TAX	Tax Reference	O	>1			Used
080	FOB	F.O.B. Related Instructions	O	>1			Used
130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Used
150	DTM	Date/Time Reference	O	10			Used
240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Used

<u>LOOP ID - N9</u>					<u>1000</u>		
295	N9	Reference Identification	O	1			Used
300	MSG	Message Text	O	1000			Used

<u>LOOP ID - N1</u>					<u>200</u>		
310	N1	Name	O	1			Used
320	N2	Additional Name Information	O	2			Used
330	N3	Address Information	O	2			Used
340	N4	Geographic Location	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>
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<u>LOOP ID - PO1</u>					<u>100000</u>	<u>N2/010L</u>	
010	PO1	Baseline Item Data	M	1		N2/010	Must use
020	CUR	Currency	O	1			Used

<u>LOOP ID - CTP</u>					<u>>1</u>		
040	CTP	Pricing Information	O	1			Used

<u>LOOP ID - PID</u>					<u>1000</u>		
050	PID	Product/Item Description	O	1			Used
100	REF	Reference Identification	O	>1			Used
170	TAX	Tax Reference	O	>1			Used
210	DTM	Date/Time Reference	O	10			Used
289	MSG	Message Text	O	>1			Used

<u>LOOP ID - SCH</u>					<u>200</u>	<u>N2/295L</u>	
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295	SCH	Line Item Schedule	O	1	N2/295	Used
LOOP ID - PKG					200	
305	PKG	Marking, Packaging, Loading	O	1		Used
310	MEA	Measurements	O	>1		Used
LOOP ID - N9					1000	
330	N9	Reference Identification	O	1		Used
LOOP ID - N1					200	
350	N1	Name	O	1		Used
370	N3	Address Information	O	2		Used
380	N4	Geographic Location	O	1		Used
LOOP ID - SLN					1000	
470	SLN	Subline Item Detail	O	1		Used
LOOP ID - AMT					>1	
600	AMT	Monetary Amount	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>
030	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

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

Notes:

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

ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 16

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier Description: Code identifying the type of information in the Authorization Information All valid standard codes are used.	M	ID	2/2	Must use
ISA02	I02	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use
ISA03	I03	Security Information Qualifier Description: Code identifying the type of information in the Security Information All valid standard codes are used.	M	ID	2/2	Must use
ISA04	I04	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	Interchange ID Qualifier Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.	M	ID	2/2	Must use
ISA06	I06	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use
ISA07	I05	Interchange ID Qualifier Description: Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used.	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	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	I65	Repetition Separator Description: Type is not applicable; the repetition separator is a delimiter and not a data element; this field provides the delimiter used to separate repeated occurrences of a simple data element or a composite data	M		1/1	Must use

		structure; this value must be different than the data element separator, component element separator, and the segment terminator				
ISA12	I11	Interchange Control Version Number Description: Code specifying the version number of the interchange control segments All valid standard codes are used.	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 indicating sender's request for an interchange acknowledgment All valid standard codes are used.	M	ID	1/1	Must use
ISA15	I14	Usage Indicator Description: Code indicating whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.	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
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets All valid standard codes are used.	M	ID	2/2	Must use
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	M	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	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 identifying the issuer of the standard; this code is used in conjunction with Data Element 480 All valid standard codes are used.	M	ID	1/2	Must use
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 All valid standard codes are used.	M	AN	1/12	Must use

Semantics:

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

Comments:

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

ST Transaction Set Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set All valid standard codes are used.	M	ID	3/3	Must use
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:

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: 6

User Option (Usage): Must use

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				
		06 Confirmation				
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>				
		BE Blanket Order/Estimated Quantities (Not firm Commitment)				
		CF Confirmation				
		NE New Order				
		RL Release or Delivery 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
BEG04	328	Release Number Description: Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	O	AN	1/30	Used
BEG05	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
BEG06	367	Contract Number Description: Contract number	O	AN	1/30	Used

Semantics:

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

CUR Currency

Pos: 040	Max: 1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CUR01	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must use
		<u>Code</u> <u>Name</u> SE Selling Party				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CUR02	100	Currency Code Description: Code (Standard ISO) for country in whose currency the charges are specified	M	ID	3/3	Must use

Syntax:

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

Comments:

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

REF Reference Identification

Pos: 050	Max: >1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name				
		CA Cost Allocation Reference				
		DP Department Number				
		IA Internal Vendor Number				
		JB Job (Project) Number				
		PO Purchase Order Number				
		RQ Purchase Requisition Number				
		VR Vendor ID Number				
		YD Buyer Identification				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used

Syntax:

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

Semantics:

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

TAX Tax Reference

Pos: 070	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TAX01	325	Tax Identification Number Description: Number assigned to a purchaser (buyer, orderer) by a taxing jurisdiction (state, county, etc.); often called a tax exemption number or certificate number	X	AN	1/20	Used
TAX02	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
		<u>Code</u> <u>Name</u> SP State/Province				
TAX03	310	Location Identifier Description: Code which identifies a specific location	X	AN	1/30	Used
TAX12	441	Tax Exempt Code Description: Code identifying exemption status from sales and use tax	O	ID	1/1	Used
		<u>Code</u> <u>Name</u> 1 Yes (Tax Exempt) 3 Exempt (For Resale)				

Syntax:

1. R0103 - At least one of TAX01,TAX03 is required
2. P0203 - If either TAX02,TAX03 is present, then all are required
3. P0405 - If either TAX04,TAX05 is present, then all are required
4. P0607 - If either TAX06,TAX07 is present, then all are required
5. P0809 - If either TAX08,TAX09 is present, then all are required
6. P1011 - If either TAX10,TAX11 is present, then all are 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: 080	Max: >1
Heading - Optional	
Loop: N/A	Elements: 7

User Option (Usage): Used

To specify transportation instructions relating to shipment

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>
FOB01	146	Shipment Method of Payment Description: Code identifying payment terms for transportation charges	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		CC Collect				
		DF Defined by Buyer and Seller				
		PP Prepaid (by Seller)				
FOB02	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
		<u>Code</u> <u>Name</u>				
		DE Destination (Shipping)				
		ZZ Mutually Defined				
FOB03	352	Description Description: A free-form description to clarify the related data elements and their content	O	AN	1/80	Used
FOB04	334	Transportation Terms Qualifier Code Description: Code identifying the source of the transportation terms All valid standard codes are used.	O	ID	2/2	Used
FOB05	335	Transportation Terms Code Description: Code identifying the trade terms which apply to the shipment transportation responsibility	X	ID	3/3	Used
		<u>Code</u> <u>Name</u>				
		FOB Free on Board				
FOB06	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
		<u>Code</u> <u>Name</u>				
		AC City and State				
		OR Origin (Shipping Point)				
FOB07	352	Description Description: A free-form description to clarify the related data elements and their content	O	AN	1/80	Used

Syntax:

1. C0302 - If FOB03 is present, then all of FOB02 are required
2. C0405 - If FOB04 is present, then all of FOB05 are required
3. C0706 - If FOB07 is present, then all of FOB06 are required
4. C0809 - If FOB08 is present, then all of FOB09 are 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: 130 Max: >1
 Heading - Optional
 Loop: N/A Elements: 13

User Option (Usage): Used

To specify terms of sale

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ITD01	336	Terms Type Code Description: Code identifying type of payment terms	O	ID	2/2	Used
		<u>Code</u> <u>Name</u>				
		01 Basic				
		05 Discount Not Applicable				
		08 Basic Discount Offered				
		ZZ Mutually Defined				
ITD02	333	Terms Basis Date Code Description: Code identifying the beginning of the terms period	O	ID	1/2	Used
		<u>Code</u> <u>Name</u>				
		2 Delivery Date				
		3 Invoice Date				
		5 Invoice Receipt Date				
		15 Receipt of Goods				
ITD03	338	Terms Discount Percent Description: Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date	O	R	1/6	Used
ITD04	370	Terms Discount Due Date Description: Date payment is due if discount is to be earned expressed in format CCYYMMDD	X	DT	8/8	Used
ITD05	351	Terms Discount Days Due Description: Number of days in the terms discount period by which payment is due if terms discount is earned	X	N0	1/3	Used
ITD06	446	Terms Net Due Date Description: Date when total invoice amount becomes due expressed in format CCYYMMDD	O	DT	8/8	Used
ITD07	386	Terms Net Days Description: Number of days until total invoice amount is due (discount not applicable)	O	N0	1/3	Used
ITD08	362	Terms Discount Amount Description: Total amount of terms discount	O	N2	1/10	Used
ITD09	388	Terms Deferred Due Date Description: Date deferred payment or percent of invoice payable is due expressed in format CCYYMMDD	O	DT	8/8	Used
ITD10	389	Deferred Amount Due Description: Deferred amount due for payment	X	N2	1/10	Used
ITD11	342	Percent of Invoice Payable Description: Amount of invoice payable expressed in percent	X	R	1/5	Used
ITD12	352	Description	O	AN	1/80	Used

		Description: A free-form description to clarify the related data elements and their content				
ITD13	765	Day of Month	X	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:

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

Semantics:

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

Comments:

1. If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

DTM Date/Time Reference

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

User Option (Usage): Used

To specify pertinent dates and times

Element Summary:

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

Syntax:

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

TD5 Carrier Details (Routing Sequence/Transit Time)

Pos: 240	Max: 12
Heading - Optional	
Loop: N/A	Elements: 5

User Option (Usage): Used

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	Routing Sequence Code Description: Code describing the relationship of a carrier to a specific shipment movement	O	ID	1/2	Used
		Code Name				
		B Origin/Delivery Carrier (Any Mode)				
		O Origin Carrier (Air, Motor, or Ocean)				
TD502	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	X	ID	1/2	Used
		Code Name				
		2 Standard Carrier Alpha Code (SCAC)				
TD503	67	Identification Code Description: Code identifying a party or other code	X	AN	2/80	Used
TD504	91	Transportation Method/Type Code Description: Code specifying the method or type of transportation for the shipment	X	ID	1/2	Used
		Code Name				
		M Motor (Common Carrier)				
		T Best Way (Shippers Option)				
		U Private Parcel Service				
		ZZ Mutually defined				
TD505	387	Routing Description: Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	X	AN	1/35	Used

Syntax:

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

Loop N9

Pos: 295	Repeat: 1000
Optional	
Loop: N9	Elements: N/A

To transmit identifying information as specified by the Reference Identification Qualifier

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
295	N9	Reference Identification	O	1		Used
300	MSG	Message Text	O	1000		Used

N9 Reference Identification

Pos: 295	Max: 1
Heading - Optional	
Loop: N9	Elements: 3

User Option (Usage): Used

To transmit identifying information as specified by the Reference Identification Qualifier

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>
N901	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name				
		CU Clear Text Clause				
		DP Department Number				
		FA Federal Acquisition Regulations (FAR)				
		L1 Letters or Notes				
		PO Purchase Order Number				
		SH Sender Defined Clause				
		ZZ Mutually Defined				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N902	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used
N903	369	Free-form Description Description: Free-form descriptive text	X	AN	1/45	Used

Syntax:

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

Semantics:

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

MSG Message Text

Pos: 300	Max: 1000
Heading - Optional	
Loop: N9	Elements: 1

User Option (Usage): Used

To provide a free-form format that allows the transmission of text 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>
MSG01	933	Free-Form Message Text Description: Free-form message text	M	AN	1/264	Must use

Syntax:

1. C0302 - If MSG03 is present, then all of MSG02 are 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.

Loop N1

Pos: 310	Repeat: 200
Optional	
Loop: N1	Elements: N/A

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
310	N1	Name	O	1		Used
320	N2	Additional Name Information	O	2		Used
330	N3	Address Information	O	2		Used
340	N4	Geographic Location	O	>1		Used

N1

Name

Pos: 310	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:

<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
		<u>Code</u> <u>Name</u>				
		BT Bill-to-Party				
		BY Buying Party (Purchaser)				
		MI Planning Schedule/Material Release Issuer				
		PN Party to Receive Shipping Notice				
		SE Selling Party				
		ST Ship To				
		SU Supplier/Manufacturer				
		VN Vendor				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N102	93	Name Description: Free-form name	X	AN	1/60	Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	X	ID	1/2	Used
		<u>Code</u> <u>Name</u>				
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix				
		92 Assigned by Buyer or Buyer's Agent				
		93 Code assigned by the organization originating the transaction set				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N104	67	Identification Code Description: Code identifying a party or other code	X	AN	2/80	Used

Syntax:

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

Comments:

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

N2

Additional Name Information

Pos: 320	Max: 2
Heading - Optional	
Loop: N1	Elements: 1

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N201	93	Name Description: Free-form name	M	AN	1/60	Must use

N3 Address Information

Pos: 330	Max: 2
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

To specify the location of the named party

Element Summary:

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

N4 Geographic Location

Pos: 340	Max: >1
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

To specify the geographic place of the named party

Element Summary:

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

Syntax:

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

Comments:

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

Loop PO1

Pos: 010	Repeat: 100000
Mandatory	
Loop: PO1	Elements: N/A

To specify basic and most frequently used line item data

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	PO1	Baseline Item Data	M	1		Must use
020	CUR	Currency	O	1		Used
040		Loop CTP	O		>1	Used
050		Loop PID	O		1000	Used
100	REF	Reference Identification	O	>1		Used
170	TAX	Tax Reference	O	>1		Used
210	DTM	Date/Time Reference	O	10		Used
289	MSG	Message Text	O	>1		Used
295		Loop SCH	O		200	Used
305		Loop PKG	O		200	Used
330		Loop N9	O		1000	Used
350		Loop N1	O		200	Used
470		Loop SLN	O		1000	Used
600		Loop AMT	O		>1	Used

PO1 Baseline Item Data

Pos: 010 Max: 1
 Detail - Mandatory
 Loop: PO1 Elements: 17

User Option (Usage): Must use

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	X	R	1/15	Used
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				
		LO Lot				
		PC Piece				
		SH Sheet				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO104	212	Unit Price Description: Price per unit of product, service, commodity, etc.	X	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>				
		EH Shift Differential				
		HP Price per Hundred				
		NQ No Quote				
		PE Price per Each				
		TE Contract Price per Each				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID	2/2	Used
		<u>Code</u> <u>Name</u>				
		BP Buyer's Part Number				
		CB Buyer's Catalog Number				
		CG Commodity Grouping				
		DR Drawing Revision Number				
		EC Engineering Change Level				
		IN Buyer's Item Number				
		MG Manufacturer's Part Number				
		PD Part Number Description				
		RN Release Number				

VC Vendor's (Seller's) Catalog Number
 VP Vendor's (Seller's) Part Number
 ZZ Mutually Defined

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PO107	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
PO108	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) All valid standard codes are used.	X	ID	2/2	Used
PO109	234	Product/Service ID Description: Identifying number for a product or service	X	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) All valid standard codes are used.	X	ID	2/2	Used
PO111	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
PO112	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) All valid standard codes are used.	X	ID	2/2	Used
PO113	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
PO114	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) All valid standard codes are used.	X	ID	2/2	Used
PO115	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
PO116	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) All valid standard codes are used.	X	ID	2/2	Used
PO117	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used

Syntax:

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

CUR Currency

Pos: 020	Max: 1
Detail - Optional	
Loop: PO1	Elements: 2

User Option (Usage): Used

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

Element Summary:

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

Syntax:

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

Comments:

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

Loop CTP

Pos: 040	Repeat: >1
	Optional
Loop: CTP	Elements: N/A

To specify pricing information

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
040	CTP	Pricing Information	O	1		Used

CTP Pricing Information

Pos: 040	Max: 1
Detail - Optional	
Loop: CTP	Elements: 3

User Option (Usage): Used

To specify pricing 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>
CTP02	236	Price Identifier Code Description: Code identifying pricing specification	X	ID	3/3	Used
		Code Name				
		CUP Confirmed Unit Price				
		INV Invoice Billing Price				
		NET Net Item Price				
CTP03	212	Unit Price Description: Price per unit of product, service, commodity, etc.	X	R	1/17	Used
CTP05	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	OT	Comp		Used
	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
		Code Name				
		CW Hundred Pounds (CWT)				
		SH Sheet				

Syntax:

1. P0405 - If either CTP04,CTP05 is present, then all are required
2. C0607 - If CTP06 is present, then all of CTP07 are required
3. C0902 - If CTP09 is present, then all of CTP02 are required
4. C1002 - If CTP10 is present, then all of CTP02 are required
5. C1103 - If CTP11 is present, then all of CTP03 are required

Semantics:

1. CTP07 is a multiplier factor to arrive at a final discounted price. A multiplier of .90 would be the factor if a 10% discount is given.
2. CTP08 is the rebate amount.

Comments:

1. See Figures Appendix for an example detailing the use of CTP03 and CTP04.
2. See Figures Appendix for an example detailing the use of CTP03, CTP04 and CTP07.

Loop PID

Pos: 050	Repeat: 1000
Optional	
Loop: PID	Elements: N/A

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
050	PID	Product/Item Description	O	1		Used

PID Product/Item Description

Pos: 050	Max: 1
Detail - Optional	
Loop: PID	Elements: 3

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
PID01	349	Item Description Type Description: Code indicating the format of a description All valid standard codes are used.	M	ID	1/1	Must use				
PID02	750	Product/Process Characteristic Code Description: Code identifying the general class of a product or process characteristic <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>08</td> <td>Product</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	08	Product	O	ID	2/3	Used
<u>Code</u>	<u>Name</u>									
08	Product									
PID05	352	Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Used				

Syntax:

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

Semantics:

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

Comments:

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

REF Reference Identification

Pos: 100	Max: >1
Detail - Optional	
Loop: PO1	Elements: 2

User Option (Usage): Used

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name				
		CA Cost Allocation Reference				
		JB Job (Project) Number				
		OP Original Purchase Order				
		PC Production Code				
		ZZ Mutually Defined				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used

Syntax:

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

Semantics:

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

TAX Tax Reference

Pos: 170	Max: >1
Detail - Optional	
Loop: PO1	Elements: 5

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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
TAX01	325	Tax Identification Number Description: Number assigned to a purchaser (buyer, orderer) by a taxing jurisdiction (state, county, etc.); often called a tax exemption number or certificate number	X	AN	1/20	Used
TAX02	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
		<u>Code</u> <u>Name</u> SP State/Province				
TAX03	310	Location Identifier Description: Code which identifies a specific location	X	AN	1/30	Used
TAX04	309	Location Qualifier Description: Code identifying type of location	X	ID	1/2	Used
		<u>Code</u> <u>Name</u> ZZ Mutually Defined				
TAX05	310	Location Identifier Description: Code which identifies a specific location	X	AN	1/30	Used

Syntax:

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

DTM Date/Time Reference

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

User Option (Usage): Used

To specify pertinent dates and times

Element Summary:

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

Syntax:

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

MSG Message Text

Pos: 289	Max: >1
Detail - Optional	
Loop: PO1	Elements: 1

User Option (Usage): Used

To provide a free-form format that allows the transmission of text 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>
MSG01	933	Free-Form Message Text Description: Free-form message text	M	AN	1/264	Must use

Syntax:

1. C0302 - If MSG03 is present, then all of MSG02 are 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.

Loop SCH

Pos: 295	Repeat: 200
Optional	
Loop: SCH	Elements: N/A

To specify the data for scheduling a specific line-item

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
295	SCH	Line Item Schedule	O	1		Used

SCH Line Item Schedule

Pos: 295	Max: 1
Detail - Optional	
Loop: SCH	Elements: 7

User Option (Usage): Used

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										
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>EA</td> <td>Each</td> </tr> <tr> <td>LB</td> <td>Pound</td> </tr> <tr> <td>PC</td> <td>Piece</td> </tr> <tr> <td>SH</td> <td>Sheet</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	EA	Each	LB	Pound	PC	Piece	SH	Sheet				
<u>Code</u>	<u>Name</u>															
EA	Each															
LB	Pound															
PC	Piece															
SH	Sheet															
SCH03	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual All valid standard codes are used.	O	ID	2/3	Used										
SCH04	93	Name Description: Free-form name	X	AN	1/60	Used										
SCH05	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	M	ID	3/3	Must use										
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>002</td> <td>Delivery Requested</td> </tr> <tr> <td>010</td> <td>Requested Ship</td> </tr> <tr> <td>069</td> <td>Promised for Delivery</td> </tr> <tr> <td>106</td> <td>Required By</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	002	Delivery Requested	010	Requested Ship	069	Promised for Delivery	106	Required By				
<u>Code</u>	<u>Name</u>															
002	Delivery Requested															
010	Requested Ship															
069	Promised for Delivery															
106	Required By															
SCH06	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use										
SCH07	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)	O	TM	4/8	Used										

Syntax:

1. C0304 - If SCH03 is present, then all of SCH04 are required
2. L080910 - If SCH08 is present, then at least one of SCH09,SCH10 is required
3. C0908 - If SCH09 is present, then all of SCH08 are required
4. C1008 - If SCH10 is present, then all of SCH08 are required

Semantics:

1. SCH12 is the schedule identification.

Comments:

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

Loop PKG

Pos: 305	Repeat: 200
Optional	
Loop: PKG	Elements: N/A

To describe marking, packaging, loading, and unloading requirements

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
305	PKG	Marking, Packaging, Loading	O	1		Used
310	MEA	Measurements	O	>1		Used

PKG Marking, Packaging, Loading

Pos: 305	Max: 1
Detail - Optional	
Loop: PKG	Elements: 3

User Option (Usage): Used

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	Item Description Type Description: Code indicating the format of a description All valid standard codes are used.	X	ID	1/1	Used
PKG04	754	Packaging Description Code Description: A code from an industry code list which provides specific data about the marking, packaging or loading and unloading of a product	X	AN	1/7	Used
PKG05	352	Description Description: A free-form description to clarify the related data elements and their content	X	AN	1/80	Used

Syntax:

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

MEA Measurements

Pos: 310 Max: >1
 Detail - Optional
 Loop: PKG Elements: 10

User Option (Usage): Used

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

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>
MEA01	737	Measurement Reference ID Code Description: Code identifying the broad category to which a measurement applies All valid standard codes are used.	O	ID	2/2	Used
MEA02	738	Measurement Qualifier Description: Code identifying a specific product or process characteristic to which a measurement applies All valid standard codes are used.	O	ID	1/3	Used
MEA03	739	Measurement Value Description: The value of the measurement	X	R	1/20	Used
MEA04	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	OT	Comp		Used
	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 All valid standard codes are used.	M	ID	2/2	Must use
	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Used
	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Used
	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 All valid standard codes are used.	O	ID	2/2	Used
	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Used
	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Used
	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 All valid standard codes are used.	O	ID	2/2	Used
	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Used
	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Used
	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	O	ID	2/2	Used

		been taken All valid standard codes are used.				
	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Used
	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Used
	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 All valid standard codes are used.	O	ID	2/2	Used
	1018	Exponent Description: Power to which a unit is raised	O	R	1/15	Used
	649	Multiplier Description: Value to be used as a multiplier to obtain a new value	O	R	1/10	Used
MEA05	740	Range Minimum Description: The value specifying the minimum of the measurement range	X	R	1/20	Used
MEA06	741	Range Maximum Description: The value specifying the maximum of the measurement range	X	R	1/20	Used
MEA07	935	Measurement Significance Code Description: Code used to benchmark, qualify or further define a measurement value All valid standard codes are used.	O	ID	2/2	Used
MEA08	936	Measurement Attribute Code Description: Code used to express an attribute response when a numeric measurement value cannot be determined All valid standard codes are used.	X	ID	2/2	Used
MEA09	752	Surface/Layer/Position Code Description: Code indicating the product surface, layer or position that is being described All valid standard codes are used.	O	ID	2/2	Used
MEA10	1373	Measurement Method or Device Description: The method or device used to record the measurement All valid standard codes are used.	O	ID	2/4	Used

Syntax:

1. R03050608 - At least one of MEA03,MEA05,MEA06,MEA08 is required
2. C0504 - If MEA05 is present, then all of MEA04 are required
3. C0604 - If MEA06 is present, then all of MEA04 are required
4. L07030506 - If MEA07 is present, then at least one of MEA03,MEA05,MEA06 is required
5. E0803 - Only one of MEA08,MEA03 may be presented

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Loop N9

Pos: 330	Repeat: 1000
Optional	
Loop: N9	Elements: N/A

To transmit identifying information as specified by the Reference Identification Qualifier

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
330	N9	Reference Identification	O	1		Used

N9 Reference Identification

Pos: 330	Max: 1
Detail - Optional	
Loop: N9	Elements: 3

User Option (Usage): Used

To transmit identifying information as specified by the Reference Identification Qualifier

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>
N901	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name				
		CU Clear Text Clause				
		FA Federal Acquisition Regulations (FAR)				
		L1 Letters or Notes				
		PM Part Number				
		QI Quality Inspection Area Identifier				
		ZZ Mutually Defined				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N902	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used
N903	369	Free-form Description Description: Free-form descriptive text	X	AN	1/45	Used

Syntax:

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

Semantics:

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

Loop N1

Pos: 350	Repeat: 200
Optional	
Loop: N1	Elements: N/A

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

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
350	N1	Name	O	1		Used
370	N3	Address Information	O	2		Used
380	N4	Geographic Location	O	1		Used

N1

Name

Pos: 350	Max: 1
Detail - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must use
		Code Name				
		MF Manufacturer of Goods				
		ST Ship To				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N102	93	Name Description: Free-form name	X	AN	1/60	Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	X	ID	1/2	Used
		Code Name				
		92 Assigned by Buyer or Buyer's Agent				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N104	67	Identification Code Description: Code identifying a party or other code	X	AN	2/80	Used

Syntax:

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

Comments:

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

N3

Address Information

Pos: 370	Max: 2
Detail - Optional	
Loop: N1	Elements: 1

User Option (Usage): Used

To specify the location of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information Description: Address information	M	AN	1/55	Must use

N4 Geographic Location

Pos: 380	Max: 1
Detail - Optional	
Loop: N1	Elements: 3

User Option (Usage): Used

To specify the geographic place of the named party

Element Summary:

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

Syntax:

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

Comments:

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

Loop SLN

Pos: 470	Repeat: 1000
Optional	
Loop: SLN	Elements: N/A

To specify product subline detail item data

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
470	SLN	Subline Item Detail	O	1		Used

SLN Subline Item Detail

Pos: 470	Max: 1
Detail - Optional	
Loop: SLN	Elements: 7

User Option (Usage): Used

To specify product subline detail 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>
SLN01	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	M	AN	1/20	Must use
SLN02	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
SLN03	662	Relationship Code Description: Code indicating the relationship between entities	M	ID	1/1	Must use
		<u>Code</u> <u>Name</u> I Included				
SLN04	380	Quantity Description: Numeric value of quantity	X	R	1/15	Used
SLN05	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	OT	Comp		Used
	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> SH Sheet				
SLN09	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X	ID	2/2	Used
		<u>Code</u> <u>Name</u> PR Process Number				
SLN10	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used

Syntax:

1. P0405 - If either SLN04,SLN05 is present, then all are required
2. C0706 - If SLN07 is present, then all of SLN06 are required
3. C0806 - If SLN08 is present, then all of SLN06 are required
4. P0910 - If either SLN09,SLN10 is present, then all are required
5. P1112 - If either SLN11,SLN12 is present, then all are required
6. P1314 - If either SLN13,SLN14 is present, then all are required
7. P1516 - If either SLN15,SLN16 is present, then all are required
8. P1718 - If either SLN17,SLN18 is present, then all are required
9. P1920 - If either SLN19,SLN20 is present, then all are required
10. P2122 - If either SLN21,SLN22 is present, then all are required

11. P2324 - If either SLN23,SLN24 is present, then all are required
12. P2526 - If either SLN25,SLN26 is present, then all are required
13. P2728 - If either SLN27,SLN28 is present, then all are required

Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 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 AMT

Pos: 600	Repeat: >1
Optional	
Loop: AMT	Elements: N/A

To indicate the total monetary amount

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
600	AMT	Monetary Amount	O	1		Used

AMT Monetary Amount

Pos: 600	Max: 1
Detail - Optional	
Loop: AMT	Elements: 2

User Option (Usage): Used

To indicate the total monetary amount

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>
AMT01	522	Amount Qualifier Code Description: Code to qualify amount	M	ID	1/3	Must use
		<u>Code</u> <u>Name</u>				
		1 Line Item Total				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AMT02	782	Monetary Amount Description: Monetary amount	M	R	1/18	Must use

SE Transaction Set Trailer

Pos: 030	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments Description: Total number of segments included in a transaction set including ST and SE segments	M	NO	1/10	Must use
SE02	329	Transaction Set Control Number Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Must use

Comments:

- SE is the last segment of each transaction set.

GE Functional Group Trailer

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

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

Semantics:

- 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
Not Defined - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	M	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

SAMPLE DATA FILE

ISA*00* *00* *01*666666666 *01*006957724
 *031009*1208*U*00401*091208492*0*P*>^
 GS*PO*666666666*006957724*20031009*1208*091208491*X*004010^
 ST*850*091208490^
 BEG*00*SA*6213060**20031009^
 REF*IA*0000010356^
 PER*BD*YOUR BUYER NAME HERE*TE*777-666-8888^
 ITD*05*15*****45^
 N9*L1*SPECIAL INSTRUCTIONS*HTXT^
 MSG*THIS ORDER IS SUBJECT TO THE TERMS AND CONDITIONS EFFECTIVE JANUARY 1,
 2001^
 N1*ST*YOUR SHIP-TO COMPANY NAME*93*1004^
 N2*NAME LINE TWO^
 N3*YOUR ADDRESS HERE^
 N4*YOUR CITY HERE*GA*305046000^
 N1*BT*YOUR BILL TO NAME HERE*9*066035486^
 PO1*00001*4000.000*LB*1.08**BP*0002012^
 PID*F****11/16" BR ROD HEX 360 R C^
 DTM*002*20031010^
 PO1*00002*25.000*LB*5.67**BP*0007303^
 PID*F****1/4OD X 065 W 1/2 HD^
 DTM*002*20031010^
 PO1*00003*2000.000*LB*1.36**BP*0002040^
 PID*F****2 BRS HEX ROD 360^
 DTM*002*20031010^
 PO1*00004*300.000*LB*1.55**BP*0001031^
 PID*F****1-1/8 BR ROD RD 360^
 DTM*002*20031010^
 CTT*4^
 SE*26*091208490^
 GE*1*091208491^
 IEA*1*091208492^