Inbound X12 4010 810 Invoice

ANSI ASC X12 4010

Version: 2.4 Final

Company:	**Daimler Trucks North America, LLC (DTNA)**
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810 Invoice

Functional Group=IN

Purpose: This implementation guide contains the format and establishes the data contents of the ANSI X12 810 Invoice Transaction Set for use within the context of an Electronic Data Interchange (EDI) environment. The 810 Invoice transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided. This document serves as a reference manual and outlines the requirements for all trading partners sending invoices to Daimler Trucks North America, LLC (DTNA) via EDI.

Depending on the end purpose of the materials DTNA is purchasing, (manufacturing, aftermarket, or non-production materials) there are slight differences in invoicing requirements.   As a result some information is listed as conditional. Conditional information is required if your specific situation dictates providing that information, however if it does not apply to your situation, it does not need to be sent. One example of such information is taxes. Most Daimler Trucks North America purchases are for resale and are not taxable. Consequently, the TXI segment would not be necessary. However, if taxes are due, the TXI segment is required.

Please remember timely supplier payment is dependent on accurate ASNs and invoices.

The 810 should be used to request payment for the shipment of material or the rendering of services to a Daimler facility pursuant to a purchase order. This transaction must convey all information necessary to create the payment. Non-PO based invoices or credit memos may not be sent via EDI.

The data transmitted in the 810 is used by Daimler to facilitate matching of invoice information to DTNA facility material receipts; preferably facilitated by an 856 (Ship Notice/ Manifest) transaction. The Shipment Identification Number (SID) is the primary reference used in this process.

Benefits of EDI

EDI provides many benefits to support your business in achieving its objectives. Keep the following in mind as we begin to work together to implement EDI.

• EDI reduces paperwork (forms handling), data entry labor costs, printing costs, and postage costs.

• EDI drives out inefficiencies in the business process.

Organizations choosing EDI should consider that the full benefits are only received when both parties fully integrate the EDI data into their application systems.

EDI Connection

Daimler Trucks North America has selected T-Systems as our third party network. All EDI transmissions between DTNA and its trading partners must go through T-Systems via either a direct communication connection with T-Systems or through a VAN interconnect with T-Systems.

Invoice Guidelines

The Shipping Identification (SID) number is one of the key pieces of information DTNA uses to match the goods received to the invoice. The value of the BSN02 element on the 856 ASN must match the value of the REF02 (where the REF01 is "SI") element on the invoice.

Multiple invoices per SID are not permitted and may result in payment delay. The relationship between invoice and SID must always be one to one, which means only one invoice per SID and only one SID per invoice. Invoice numbers and SID numbers must not be duplicated within a calendar year.

The PO and PO line numbers being invoiced are also critical pieces of information. The PO number on the 856 ASN will be located in the PRF01 element and will need to be returned in the IT109 element of the invoice. The PO line number will be located in the PRF05 element on the 856 ASN and must match the IT111 element on the invoice. The invoice may include multiple PO's and PO line numbers of the same PO type.

Invoices must include the following:

1.   Invoice number - unique in a calendar year

2.   Invoice date

3.   Shipment Identification number (SID) which matches exactly the SID on the ASN (BSN02 on the 856 = REF02 where REF01 = "SI" on the 810) - unique in a calendar year

4.   Name of the supplier and the DTNA-assigned supplier code

5.   DTNA-assigned Ship-to location code (DTNA Plant, Parts Distribution Center (PDC), or Dealer code)

6.   Shipping date

7.   Purchase order number (must match the PRF01 on the 856 ASN)

8.   Purchase order line number (must match the PRF05 on the 856 ASN)

9.   Buyer Part / Material number (must match the LIN03 on the 856 ASN)

10.   Quantity

11.   Unit of Measure

12.   Unit Price

13.   Currency

14.   Total amount

15.   Any other charges i.e. Core charges, Freight, Taxes

Required Segments: ST, BIG, CUR, REF*SI, N1*ST, N1*SU, DTM, IT1, TDS, CTT, SE

Envelope Guidelines

ISA Inbound to DTNA

• The ISA usage indicator (ISA06) must be set to "FTL FIAC" (one space), "FTL FIAC" (two spaces), or "FTLXFIAC"

• The ISA usage indicator (ISA15) during the test period will reflect "T".

• The ISA usage indicator (ISA15) for production must be revised to "P" when production readiness has been determined and scheduled by the Trading Partner and EDI Coordinator at DTNA.

ISA Outbound from DTNA

• The ISA sender code is "FTL FIAC" (one space) on all outbound 820, 824, and 997 transactions, regardless of the value of the ISA receiver code that is sent on associated inbound transactions.

GS Inbound to DTNA

• The application sender's code (GS02) should only include your supplier code, without the DTNA suffix; i.e. FIAC

GS Outbound from DTNA

• The application sender's code will reflect "FTL FIAC" (one space).

Preferred X12 Delimiters:

Preferred Element Separators:

"*" - Asterisk (ASCII Hex "2A")

"~" - Tilde (ASCII Hex "7E")

"`" - Acute (ASCII Hex "60")

Preferred Sub-Element/Component Separators:

">" - Greater Than (ASCII Hex "3E")

"]" - Close Square Bracket (ASCII Hex "5D")

"}" - Close Curly Brace (ASCII Hex "7D")

Preferred Segment Terminators:

"^" - Caret (ASCII Hex "5E")

"~" - Tilde (ASCII Hex "7E")

"|" - Pipe (ASCII Hex "7C")

System Limitations

Purchase order types may not be mixed on the same invoice i.e. Aftermarket and Manufacturing. Please see Table C for a list of DTNA PO types that may be encountered.

Multiple ISA envelopes may be sent within one transmission; however various document types may not be mixed under one ISA i.e. 810's and 856's cannot be combined under the same ISA.

Rejected Invoices

The 824 Application Advice is sent by DTNA to notify a trading partner that an invoice has been rejected. Trading partners are required to monitor for and resolve 824 invoice rejection notices / application advice notices. All 824 notices related to invoices are hard rejections and will require the invoice to be resubmitted. In order to prevent the resubmission from being rejected as a duplicate the invoice number will need to be modified. DTNA recommends adding an "A" to the end of the existing invoice number. Application advice notices are sent out once a day. If the invoice number cannot be modified, a corrected paper version will need to be sent to:

    Daimler Trucks North America, LLC

    PO Box 5800

    Troy, MI 48007-5800

For a list of error messages please refer to Table B.

Functional Acknowledgments

The 997 Functional Acknowledgment is sent by DTNA to acknowledge the receipt of documents sent by our trading partners. The acknowledgement is to confirm that DTNA did receive the transmission; however individual invoices may be rejected later in the process. DTNA will acknowledge each document by the group (GS) control numbers sent on the 810. If an acknowledgment is not received within 72 hours please contact the AP EDI coordinator.

Additional Information

Additional EDI documentation can be found at the below website.

https://daimler.portal.covisint.com/web/freightliner/downloads/-/journal_content/

or by contacting us at (503) 745-8776.

Table A -- Daimler Trucks North America Ship-To Codes for DTNA plants and PDC locations (Dealer codes are not listed because they are too numerous and subject to change):

001   Portland TMP - 6936 North Fathom; Portland, OR 97217

02A   Memphis PDC - 5745 Challenge Dr.; Memphis, TN 38115

004   Cleveland TMP - 11550 Statesville Blvd; Cleveland, NC 27013

07A   Chicago PDC - 804 Mittel Drive; Wood Dale, IL 60191

013   Saltillo TMP - Carretera A General Cepeda #8395; Colonia Ej. Derramadero; Municipio de Saltillo; Coahuila, MX C.P. 25300

016   Test Center - (multiple possibilities)

017   Mt Holly TMP - 1800 North Main St.; Mt. Holly , NC 28120

018   Gastonia PMP - 1400 Tulip Drive; Gastonia, NC 28052

19A   Canton PDC - 515 11th Street S.E.; Canton, OH 44707

20A   Atlanta PDC - 2510 Mill Center Pkwy; Building 100; Buford, GA 30518

021   Kontane - (multiple possibilities)

24A   Bridgeport PDC - 2078 Center Square Road; Logan Township, NJ 08085

034   Freightliner CCC-Gaffney - 552 Hyatt St.; Gaffney, SC 29341

43A   Reno PDC - 14444 Lear Blvd; Reno, NV 89506

52A   Calgary PDC - 4901 64th Ave SE; Calgary, Alberta T2C-4V4

058   Toluca - Carretera Villa Cuahutemoc Sin Nave 5 Parque; AV. De Las Partidas y Carr Toluca-Naucalpan; Ex Hacienda Santin; Toluca, MX 50010

065   Santiago TMP - KM 23.7 Carretera; LaMarquesa-Tenago; CP 52600 Santiago Tianguistenco; Edo de Mexico

Table B -- Description of 824 rejection notices:

006 - DUPLICATE INVOICE: This message occurs when an invoice has been previously submitted.

006 - DUPLICATE INVOICE - SAME DAY: This message occurs when an invoice has already been submitted on the same day.

007 - INVALID OR MISSING DEALER CODE: This message occurs when the code value in the N104 (when N101 = "SU") is missing or does not match a value in the DTNA entity code lists (regardless of the actual entity type the code references).

007 - INVALID/MISSING TAX CODE INDICATOR ON LINE: This message occurs when the TXI segment contains an invalid or missing tax code.

009 - INVALID INVOICE DATE: This message occurs when the invoice date is invalid or future-dated.

010 - ITEM COUNT DOES NOT MATCH CONTROL RECORD COUNT: This message occurs when the CTT01 does not equal the total number of line items included on the invoice.

011 - INVALID/MISSING PO NUMBER AND LINE NUMBER COMBINATION: This message occurs when the PO Number or PO Line Number is missing or the combination is invalid.

012 - CO-MINGLED PURCHASE ORDERS ON SAME INVOICE: This message occurs when different PO types are co-mingled on the same invoice. Multiple PO's may be sent on the same invoice as long as they are the same PO type.

012 - MULTIPLE LINES FOR THE SAME PART OR LINE ITEM NUMBER: This message occurs when there is more than one line for the same PO and PO line number combination.

024 - BIG RECORD MUST BE PRESENT: This message occurs when the BIG segment is not in the EDI transaction set.

024 - INVALID PROD/TEST INDICATOR ON HEADER: This message occurs when the ISA15 does not contain either a 'P' (for Production) or a 'T' (for Test).

024 - MISSING MANDATORY SEGMENT: This message occurs when a required EDI segment (ST, BIG, CUR, REF*SI, N1*ST, N1*SU, DTM, IT1, TDS, CTT, SE) is not present.

024 - SEGMENT EXCEEDS MAXIMUM LIMIT: This message occurs when the maximum repetitions of a segment has been exceeded.

024 - TOTAL SEGMENT COUNT DOES NOT MATCH SE: This message occurs when the SE01 value does not match the calculated number of segments in the transaction.

819 - LINE(S) & INVOICE TOTAL AMOUNT IS OUT-OF-BALANCE: This message occurs when the TDS value does not match the value obtained from calculating the sum of the detail lines in the transaction set.

848 - DECIMAL POINT NOT ALLOWED IN TDS SEGMENT: This message occurs when a value in the TDS segment contains a decimal point.

848 - INVALID CHARACTER FOUND: This message occurs when an invalid character appears in the data, for example, Hexadecimal value "0D25" (ASCII carriage return/line feed).

848 - INVALID N1 QUALIFICATION CODE (MUST BE ST OR SU): This message occurs when the N101 contains a value that is not ST, SU, SO, or SE. The transaction set is then rejected and an 824 error message is generated.

848 - UNKNOWN SEGMENT TYPE: This message occurs when a segment that is unknown to the ANSI X12 810 standards appears within the transaction set.

IQT - NOT NUMERIC: This message occurs when non-numeric data appears in a field defined as numeric.

MB - MISSING INVOICE NUMBER OR INVALID FORMAT: This message occurs when the invoice number is

missing or contains invalid values like spaces, '/', or '*'.

MID - MISSING FTL LOCATION CODE: This message occurs if the N104 element (when N101 = "ST") is missing.

MK - INVALID FTL LOCATION CODE: This message occurs if the N104 (when N101 = "ST") does not match a valid DTNA entity code.

OTH - CREDIT MEMO - NOT EDI, MUST BE SUBMITTED BY PAPER: This message occurs when the invoice is actually a credit and the value is less than $0. Credit memos must be sent in by paper.

OTH - INVOICE WITH ZERO-AMT - ZERO DOLLAR INVOICES ARE NOT ALLOWED: This message occurs when the invoice total is equal to zero.

POI -INVALID PO NUMBER: This message occurs when the PO number cannot be matched to a valid, open DTNA PO number or the PO number is missing.

Table C -- DTNA PO Types:

PO Format	Type
A12345	Truck Production
F12345	Truck Production
4501123456	Aftermarket Parts Distribution Center (PDC) Stock or Emergency Orders
4580123456	Aftermarket Direct Ship Orders
4585123456	Aftermarket Emergency Direct Ship Orders
4589123456	Aftermarket Critical Drop Ship Orders
1164012345	Non-Production Material (NPM)
3410123456	Non-Production Material (NPM)
3420123456	Non-Production Material (NPM)
4164012345	Non-Production Material (NPM)
8410123456	Non-Production Material (NPM)

Example X12 Transactions:

AFTERMARKET - All documented segments and elements (includes detail additional charges & summary taxes):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110903*2107*U*00401*000333331*0*P*>~

GS*IN*AB12*FTL FIAC*20110903*2107*222221*X*004010~

ST*810*11111~

BIG*20110903*78675634~

CUR*SE*USD~

REF*SI*1234567~

REF*PK*456789~

REF*BM*76543210~

N1*ST*DTNA (ship-to location)*92*FVHMDA~

N3*9622 NE VANCOUVER WAY*STR_SUPPL1~

N4*PORTLAND*OR*97211*US~

N1*SU*SUPPLIER (supplier)*92*AB12~

N1*SO*DAIMLER TRUCKS NORTH AMERICA, LLC*92*FVHMD~

N1*SE*SELLER (supplier parent)*92*AB12~

DTM*011*20110829~

IT1*001*20*EA*30.00**BP*WWS 56502M7174DA*PO*4585021211*PL*001*PD*PART DESCRIPTION~

SAC*C*F155***1100*******06~

TDS*62100~

TXI*GS*10.00~

CAD*M***SCAC***BM*76543210~

CTT*1*20*159*LB~

SE*20*11111~

GE*1*222221~

IEA*1*000333331~

AFTERMARKET - Mandatory segments & elements only (no taxes or additional charges & not a direct ship or drop ship PO type):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110923*2201*U*00401*000333332*0*P*>~

GS*IN*AB12*FTL FIAC*20110923*2210*222222*X*004010~

ST*810*11112~

BIG*20110923*43657687~

CUR*SE*EUR~

REF*SI*7654321~

N1*ST*DTNA (ship-to location)*92*02A~

N1*SU*SUPPLIER (supplier)*92*AB12~

N1*SO*DAIMLER TRUCKS NORTH AMERICA, LLC*92*02A~

DTM*011*20110920~

IT1**10*EA*20.50**BP*153972*PO*4500121213*PL*020~

IT1**1*GA*5.00**BP*DNC 23529 1*PO*4500121214*PL*040~

TDS*21000~

CTT*2~

SE*13*11112~

GE*1*222222~

IEA*1*000333332~

AFTERMARKET - Typical segments & elements (no tax, freight is only additional charge):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110915*0321*U*00401*000333333*0*P*>~

GS*IN*AB12*FTL FIAC*20110915*0321*222223*X*004010~

ST*810*11113~

BIG*20110915*77665544~

CUR*SE*USD~

REF*SI*2345678~

N1*ST*DTNA (ship-to location)*92*52A~

N3*9622 NE VANCOUVER WAY~

N4*PORTLAND*OR*97211*US~

N1*SU*SUPPLIER (supplier)*92*AB12~

N1*SO*DAIMLER TRUCKS NORTH AMERICA, LLC*92*52A~

DTM*011*20110914~

IT1*001*100*BG*10.00**BP*A11-12345-001*PO*4500121216*PL*020~

IT1*002*20*RL*20.00**BP*A22-54321-002*PO*4500121215*PL*050~

IT1*003*3*FT*30.00**BP*01-12345-000*PO*4500121215*PL*070~

IT1*004*4*EA*40.00**BP*01-54321-000*PO*4500121217*PL*010~

SAC*C*C040***3000~

TDS*168000~

CAD*A***SCAC***BM*7654321451~

CTT*4*127*220*LB~

SE*19*11113~

GE*1*222223~

IEA*1*000333333~

MANUFACTURING - All documented segments and elements (includes detail additional charges, & summary taxes):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110910*0943*U*00401*000333334*0*P*>~

GS*IN*AB12*FTL FIAC*20110910*0943*222224*X*004010~

ST*810*11114~

BIG*20110910*86756347~

CUR*SE*CAD~

REF*BM*7654321089~

REF*PK*345678901~

REF*SI*123456798~

N1*ST*DTNA (ship-to location)*92*001~

N3*9622 NE VANCOUVER WAY*STR_SUPPL1~

N4*PORTLAND*OR*97211*US~

N1*SU*SUPPLIER (supplier location)*92*AB12~

N1*SO*Daimler Trucks North America, LLC*92*001~

N1*SE*SELLER (supplier parent)*92*AB12~

DTM*011*20110905~

IT1*001*10*EA*40.00**BP*27935132*PO*A54321*PL*001*PD*PART DESCRIPTION~

SAC*C*F190***1000*******06~

TDS*42500~

TXI*VA*15.00

CAD*R***SCAC***BM*7654321012~

CTT*1*10*112*LB~

SE*20*11114~

GE*1*222224~

IEA*1*000333334~

MANUFACTURING - Mandatory segments & elements only (no taxes or additional charges):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110930*2054*U*00401*000333335*0*P*>~

GS*IN*AB12*FTL FIAC*20110930*2054*222225*X*004010~

ST*810*11115~

BIG*20110930*75634768~

CUR*SE*USD~

REF*SI*123456798~

N1*ST*DTNA (ship-to location)*92*001~

N1*SU*SUPPLIER (supplier location)*92*AB12~

DTM*011*20110905~

IT1**1*GA*20.00**BP*92793513252*PO*A54320*PL*001~

IT1**10*EA*10.00**BP*12793513276*PO*A54323*PL*004~

IT1**20*FT*5.00**BP*32793513281*PO*A54325*PL*003~

TDS*22000~

CTT*3~

SE*13*11115~

GE*1*222225~

IEA*1*000333335~

MANUFACTURING - Typical segments & elements (no tax, freight is only additional charge):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110912*2054*U*00401*000333336*0*P*>~

GS*IN*AB12*FTL FIAC*20110912*2054*222226*X*004010~

ST*810*11116~

BIG*20110912*74867563~

CUR*SE*USD~

REF*SI*891234567~

N1*ST*DTNA (ship-to location)*92*001~

N1*SU*SUPPLIER (supplier location)*92*AB12~

DTM*011*20110905~

IT1*1*100*EA*50.00**BP*92793513274*PO*A54327*PL*001~

IT1*2*200*GA*2.00**BP*22793513227*PO*A54327*PL*002~

SAC*C*C040***2000*******06~

TDS*542000~

CAD*S***SCAC***BM*12765432~

CTT*2*300*5643*LB~

SE*14*11116~

GE*1*222226~

IEA*1*000333336~

NPM (Non-Production Material) - All valid documented segments and elements (includes summary tax, but NO additional charges):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110829*1413*U*00401*000333337*0*P*>~

GS*IN*AB12*FTL FIAC*20110829*1413*222227*X*004010~

ST*810*11117~

BIG*20110826*234567~

CUR*SE*USD~

REF*PK*7654321~

REF*SI*6543210~

REF*BM*1ZE7E269~

N1*SO*Daimler Trucks North America, LLC*92*001~

N1*SE*SELLER (supplier parent)*92*AB12~

N1*SU*SUPPLIER (supplier location)*92*AB12~

N1*ST*DTNA (ship-to location)*92*001~

N3*2400 N. Commerce*BLDG 7~

N4*WOODRIDGE*IL*60517*US~

DTM*011*20110826~

IT1*01*10*EA*25.00**BP*TDC-91329/X4*PO*3410123456*PL*010*ZZ*07-35-2741 TDC-91329 PROTOTYPE~

TDS*26000~

TXI*VA*10.00

CAD*M***SCAC***BM*1ZE7E269~

CTT*1*10*1100*LB~

SE*19*11117~

GE*1*222227~

IEA*1*000333337~

NPM (Non-Production Material) - Mandatory segments & elements only (no tax or additional charges):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *110906*1620*U*00401*000333338*0*P*>~

GS*IN*AB12*FTL FIAC*20110906*1620*222228*X*004010~

ST*810*11118~

BIG*20110906*765432~

CUR*SE*USD~

REF*SI*6543210~

N1*SU*SUPPLIER (supplier location)*92*AB12~

N1*ST*DTNA (ship-to location)*92*001~

DTM*011*20110906~

IT1**5*EA*50.00**BP*DCT-123456*PO*3410123456*PL*02~

TDS*25000~

CTT*1~

SE*11*11118~

GE*1*222228~

IEA*1*000333338~

NPM (Non-Production Material) - Typical segments & elements (no tax or additional charges):

ISA*00*   *00*   *ZZ*AB12 FIAC   *ZZ*FTL FIAC   *111002*1413*U*00401*000333339*0*P*>~

GS*IN*AB12*FTL FIAC*20111002*1413*222229*X*004010~

ST*810*11119~

BIG*20111002*123456~

CUR*SE*USD~

REF*PK*7654321~

REF*SI*6543210~

N1*SU*SUPPLIER (supplier location)*92*AB12~

N1*ST*DTNA (ship-to location)*92*001~

N3*2400 N. Commerce~

N4*WOODRIDGE*IL*60517*US~

DTM*011*20111001~

IT1**5*EA*20.00**BP*CTD-71322/X4*PO*4146023654*PL*010*PD*PART DESCRIPTION~

IT1**10*EA*15.00**BP*X742398631*PO*1590001230*PL*005~

TDS*25000~

CAD*M***SCAC***BM*962E4723~

CTT*2~

SE*16*11119~

GE*1*222229~

IEA*1*000333339~

Not Defined:

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

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1			Must use
020	BIG	Beginning Segment for Invoice	M	1			Must use
040	CUR	Currency	M	1			Must use
050	REF	Reference Identification	M	12			Must use
LOOP ID - N1					**200**		
070	N1	Name	M	1			Must use
090	N3	Address Information	C	2			Conditional
100	N4	Geographic Location	C	1			Conditional
140	DTM	Date/Time Reference	M	10			Must use

Detail:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
LOOP ID - IT1					**200000**		
010	IT1	Baseline Item Data (Invoice)	M	1			Must use
LOOP ID - SAC					**25**		
180	SAC	Service, Promotion, Allowance, or Charge Information	C	1			Conditional

Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	TDS	Total Monetary Value Summary	M	1			Must use
020	TXI	Tax Information	C	10			Conditional
030	CAD	Carrier Detail	O	1			Used
070	CTT	Transaction Totals	M	1			Must use
080	SE	Transaction Set Trailer	M	1			Must use

Not Defined:

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

ISA   Interchange Control Header

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

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA01	I01	**Authorization Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Authorization Information

CodeList Summary (Total Codes: 7, Included: 1)

Code Name

00   No Authorization Information Present (No Meaningful Information in I02)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA02	I02	**Authorization Information**	M	AN	10/10	Must use

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).

DTNA does not use Authorization Information. This element should be populated entirely with space characters.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA03	I03	**Security Information Qualifier**	M	ID	2/2	Must use

Description: Code to identify the type of information in the Security Information

CodeList Summary (Total Codes: 2, Included: 1)

Code Name

00   No Security Information Present (No Meaningful Information in I04)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA04	I04	**Security Information**	M	AN	10/10	Must use

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).

DTNA does not use Security Information. This element should be populated entirely with space characters.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA05	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified.

For the DTNA implementation all standard codes are used, however, the preferred ISA ID qualifier is "ZZ" (Mutually Defined).
All valid standard codes are used. (Total Codes: 38)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA06	I06	**Interchange Sender ID**	M	AN	15/15	Must use

Description: The DTNA-approved identification code of the supplier entity that is requesting payment from DTNA for goods or services rendered via the ANSI X12 810 Invoice Transaction Set.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ISA07	I05	**Interchange ID Qualifier**	M	ID	2/2	Must use

Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified.

For the DTNA implementation all standard codes are used, however, the most common ISA ID qualifier is "ZZ" (Mutually Defined).

All valid standard codes are used. (Total Codes: 38)

ISA08	I07	**Interchange Receiver ID**	M	AN	15/15	Must use

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.

For the DTNA implementation of the ANSI X12 Version 4010 810 Invoice the value in the ISA06 element (Interchange Receiver ID) must be "FTL FIAC" (with a single space character), "FTL FIAC" (with two space characters), or "FTLXFIAC" (with no space characters). Note that the ISA record is a fixed-length field, so the appropriate number of space characters must be appended to the end of the actual ID to ensure that all 15 required characters of this element are used.

ISA09	I08	**Interchange Date**	M	DT	6/6	Must use

Description: Date of the interchange in six character format YYMMDD.

ISA10	I09	**Interchange Time**	M	TM	4/4	Must use

Description: Time of the interchange in four character format HHMM.

ISA11	I10	**Interchange Control Standards Identifier**	M	ID	1/1	Must use

Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer

CodeList Summary (Total Codes: 2, Included: 1)

Code	Name
U	U.S. EDI Community of ASC X12, TDCC, and UCS

ISA12	I11	**Interchange Control Version Number**	M	ID	5/5	Must use

Description: Code specifying the version number of the interchange control segments.

CodeList Summary (Total Codes: 14, Included: 1)

Code	Name
00401	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997

ISA13	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender

ISA14	I13	**Acknowledgment Requested**	M	ID	1/1	Must use

Description: Code sent by the sender to request an interchange acknowledgment (TA1).

The code "0" in this element indicates that TA1 interchange-level acknowledgements are not required by DTNA. Please note that a TA1 interchange acknowledgement is different than a 997 Functional Acknowledgement. DTNA requires that a 997 Functional Acknowledgement be returned by trading partners for all EDI transactions that are sent outbound from DTNA.

Ref	Id	Element Name	Req	Type	Min/Max	Usage

CodeList Summary (Total Codes: 2, Included: 1)

Code Name

0   No Acknowledgment Requested

| ISA15 | I14 | **Usage Indicator** | M | ID | 1/1 | Must use |

Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information

CodeList Summary (Total Codes: 3, Included: 2)

Code Name

P   Production Data

T   Test Data

| ISA16 | I15 | **Component Element Separator** | M | | 1/1 | Must use |

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.

For the DTNA implementation all valid separators and terminators are allowed, provided they are unique among each other. However, DTNA's prefered delimiters are listed below:

Preferred Element Separators:

"*" - Asterisk (ASCII Hex "2A")

"~" - Tilde (ASCII Hex "7E")

"`" - Acute (ASCII Hex "60")

Preferred Sub-Element/Component Separators:

">" - Greater Than (ASCII Hex "3E")

"]" - Close Square Bracket (ASCII Hex "5D")

"}" - Close Curly Brace (ASCII Hex "7D")

Preferred Segment Terminators:

"^" - Caret (ASCII Hex "5E")

"~" - Tilde (ASCII Hex "7E")

"|" - Pipe (ASCII Hex "7C")

GS   Functional Group Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS01	479	**Functional Identifier Code**	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

CodeList Summary (Total Codes: 240, Included: 1)

Code	Name
IN	Invoice Information (810)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS02	142	**Application Sender's Code**	M	AN	2/15	Must use

Description: Code identifying party sending transmission; codes agreed to by trading partners.

For the DTNA implementation the value of the GS02 element (Application Sender's Code) in the X12 Version 4010 810 Invoice must be the DTNA assigned supplier code of the supplier submitting the invoice for payment. The value in this element must be the appropriate four character supplier code only, without any suffix (i.e. omit the "FIAC" suffix).

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS03	124	**Application Receiver's Code**	M	AN	2/15	Must use

Description: Code identifying party receiving transmission; codes agreed to by trading partners.

For the DTNA implementation the value in the GS03 element (Application Receiver's Code) must always be "FTL FIAC" (with a single space character), "FTL FIAC" (with two space characters), or "FTLXFIAC" (with no space characters).

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS04	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS05	337	**Time**	M	TM	4/8	Must use

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)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS06	28	**Group Control Number**	M	N0	1/9	Must use

Description: Assigned number originated and maintained by the sender

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GS07	455	**Responsible Agency Code**	M	ID	1/2	Must use

Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

CodeList Summary (Total Codes: 2, Included: 1)

Code	Name
X	Accredited Standards Committee X12

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS08	480	**Version / Release / Industry Identifier Code**	M	AN	1/12	Must use

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

CodeList Summary (Total Codes: 39, Included: 1)

<u>Code</u>	<u>Name</u>
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Semantics:

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

Comments:

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

ST Transaction Set Header

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

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code	Name
810	Invoice

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

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).

BIG Beginning Segment for Invoice

Pos: 020	**Max: 1**
Heading - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BIG01	373	**Date**	M	DT	8/8	Must use

Description: Date of the invoice expressed as CCYYMMDD.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
BIG02	76	**Invoice Number**	M	AN	1/22	Must use

Description: Identifying number assigned to the invoice by the issuer.

For the DTNA implementation a unique Invoice Number can only be sent once per calendar year. The invoice number can be the same as the SID number, but the SID number sent in the 810 invoice in the REF02 element (where REF01 = "SI") must still exactly match the SID number on the 856 ASN transaction. A maximum of 16 characters of the BIG02 element (invoice number) will be processed by DTNA applications.

Semantics:

1. BIG01 is the invoice issue date.

CUR Currency

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

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR01	98	**Entity Identifier Code**	M	ID	2/3	Must use

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

CodeList Summary (Total Codes: 1312, Included: 1)

Code	Name
SE	Selling Party

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CUR02	100	**Currency Code**	M	ID	3/3	Must use

Description: Code for country in whose currency the charges are specified.

Most standard ISA codes are used. Some typical code values are:

"USD" = United States Dollars

"CAD" = Canadian Dollars

"EUR" = European Euros

"JPY" = Japanese Yen

REF   Reference Identification

Pos: 050	**Max: 12**
Heading - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

Purpose: To specify identifying information.

For the DTNA implementation the Shipment Identification Number (SID) is required. The SID must be contained in the REF02 element where the REF01 value is "SI".

Element Summary:

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

Description: Code qualifying the Reference Identification.

DTNA requires use of the "SI" qualifier in the REF01 and the appropriate SID Number in the corresponding REF02 element. The other included codes are optional but recommended.

CodeList Summary (Total Codes: 1503, Included: 3)

Code	Name
BM	Bill of Lading Number
PK	Packing List Number
SI	Shipper's Identifying Number for Shipment (SID) <Required for DTNA>

Ref	Id	Element Name	Req	Type	Min/Max	Usage
REF02	127	**Reference Identification**	M	AN	1/16	Must use

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

For the DTNA implementation the Shipment ID Number (SID) is required on the 810 invoice in the REF02 element where the REF01 element is "SI". The SID must EXACTLY match the BSN02 element on the corresponding 856 Advanced Ship Notice (including spaces, prefix, suffix, etc.). The length of this element is restricted to no more than 16 characters.

Syntax Rules:

1. P0102 - If either REF01 or REF02 is present, then the other is required.

Loop Name

Pos: 070	**Repeat: 200**
Mandatory	
Loop: N1	**Elements: N/A**

User Option (Usage): Must use

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
070	N1	Name	M	1		Must use
090	N3	Address Information	C	2		Conditional
100	N4	Geographic Location	C	1		Conditional

N1 Name

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N1	**Elements: 4**

User Option (Usage): Must use

Purpose: To identify a party by type of organization, name, and code. For the DTNA implementation N1 Loops for the N101 Entity Codes "ST" (Ship-To) and "SU" (Supplier/Manufacturer) are required on all 810 invoices. DTNA Aftermarket also requires that the N101 entity code "SO" (Sold-To) be sent on invoices for Aftermarket Direct Ship orders.

When the N101 Entity Code is "ST" (Ship-To) the value in the N104 must be the DTNA-assigned Ship-To code of the location where the invoiced material was delivered. Invoices for Aftermarket Direct Ship and Critical Drop Ship orders (DTNA PO numbers that begin with "4580", "4589", & "4585") must include the entire Ship-To address information (including N1, N3, & N4 segments) in the N1 Loop where N101 is "ST" (Ship-To).

When the N101 Entity Code is "SU" (Supplier/Manufacturer) the value in the N104 element must be the DTNA-assigned supplier code of the supplier.

The N101 Entity Code "SO" is primarily utilized on invoices for Aftermarket Direct Ship orders. When the 810 N101 entity Code is "SO" (Sold-To) the value in the N104 must match the DTNA-assigned entity code transmitted on the 850 PO in the N104 element where the N101 element was "SO".

Element Summary:

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

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

CodeList Summary (Total Codes: 1312, Included: 4)

Code	Name
SE	Selling Party
SO	Sold To
ST	Ship To <Required for DTNA>
SU	Supplier/Manufacturer <Required for DTNA>

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	M	AN	1/60	Must use

Description: Free-form name.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N103	66	**Identification Code Qualifier**	M	ID	1/2	Must use

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

CodeList Summary (Total Codes: 215, Included: 1)

Code	Name
92	Assigned by Buyer or Buyer's Agent

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N104	67	**Identification Code**	M	AN	2/10	Must use

Description: For the DTNA implementation the N104 element is always expected to contain a DTNA-assigned entity code. The N104 element is restricted to 10 characters.

Syntax Rules:

1. P0304 - If either N103 or N104 is present, then the other is required.

Comments:

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

N3   Address Information

Pos: 090	Max: 2
Heading - Conditional	
Loop: N1	**Elements: 2**

User Option (Usage): Conditional

Purpose: To specify the location of the named party.

For the DTNA implementation the N3 segment is required for all Aftermarket Direct Ship and Critical Drop Ship orders (DTNA PO numbers that begin with "4580", "4589", & "4585") in the N1 loop where N101 = "ST" (Ship-To). The N3 segment is optional in N1 loops where the value of the N101 is not "ST".

Element Summary:

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

N4   Geographic Location

Pos: 100	Max: 1
Heading - Conditional	
Loop: N1	**Elements: 4**

User Option (Usage): Conditional

Purpose: To specify the geographic place of the named party.

For the DTNA implementation the N4 segment is required for all Aftermarket Direct Ship and Critical Drop Ship orders (DTNA PO numbers that begin with "4580", "4589", & "4585") in the N1 loop where N101 = "ST" (Ship-To). The N4 segment is optional in N1 loops where the value of the N101 is not "ST".

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	M	AN	2/30	Must use

Description: Free-form text for city name

N402	156	**State or Province Code**	M	ID	2/2	Must use

Description: Code (Standard State/Province) as defined by appropriate government agency

N403	116	**Postal Code**	M	ID	3/15	Must use

Description: Code defining international postal zone code excluding punctuation and blanks (zip code for United States)

N404	26	**Country Code**	M	ID	2/3	Must use

Description: Code identifying the country

DTM Date/Time Reference

Pos: 140	Max: 10
Heading - Mandatory	
Loop: N/A	**Elements: 2**

User Option (Usage): Must use

Purpose: To specify pertinent dates and times

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	**Date/Time Qualifier**	M	ID	3/3	Must use

Description: Code specifying type of date or time, or both date and time

CodeList Summary (Total Codes: 1112, Included: 1)

Code	Name
011	Shipped

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM02	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD.

For the DTNA implementation this element must contain the date that the invoiced material was shipped.

Loop Baseline Item Data (Invoice)

Pos: 010	**Repeat: 200000**
Mandatory	
Loop: IT1	**Elements: N/A**

User Option (Usage): Must use

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
010	IT1	Baseline Item Data (Invoice)	M	1		Must use
180		Loop SAC	C		25	Conditional

IT1   Baseline Item Data (Invoice)

Pos: 010	Max: 1
Detail - Mandatory	
Loop: IT1	Elements: 12

User Option (Usage): Must use

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT101	350	**Assigned Identification**	O	AN	1/20	Used

Description: Alphanumeric characters assigned for differentiation within a transaction set

IT102	358	**Quantity Invoiced**	M	R	1/10	Must use

Description: Number of units invoiced (supplier units).

For the DTNA implementation the Quantity Invoiced in the IT102 element of the 810 Invoice should match the value of the Shipped Quantity in the SN102 element of the 856 ASN.

IT103	355	**Unit or Basis for Measurement Code**	M	ID	2/2	Must use

Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken.

For the DTNA implementation the Unit of Measure (UOM) in the IT103 element of the 810 invoice must exactly match the UOM sent in the SN103 element of the 856 ASN.
All valid standard codes are used. (Total Codes: 794)

IT104	212	**Unit Price**	M	R	1/17	Must use

Description: Price per unit of product, service, commodity, etc. The value in this element is expected to be a real number that includes the decimal point. When more than 2 significant figures after the decimal point are needed the UOM must be mutually adjusted.

IT106	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234).

For the DTNA implementation the IT106 element is expected to contain the code "BP" for "Buyer's Part Number", which indicates that the DTNA Part Number should be contained in the following element (the IT107).

CodeList Summary (Total Codes: 477, Included: 1)

Code	Name
BP	Buyer's Part Number

IT107	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service.

For the DTNA implementation this element should always contain the DTNA Part Number for the invoiced material, which must exactly match the Buyer Part Number sent in the LIN03 element of the 856 ASN.

IT108	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234).

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		For the DTNA implementation the IT108 element is expected to contain the code "PO" for "Purchase Order Number", which indicates that the DTNA PO Number should be contained in the following element (the IT109).				

CodeList Summary (Total Codes: 477, Included: 1)

Code **Name**

PO   Purchase Order Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT109	234	**Product/Service ID**	M	AN	1/48	Must use

Description: Identifying number for a product or service.

For the DTNA implementation this element should always contain the DTNA Purchase Order Number for the invoiced material, which must exactly match the PO number sent in the PRF01 element of the 856 ASN.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT110	235	**Product/Service ID Qualifier**	M	ID	2/2	Must use

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234).

For the DTNA implementation the IT110 element is expected to contain the code "PL" for "Purchaser's Order Line Number", which indicates that the Line Number from the DTNA Purchase Order should be contained in the following element (the IT111).

CodeList Summary (Total Codes: 477, Included: 1)

Code **Name**

PL   Purchaser's Order Line Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT111	234	**Product/Service ID**	M	AN	1/6	Must use

Description: Identifying number for a product or service.

For the DTNA implementation this element should always contain the DTNA Purchase Order Line Number for the invoiced material, which must be an exact match with the PO Line Number sent in the PRF05 element of the 856 ASN.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT112	235	**Product/Service ID Qualifier**	O	ID	2/2	Used

Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)

CodeList Summary (Total Codes: 477, Included: 2)

Code **Name**

PD   Part Number Description

ZZ   Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IT113	234	**Product/Service ID**	O	AN	1/48	Used

Description: Identifying number for a product or service

Syntax Rules:

1. P0607 - If either IT106 or IT107 is present, then the other is required.
2. P0809 - If either IT108 or IT109 is present, then the other is required.
3. P1011 - If either IT110 or IT111 is present, then the other is required.
4. P1213 - If either IT112 or IT113 is present, then the other is required.

Loop Service, Promotion, Allowance, or Charge Information

Pos: 180	Repeat: 25
Conditional	
Loop: SAC	Elements: N/A

User Option (Usage): Conditional

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
180	SAC	Service, Promotion, Allowance, or Charge Information	C	1		Conditional

SAC Service, Promotion, Allowance, or Charge Information

Pos: 180	Max: 1
Detail - Conditional	
Loop: SAC	Elements: 4

User Option (Usage): Conditional

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge.

For the DTNA implementation the Detail-Level SAC segment is required if additional charges apply to the line item and those charges are not already included in the IT1 segment.

DTNA does not accept separate allowances on EDI X12 810 Invoices. Allowances must be calculated and included in the unit price that is contained in the IT104 element.

If freight charges apply to the entire invoice they must still be documented in the detail instance of the SAC segment (using SAC02 code value "C040") inside a valid IT1 Loop on the invoice.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	**Allowance or Charge Indicator**	M	ID	1/1	Must use

Description: Code which indicates an allowance or charge for the service specified

CodeList Summary (Total Codes: 7, Included: 1)

Code	Name
C	Charge

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC02	1300	**Service, Promotion, Allowance, or Charge Code**	M	ID	4/4	Must use

Description: Code identifying the service, promotion, allowance, or charge

CodeList Summary (Total Codes: 1053, Included: 17)

Code	Name
B570	Container Deposits
B750	Core Charge
C040	Delivery
C670	Engraving
C680	Environmental
D500	Handling
D860	State Inspection Fee
E820	Non-returnable Containers
F155	Packaging
F190	Palletizing
F550	Premium Charge
G510	Returnable Container
G760	Set-up
H550	Surcharge
H760	State Oil and Recycling Fees
H770	State Oil Tax
H780	State Hazardous Material Fee

| SAC05 | 610 | **Amount** | M | N2 | 1/15 | Must use |

Description: Monetary amount. The value in this element is expected to be an integer with two IMPLIED decimal points. For example, if the total charge amount is $43.21 then the SAC05 element will contain the value "4321" and must not contain the actual decimal point (".") character. DTNA rejects X12 810 invoices where the SAC05 element contains non-numeric characters.

| SAC12 | 331 | **Allowance or Charge Method of Handling Code** | O | ID | 2/2 | Used |

Description: Code indicating method of handling for an allowance or charge

CodeList Summary (Total Codes: 22, Included: 1)

Code **Name**

06   Charge to be Paid by Customer

Semantics:

1. SAC05 is the total amount for the service, promotion, allowance, or charge.

TDS Total Monetary Value Summary

User Option (Usage): Must use

Purpose: To specify the total invoice discounts and amounts

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TDS01	610	**Amount**	M	N2	1/15	Must use

Description: Monetary amount for the total invoice including all charges, fees, and taxes. The value in this element is expected to be an integer with two IMPLIED decimal points. For example, if the total value of the invoice is $12.34 then the TDS01 element will contain the value "1234" and must not contain the actual decimal point (".") character. DTNA rejects X12 810 invoices where the TDS01 element contains non-numerical characters.

Semantics:

1. TDS01 is the total amount of invoice including all charges, fees, and taxes.

TXI Tax Information

Pos: 020	Max: 10
Summary - Conditional	
Loop: N/A	**Elements: 2**

User Option (Usage): Conditional

Purpose: To specify tax information.

For the DTNA implementation the Summary-Level TXI segment is only required if taxes will be billed on the invoice. The TDS01 element (total invoice amount) should include any applicable charges that are described in this Summary-Level TXI segment.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI01	963	**Tax Type Code**	M	ID	2/2	Must use

Description: Code specifying the type of tax

CodeList Summary (Total Codes: 74, Included: 5)

Code	Name
FT	Federal Excise Tax
GS	Goods and Services Tax
ST	State Sales Tax
VA	Value Added Tax
ZZ	Mutually Defined

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TXI02	782	**Monetary Amount**	M	R	1/18	Must use

Description: Monetary amount. The value in this element is expected to be a real number that includes the decimal point and exactly two significant figures after the decimal point.

Semantics:

1. TXI02 is the monetary amount of the tax.

CAD Carrier Detail

<div>

Pos: 030   **Max: 1**

Summary - Optional

Loop: N/A   **Elements: 4**

</div>

User Option (Usage): Used

Purpose: To specify transportation details for the transaction

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD01	91	**Transportation Method/Type Code**	M	ID	1/2	Must use

Description: Code specifying the method or type of transportation for the shipment

CodeList Summary (Total Codes: 71, Included: 7)

Code	Name
A	Air
H	Customer Pickup
L	Contract Carrier
M	Motor (Common Carrier)
Q	Conventional Ocean
R	Rail
S	Ocean

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD04	140	**Standard Carrier Alpha Code**	M	ID	2/4	Must use

Description: Standard Carrier Alpha Code.

For the DTNA implementation the value of this element is expected to be the Lloyd Registered SCAC Code of the carrier. This should match the SCAC that was sent in the TD503 element of the 856 ASN.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD07	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

CodeList Summary (Total Codes: 1503, Included: 1)

Code	Name
BM	Bill of Lading Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CAD08	127	**Reference Identification**	M	AN	1/30	Must use

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

DTNA requires the Bill of Lading Number in this element.

Syntax Rules:

1. P0807 - If either CAD08 or CAD07 is present, then the other is required.

CTT Transaction Totals

Pos: 070   Max: 1
Summary - Mandatory
Loop: N/A   Elements: 4

User Option (Usage): Must use

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

For the DTNA implementation the CTT03 and CTT04 are required if freight charges are added to the invoice total.

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 all included IT1 segments.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items**	M	N0	1/6	Must use

   Description: Total number of line items in the transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT02	347	**Hash Total**	O	R	1/10	Used

   Description: For the DTNA implementation the hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

   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.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT03	81	**Weight**	C	R	1/10	Conditional

   Description: Numeric value of weight.

   DTNA Requires the weight if freight charges are added to the invoice total.

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT04	355	**Unit or Basis for Measurement Code**	C	ID	2/2	Conditional

   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. (Total Codes: 794)

Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE Transaction Set Trailer

Pos: 080   Max: 1
Summary - Mandatory
Loop: N/A   Elements: 2

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Must use

Description: Total number of segments included in a transaction set including ST and SE segments

| SE02 | 329 | **Transaction Set Control Number** | M | AN | 4/9 | Must use |

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Comments:

1. 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

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
GE01	97	**Number of Transaction Sets Included**	M	N0	1/6	Must use

Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element

| GE02 | 28 | **Group Control Number** | M | N0 | 1/9 | Must use |

Description: Assigned number originated and maintained by the sender

Semantics:

1. 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:

1. 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

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA01	I16	**Number of Included Functional Groups**	M	N0	1/5	Must use

Description: A count of the number of functional groups included in an interchange

Ref	Id	Element Name	Req	Type	Min/Max	Usage
IEA02	I12	**Interchange Control Number**	M	N0	9/9	Must use

Description: A control number assigned by the interchange sender