Introduction

This guideline provides a description and technical layout of the data segments sent in 3M's EDI invoices (ASC X12 transaction set 810). 3M can send many valid ACS X12 data segments and elements; however, this guide includes only those which are most commonly sent. If you have data requirements that are not covered in this document, please consult your 3M EDI contact.

The ASC X12 version presented in this guideline is 004010. If you cannot receive invoices in version 004010, please consult your 3M EDI contact for information on other ASC X12 versions supported by 3M.

When sending EDI invoices, 3M uses our corporate DUNS number (006173082) in ISA07 and GS02. This DUNS number may be different from the DUNS number you use to identify 3M on your EDI purchase orders. For more information on the ISA and GS segments, refer to the EDI overview at the front of this guide.

An example of a paper-copy invoice and its ASC X12 interpretation can be found at the end of this guideline.

Note: For illustration purposes only, all examples use an asterisk (*) as the data element separator and a caret (^) as the segment terminator. In actual practice, values must be chosen that do not conflict with the data.

810 Invoice

Functional Group ID=IN

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
3	010	ST	Transaction Set Header	M	1		
4	020	BIG	Beginning Segment for Invoice	M	1		
			LOOP ID - N1			200	
5	070	N1	Name	C	1		
7	080	N2	Additional Name Information	O	2		
8	090	N3	Address Information	O	2		
9	100	N4	Geographic Location	O	1		
10	130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1		
12	140	DTM	Date/Time Reference	O	10		

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - IT1			200000	
13	010	IT1	Baseline Item Data (Invoice)	O	1		
			LOOP ID - PID			1000	
15	060	PID	Product/Item Description	O	1		
			LOOP ID - SAC			25	
16	180	SAC	Service, Promotion, Allowance, or Charge Information	O	1		

Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
18	010	TDS	Total Monetary Value Summary	M	1		
19	030	CAD	Carrier Detail	O	1		
			LOOP ID - SAC			25	
20	040	SAC	Service, Promotion, Allowance, or Charge Information	O	1		
			LOOP ID - ISS			>1	

22	060	ISS	Invoice Shipment Summary	O	1	
23	070	CTT	Transaction Totals	O	1	n1
24	080	SE	Transaction Set Trailer	M	1	

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

Segment:	**ST Transaction Set Header**
Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number
Syntax Notes:	
Semantic Notes:	**1** The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:	
Notes:	3M Example(s): ST*810*000005964^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**ST01**	**143**	**Transaction Set Identifier Code**	**M ID 3/3**
			Code uniquely identifying a Transaction Set	
			810 Invoice	
Required	**ST02**	**329**	**Transaction Set Control Number**	**M AN 4/9**
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			Sender-assigned sequential control number to match control number on SE segment.	

Segment: **BIG** **Beginning Segment for Invoice**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates
Syntax Notes:
Semantic Notes:
1 BIG01 is the invoice issue date.
2 BIG03 is the date assigned by the purchaser to purchase order.
3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.
Comments:
1 BIG07 is used only to further define the type of invoice when needed.
Notes: 3M Example(s): BIG*19991018*AB12345*19990928*123456789^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**BIG01**	**373**	**Date**	**M DT 8/8**
			Date expressed as CCYYMMDD	
Required	**BIG02**	**76**	**Invoice Number**	**M AN 1/22**
			Identifying number assigned by issuer	
			3M's seven-position invoice number.	
	BIG03	**373**	**Date**	**O DT 8/8**
			Date expressed as CCYYMMDD	
	BIG04	**324**	**Purchase Order Number**	**O AN 1/22**
			Identifying number for Purchase Order assigned by the orderer/purchaser	
	BIG07	**640**	**Transaction Type Code**	**O ID 2/2**
			Code specifying the type of transaction	
			BIG07 is not used unless the transaction is an adjustment.	
			CR Credit Memo	
			DR Debit Memo	

Segment: **N1** **Name**
Position: 070
Loop: N1 Conditional
Level: Heading
Usage: Conditional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:
1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
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.
Notes: 3M Comments: Remit-to (N101 = RE) and Ship-to (N101 = ST) name loops will always be provided.

3M Example(s):
N1*ST**92*0024^
N1*ST*ABC CORPORATION #0024^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**N101**	**98**	**Entity Identifier Code**	**M ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual	
			RE — Party to receive commercial invoice remittance	
			ST — Ship To	
	N102	**93**	**Name**	**X AN 1/60**
			Free-form name	
	N103	**66**	**Identification Code Qualifier**	**X ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)	
			1 — D-U-N-S Number, Dun & Bradstreet Used for remit-to.	
			92 — Assigned by Buyer or Buyer's Agent Optionally used for ship-to. 3M can store and return to the customer (in N104) a code which the customer has assigned to the ship-to location. If N103/N104 are used for the ship-to code, they are used in lieu of other ship-to name and address information (i.e., N102 N2, N3, and N4 will not be included.)	
	N104	**67**	**Identification Code**	**X AN 2/80**

Code identifying a party or other code

Segment:	**N2 Additional Name Information**
Position:	080
Loop:	N1 Conditional
Level:	Heading
Usage:	Optional
Max Use:	2
Purpose:	To specify additional names or those longer than 35 characters in length
Syntax Notes:	
Semantic Notes:	
Comments:	
Notes:	3M Comments: Used in ship-to N1 loop only if address information cannot be identified by a code in N104.
	3M Example(s): N2*%JOHN JOHNSON & SONS^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**N201**	**93**	**Name** Free-form name	**M AN 1/60**

Segment:	**N3 Address Information**
Position:	090
Loop:	N1 Conditional
Level:	Heading
Usage:	Optional
Max Use:	2
Purpose:	To specify the location of the named party
Syntax Notes:	
Semantic Notes:	
Comments:	
Notes:	3M Comments: Used in ship-to N1 loop only if address information cannot be identified by a code in N104.
	3M Example(s): N3*200 N MAIN ST^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Required	**N301**	**166**	**Address Information**	**M**	**AN 1/55**
			Address information		
	N302	**166**	**Address Information**	**O**	**AN 1/55**
			Address information		

Segment: **N4** **Geographic Location**
Position: 100
Loop: N1 Conditional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: **1** If N406 is present, then N405 is required.
Semantic Notes:
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.
Notes: 3M Comments: Used in ship-to N1 loop only if address information cannot be identified by a code in N104.

3M Example(s): N4*ST PAUL*MN*551441000^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**N401**	**19**	**City Name** Free-form text for city name	**O AN 2/30**
Required	**N402**	**156**	**State or Province Code** Code (Standard State/Province) as defined by appropriate government agency	**O ID 2/2**
Required	**N403**	**116**	**Postal Code** Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	**O ID 3/15**

Segment:	**ITD** **Terms of Sale/Deferred Terms of Sale**
Position:	130
Loop:	
Level:	Heading
Usage:	Optional
Max Use:	>1
Purpose:	To specify terms of sale
Syntax Notes:	**1** If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.
	2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.
	3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.
Semantic Notes:	**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.
Notes:	3M Comments: ITD segment is always provided.
	3M Example(s): ITD*05*3****19991117*30*****NET 30 DAYS^

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Required	**ITD01**	**336**	**Terms Type Code**	**O**	**ID 2/2**
			Code identifying type of payment terms		
			04 — Deferred or Installment		
			05 — Discount Not Applicable		
			08 — Basic Discount Offered		
Required	**ITD02**	**333**	**Terms Basis Date Code**	**O**	**ID 1/2**
			Code identifying the beginning of the terms period		
			3 — Invoice Date		
	ITD03	**338**	**Terms Discount Percent**	**O**	**R 1/6**
			Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date		
			Terms discount percentage available to the purchaser if invoice is paid on or before Terms Discount Due Date (ITD04). Used when ITD01 = 08 and possibly 04.		
	ITD04	**370**	**Terms Discount Due Date**	**X**	**DT 8/8**
			Date payment is due if discount is to be earned expressed in format CCYYMMDD		
			Used when ITD01 = 08 and possibly 04.		
	ITD05	**351**	**Terms Discount Days Due**	**X**	**N0 1/3**
			Number of days in the terms discount period by which payment is due if terms discount is earned		
			Used when ITD01 = 08 and possibly 04.		
	ITD06	**446**	**Terms Net Due Date**	**O**	**DT 8/8**

		Date when total invoice amount becomes due expressed in format CCYYMMDD		
ITD07	**386**	**Terms Net Days**	**O**	**N0 1/3**
		Number of days until total invoice amount is due (discount not applicable)		
ITD08	**362**	**Terms Discount Amount**	**O**	**N2 1/10**
		Total amount of terms discount		
		Used when ITD01 = 08 and possibly 04.		
ITD09	**388**	**Terms Deferred Due Date**	**O**	**DT 8/8**
		Date deferred payment or percent of invoice payable is due expressed in format CCYYMMDD		
		Used only when ITD01 = 04.		
ITD10	**389**	**Deferred Amount Due**	**X**	**N2 1/10**
		Deferred amount due for payment		
		Deferred amount due on date stated in ITD09. Used only when ITD01 = 04.		
ITD12	**352**	**Description**	**O**	**AN 1/80**
		A free-form description to clarify the related data elements and their content		
		Free-form description of terms of sale.		

Segment: **DTM Date/Time Reference**
Position: 140
Loop:
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:
1 At least one of DTM02 DTM03 or DTM05 is required.
2 If DTM04 is present, then DTM03 is required.
3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:
Comments:
Notes: 3M Comments: DTM segment is always provided.

3M Example(s): DTM*011*19991018^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**DTM01**	**374**	**Date/Time Qualifier**	**M ID 3/3**
			Code specifying type of date or time, or both date and time	
			011 Shipped	
Required	**DTM02**	**373**	**Date**	**X DT 8/8**
			Date expressed as CCYYMMDD	

Segment: **IT1** **Baseline Item Data (Invoice)**
Position: 010
Loop: IT1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions
Syntax Notes:
1 If any of IT102 IT103 or IT104 is present, then all are required.
2 If either IT106 or IT107 is present, then the other is required.
3 If either IT108 or IT109 is present, then the other is required.
4 If either IT110 or IT111 is present, then the other is required.
5 If either IT112 or IT113 is present, then the other is required.
6 If either IT114 or IT115 is present, then the other is required.
7 If either IT116 or IT117 is present, then the other is required.
8 If either IT118 or IT119 is present, then the other is required.
9 If either IT120 or IT121 is present, then the other is required.
10 If either IT122 or IT123 is present, then the other is required.
11 If either IT124 or IT125 is present, then the other is required.
Semantic Notes:
1 IT101 is the purchase order line item identification.
Comments:
1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes: 3M Comments: IT1 segment is always provided.

3M Example(s): IT1*001*12*EA*225*RE*BP*654321^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
	IT101	**350**	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set Customer purchase order line number. 3M can return this number only if it was included on an EDI purchase order.	**O**	**AN 1/20**
Required	**IT102**	**358**	**Quantity Invoiced** Number of units invoiced (supplier units)	**X**	**R 1/10**
Required	**IT103**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken 3M uses many different codes from the ASC X12 list.	**X**	**ID 2/2**
Required	**IT104**	**212**	**Unit Price** Price per unit of product, service, commodity, etc.	**X**	**R 1/17**
Required	**IT105**	**639**	**Basis of Unit Price Code**	**O**	**ID 2/2**

		Code identifying the type of unit price for an item		
		HP — Price per Hundred		
		PT — Price per Ton		
		RE — Retail Price per Each		
		RE is the value normally used.		
		TP — Price per Thousand		
IT106	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		IT106/07 will contain the Buyer's Part Number if it was specified on the buyer's EDI purchase order. If the Buyer's Part Number was not specified, IT106/07 will contain the UPC number.		
		BP — Buyer's Part Number		
		UP — U.P.C. Consumer Package Code (1-5-5-1)		
IT107	**234**	**Product/Service ID**	**X**	**AN 1/48**
		Identifying number for a product or service		

Segment: **PID** **Product/Item Description**
Position: 060
Loop: PID Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To describe a product or process in coded or free-form format
Syntax Notes:
1 If PID04 is present, then PID03 is required.
2 At least one of PID04 or PID05 is required.
3 If PID07 is present, then PID03 is required.
4 If PID08 is present, then PID04 is required.
5 If PID09 is present, then PID05 is required.

Semantic Notes:
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.

Notes: 3M Comments: PID segment is always provided. Multiple PID segments may be needed to send the entire product description.

3M Example(s):
PID*F****471 BLUE WIDGET WITH^
PID*F****RED MARKINGS^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**PID01**	**349**	**Item Description Type**	**M ID 1/1**
			Code indicating the format of a description	
			F Free-form	
Required	**PID05**	**352**	**Description**	**X AN 1/80**
			A free-form description to clarify the related data elements and their content	

Segment: **SAC** **Service, Promotion, Allowance, or Charge Information**
Position: 180
Loop: SAC Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Syntax Notes:
1 At least one of SAC02 or SAC03 is required.
2 If either SAC03 or SAC04 is present, then the other is required.
3 If either SAC06 or SAC07 is present, then the other is required.
4 If either SAC09 or SAC10 is present, then the other is required.
5 If SAC11 is present, then SAC10 is required.
6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7 If SAC14 is present, then SAC13 is required.
8 If SAC16 is present, then SAC15 is required.

Semantic Notes:
1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2 SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
3 SAC08 is the allowance or charge rate per unit.
4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
7 SAC16 is used to identify the language being used in SAC15.

Comments:
1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" **-** Dollars in SAC09.

Notes: 3M Example(s): SAC*A*A400***-248*******09***5409 ND ALLOWANCE^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**SAC01**	**248**	**Allowance or Charge Indicator**	**M ID 1/1**
			Code which indicates an allowance or charge for the service specified	
			A Allowance	
			C Charge	
Required	**SAC02**	**1300**	**Service, Promotion, Allowance, or Charge Code**	**X ID 4/4**

			Code identifying the service, promotion, allowance, or charge		
			A400 — Allowance Non-performance		
			D240 — Freight		
			D500 — Handling		
			E740 — New Store Allowance		
			E760 — New Warehouse Discount		
			F050 — Other (See related description)		
			F420 — Placement and/or Removal Charge		
			F800 — Promotional Allowance		
			H850 — Tax		
			ZZZZ — Mutually Defined		
Required	**SAC05**	**610**	**Amount**	**O**	**N2 1/15**
			Monetary amount		
Required	**SAC12**	**331**	**Allowance or Charge Method of Handling Code**	**O**	**ID 2/2**
			Code indicating method of handling for an allowance or charge		
			06 — Charge to be Paid by Customer		
			09 — Allowance To Be Issued by Vendor Code designating vendor as the issuer of an allowance		
Required	**SAC15**	**352**	**Description**	**X**	**AN 1/80**
			A free-form description to clarify the related data elements and their content		

Segment:	**TDS Total Monetary Value Summary**
Position:	010
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To specify the total invoice discounts and amounts
Syntax Notes:	
Semantic Notes:	**1** TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
	2 TDS02 indicates the amount upon which the terms discount amount is calculated.
	3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
	4 TDS04 indicates the total amount of terms discount.
Comments:	**1** TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.
Notes:	3M Example(s): TDS*270694^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**TDS01**	**610**	**Amount** Monetary amount	**M N2 1/15**

Segment:	**CAD Carrier Detail**
Position:	030
Loop:	
Level:	Summary
Usage:	Optional
Max Use:	1
Purpose:	To specify transportation details for the transaction
Syntax Notes:	**1** At least one of CAD05 or CAD04 is required.
	2 If CAD07 is present, then CAD08 is required.
Semantic Notes:	
Comments:	
Notes:	3M Example(s): CAD****FDE*FEDERAL**BM*1234567899^

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
CAD04	**140**	**Standard Carrier Alpha Code** Standard Carrier Alpha Code	**X ID 2/4**
CAD05	**387**	**Routing** Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	**X AN 1/35**
CAD07	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification BM Bill of Lading Number	**O ID 2/3**
CAD08	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

Segment:	**SAC** **Service, Promotion, Allowance, or Charge Information**
Position:	040
Loop:	SAC Optional
Level:	Summary
Usage:	Optional
Max Use:	1
Purpose:	To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge
Syntax Notes:	**1** At least one of SAC02 or SAC03 is required.
	2 If either SAC03 or SAC04 is present, then the other is required.
	3 If either SAC06 or SAC07 is present, then the other is required.
	4 If either SAC09 or SAC10 is present, then the other is required.
	5 If SAC11 is present, then SAC10 is required.
	6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
	7 If SAC14 is present, then SAC13 is required.
	8 If SAC16 is present, then SAC15 is required.
Semantic Notes:	**1** If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
	2 SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
	3 SAC08 is the allowance or charge rate per unit.
	4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
	5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
	6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
	7 SAC16 is used to identify the language being used in SAC15.
Comments:	**1** SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
	2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" **-** Dollars in SAC09.
Notes:	3M Example(s): SAC*C*D240***694*******06***FREIGHT CHARGE^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**SAC01**	**248**	**Allowance or Charge Indicator**	**M ID 1/1**
			Code which indicates an allowance or charge for the service specified	
			A Allowance	
			C Charge	
Required	**SAC02**	**1300**	**Service, Promotion, Allowance, or Charge Code**	**X ID 4/4**

			Code identifying the service, promotion, allowance, or charge		
			A400 — Allowance Non-performance		
			D240 — Freight		
			D500 — Handling		
			E740 — New Store Allowance		
			E760 — New Warehouse Discount		
			F050 — Other (See related description)		
			F420 — Placement and/or Removal Charge		
			F800 — Promotional Allowance		
			H850 — Tax		
			ZZZZ — Mutually Defined		
Required	**SAC05**	**610**	**Amount**	**O**	**N2 1/15**
			Monetary amount		
Required	**SAC12**	**331**	**Allowance or Charge Method of Handling Code**	**O**	**ID 2/2**
			Code indicating method of handling for an allowance or charge		
			06 — Charge to be Paid by Customer		
			09 — Allowance To Be Issued by Vendor Code designating vendor as the issuer of an allowance		
Required	**SAC15**	**352**	**Description**	**X**	**AN 1/80**
			A free-form description to clarify the related data elements and their content		

Segment: **ISS** **Invoice Shipment Summary**
Position: 060
Loop: ISS Optional
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To specify summary details of total items shipped in terms of quantity, weight, and volume
Syntax Notes:
1 At least one of ISS01 ISS03 or ISS05 is required.
2 If either ISS01 or ISS02 is present, then the other is required.
3 If either ISS03 or ISS04 is present, then the other is required.
4 If either ISS05 or ISS06 is present, then the other is required.
Semantic Notes:
1 ISS07 is the quantity of third party pallets.
2 ISS08 is the gross weight of third party pallets in pounds.
Comments:
Notes: 3M Examples(s): ISS*1*PC*2*PG^

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
ISS01	**382**	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	**X R 1/10**
ISS02	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken PC Piece	**X ID 2/2**
ISS03	**81**	**Weight** Numeric value of weight	**X R 1/10**
ISS04	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken PG Pounds Gross	**X ID 2/2**

Segment:	**CTT Transaction Totals**
Position:	070
Loop:	
Level:	Summary
Usage:	Optional
Max Use:	1
Purpose:	To transmit a hash total for a specific element in the transaction set
Syntax Notes:	**1** If either CTT03 or CTT04 is present, then the other is required.
	2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:	
Comments:	**1** This segment is intended to provide hash totals to validate transaction completeness and correctness.
Notes:	3M Comments: CTT segment is always provided.
	3M Examples(s): CTT*1*12^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**CTT01**	**354**	**Number of Line Items**	**M N0 1/6**
			Total number of line items in the transaction set	
			Total number of IT1 segments in the invoice.	
Required	**CTT02**	**347**	**Hash Total**	**O R 1/10**
			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.	
			Total accumulated quantity invoiced (sum of all IT102s).	

Segment: **SE Transaction Set Trailer**
Position: 080
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
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)
Syntax Notes:
Semantic Notes:
Comments: **1** SE is the last segment of each transaction set.
Notes: 3M Examples(s): SE*17*000005964^

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Required	**SE01**	**96**	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	**M N0 1/10**
Required	**SE02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set This will match the control number on the ST segment for this transaction set.	**M AN 4/9**

Invoice Example

This section contains an example to illustrate the use of Transaction Set 810.

Invoice

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PAGE    1 OF    1        ìPURCHASE ORDER..123456789          ìì INVOICE NO......  AB12345 ì
                         àííííííííííííííííííííííííííííííííííííäì TYPE............ ORIGINAL ì
DIRECT INQUIRIES TO:                                          ì DATE.......... 10/18/1999 ì
CREDIT DEPARTMENT                                             ì                           ì
223-2N-08 3M CENTER       ORDER DATE         09/28/1999       ì TERMS OF SALE             ì
ST PAUL MN 55144-1000     SHIP DATE..........10/18/1999       ì NET 30 DAYS               ì
                                                              ì TERMS DATE.....10/18/1999 ì
PHONE NO.. 651-733-8303                                       ì SALES REP.......  T1234-5 ì
                                                              àíííííííííííííííííííííííííííä

                          PARTIAL ORDER....... YES


ACCOUNT NO.
CHARGE TO: AQX1234 ííí
  SHIP TO: XZY1234

ABC CORPORATION #0024                     ABC COMPANY
%JOHN JOHNSON & SONS                      10 MAIN STREET
200 N MAIN ST                             ANYTOWN MN 55123
ST PAUL MN 55144-1000


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ì  QUANTITY  UNIT  DESCRIPTION                                 UNIT PRICE  TOTAL AMOUNTì
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                  PART NUMBER 654321
                  P.O. LINE NO: 001
       12    EACH 02120003134 471 BLUE WIDGET WITH              225.00         2,700.00
                  RED MARKINGS
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                  FREIGHT CHARGE                                                   6.94
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                  EXEMPTION CERTIFICATE:98765432                  R
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    ***     SHPD 10/18 FROM-TELECOM; AUSTI  VIA-FDE  FEDERAL
    ***                                                 B/L-1234567899
    ***                                                2-LBS              1-PCS

                      áíííííííííííííííííííííííííííííííéíííííííííííííííííííííííííííííííííííííâ
                      ì      TOTAL DUE BY: 11/17/1999 ì INVOICE TOTAL          2,706.94  ì
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      Please see reverse side for terms and conditions of sale and address change form.
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ì                           DETACH AND RETURN WITH PAYMENT                               ì
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                               áííííííííííííííííííííííííííâ  INVOICE NO........  AB12345
AQX1234                        ì          REMIT TO        ì  INVOICE DATE.... 10/18/1999
ABC COMPANY                    ì                          ì  TERMS DATE...... 10/18/1999
10 MAIN STREET                 ì 3M        AQX1234        ì
ANYTOWN MN 55123               ì P.O. BOX 102960          ì
                               ì ATLANTA  GA 30368-2960   ì
                               ì                          ì  FREIGHT........        6.94
                               àííííííííííííííííííííííííííä


                                                             TOTAL DUE BY:        11/17/1999
                                                             INVOICE TOTAL          2,706.94

                                              áííííííííííííííííííííííééííííííííííííííííííííííâ
                                              ì    AMOUNT ENCLOSED     ì                      ì
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ASC X12 FORMAT	INTERPRETATION
ST*810*000005964^	ASC X12 Transaction Set: 810 Transaction Set Control Number: 000005964
BIG*19991018*AB12345*19990928 *123456789^	Invoice Date: 10/18/1999 Invoice Number: AB12345 Purchase Order Date: 09/28/1999 Purchase Order Number: 123456789
N1*ST**92*0024^	Ship To: ABC Corporation Buyer-Assigned Location Number: 0024 %John Johnson & Sons 200 N Main St St Paul MN 55144-1000
N1*RE*3M AQX1234*1*956822720^	Remit To: 3M AQX1234 DUNS Number: 956822720
N3*P.O. BOX 102960^	P.O. Box 102960
N4*ATLANTA*GA*303682960^	Atlanta, GA 30368-2960
ITD*05*3****19991117*30*****NET 30 DAYS^	Terms Type Code: 05=Discount Not Applicable Terms Basis Date Code: 3=invoice date Terms Net Due Date: 11/17/1999 Terms Net Days: 30 days Terms Description: Net 30 Days
DTM*011*19991018^	Ship Date: 10/18/1999
IT1*001*12*EA*225*RE*BP*654321^	Customer P.O. Line Number: 001 Quantity: 12 Unit of Measure: EA=Each Unit Price: $225.00 Buyer's Part Number: 654321
PID*F****471 BLUE WIDGET WITH^	Description: 471 Blue Widget With
PID*F****RED MARKINGS^	Red Markings
TDS*270694^	Total Invoice Amount: $2706.94
CAD****FDE*FEDERAL**BM *1234567899^	SCAC: FDE Carrier Name: Federal Bill of Lading Number: 1234567899

SAC*C*D240*694*******06 ***FREIGHT CHARGE^**	Allowance or Charge Indicator: C=Charge Charge Code: D240=Freight Charge Total Amount: $6.94 Method of Handling: 06=Charge to be paid by Customer Description: Freight Charge
ISS*1*PC*2*PG^	Pieces: 1 Pounds Gross: 2
CTT*1*12^	Number of Line Items: 1 Total Accumulated Quantity Invoiced: 12
SE*17*000005964^	Number of Segments: 17 Transaction Set Control Number: 000005964

NOTE: Sample invoice contains fictitious data.