

TMC

A DIVISION OF
C.H. ROBINSON

110 Air Freight Details and Invoice

X12/V4010/110 : 110 Air Freight Details and Invoice

Version: 1.4 Final

Publication: 6/1/2022

Notes

Changes:

Header-level B3:

- Narrowed B308 codes to only "BD" & "CO" - 7/26/2021

Detail-level N1 (within LX loop):

- Removed - 7/26/2021

Detail-level L1

- Revised L108 codes - 7/26/2021

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110 Air Freight Details and Invoice

Functional Group=IA

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Air Freight Details and Invoice Transaction Set (110) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide a customer with an air invoice for transportation and other charges related to shipments, including Original Invoices, Past Due Billings, Balance Due Bills and Revisions.

Notes:

- 1/075L The N1 Loop is used only to convey entity information relevant to the debtor or for a party other than the shipper or consignee.
- 1/075 The N1 Loop is used only to convey entity information relevant to the debtor or for a party other than the shipper or consignee.

Not Defined:

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

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Must use
020	B3	Beginning Segment for Carrier's Invoice	M	1			Must use
030	B3A	Invoice Type	O	1			Used
050	C3	Currency	O	1			Used

<u>LOOP ID - N1</u>					<u>3</u>	<u>N1/075L</u>	
075	N1	Name	M	1		N1/075	Must use
090	N3	Address Information	M	2			Must use
100	N4	Geographic Location	M	1			Must use
110	N9	Reference Identification	O	10			Used

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
<u>LOOP ID - LX</u>					<u>9999</u>		
010	LX	Assigned Number	M	1			Must use
090	R1	Route Information (Air)	M	1			Must use
<u>LOOP ID - L5</u>					<u>4</u>		
150	L5	Description, Marks and Numbers	M	1			Must use
160	L0	Line Item - Quantity and Weight	M	1			Must use
163	L4	Measurement	O	4			Used
165	L10	Weight	M	4			Must use
167	SL1	Tariff Reference	O	1			Used
<u>LOOP ID - L1</u>					<u>30</u>		
175	L1	Rate and Charges	M	1			Must use

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
015	L3	Total Weight and Charges	M	1			Must use
045	SE	Transaction Set 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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use				
<p>Description: Code to identify the type of information in the Authorization Information All valid standard codes are used. (Total Codes: 7)</p>										
ISA02	I02	Authorization Information	M	AN	10/10	Must use				
<p>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)</p>										
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use				
<p>Description: Code to identify the type of information in the Security Information All valid standard codes are used. (Total Codes: 2)</p>										
ISA04	I04	Security Information	M	AN	10/10	Must use				
<p>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)</p>										
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	Must use				
<p>Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified All valid standard codes are used. (Total Codes: 38)</p>										
ISA06	I06	Interchange Sender ID	M	AN	15/15	Must use				
<p>Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element</p>										
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	Must use				
<p>Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified</p> <p>Code List Summary (Total Codes: 38, Included: 1)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>ZZ</td> <td>Mutually Defined</td> </tr> </tbody> </table>							<u>Code</u>	<u>Name</u>	ZZ	Mutually Defined
<u>Code</u>	<u>Name</u>									
ZZ	Mutually Defined									
ISA08	I07	Interchange Receiver ID	M	AN	15/15	Must use				
<p>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</p>										

User Note 1:
PROD: RBTWTMC

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
<i>TEST: RBTWTMCTEST</i>						
ISA09	I08	Interchange Date	M	DT	6/6	Must use
Description: Date of the interchange						
ISA10	I09	Interchange Time	M	TM	4/4	Must use
Description: Time of the interchange						
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						
All valid standard codes are used. (Total Codes: 1)						
ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use
Description: Code specifying the version number of the interchange control segments						
Code List 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)						
Code List Summary (Total Codes: 2, Included: 1)						
Code Name						
1 Interchange 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						
All valid standard codes are used. (Total Codes: 3)						
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						
User Note 1: <i>Preferred character: ></i>						

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:

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

Description: Code identifying a group of application related transaction sets

Code List Summary (Total Codes: 240, Included: 1)

Code Name

IA Air Freight Details and Invoice (110, 980)

GS02	142	Application Sender's Code	M	AN	2/15	Must use
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Description: Code identifying party sending transmission; codes agreed to by trading partners

GS03	124	Application Receiver's Code	M	AN	2/15	Must use
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Description: Code identifying party receiving transmission; codes agreed to by trading partners

User Note 1:

PROD: RBTWTMC

TEST: RBTWTMCTEST

GS04	373	Date	M	DT	8/8	Must use
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Description: Date expressed as CCYYMMDD

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)

GS06	28	Group Control Number	M	N0	1/9	Must use
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Description: Assigned number originated and maintained by the sender

GS07	455	Responsible Agency Code	M	ID	1/2	Must use
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Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

All valid standard codes are used. (Total Codes: 2)

GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use
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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

Code List Summary (Total Codes: 39, Included: 1)**Code** **Name**

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:

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

Description: Code uniquely identifying a Transaction Set

Code List Summary (Total Codes: 298, Included: 1)

Code Name

110 Air Freight Details and Invoice

ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
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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).

B3 Beginning Segment for Carrier's Invoice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 14

User Option (Usage): Must use

Purpose: To transmit basic data relating to the carrier's invoice

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>								
B301	147	Shipment Qualifier	O	ID	1/1	Used								
<p>Description: Code defining relationship of this shipment with respect to other shipments given to the carrier at the same time</p> <p>All valid standard codes are used. (Total Codes: 35)</p>														
B302	76	Invoice Number	M	AN	1/22	Must use								
<p>Description: Identifying number assigned by issuer</p> <p>User Note 1: <i>Pro Number</i></p>														
B303	145	Shipment Identification Number	O	AN	1/30	Used								
<p>Description: Identification number assigned to the shipment by the shipper that uniquely identifies the shipment from origin to ultimate destination and is not subject to modification; (Does not contain blanks or special characters)</p> <p>User Note 1: <i>TMC load number (N9*AG from 304)</i></p>														
B304	146	Shipment Method of Payment	M	ID	2/2	Must use								
<p>Description: Code identifying payment terms for transportation charges</p> <p>Code List Summary (Total Codes: 28, Included: 3)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>CC</td> <td>Collect</td> </tr> <tr> <td>PP</td> <td>Prepaid (by Seller)</td> </tr> <tr> <td>TP</td> <td>Third Party Pay</td> </tr> </tbody> </table>							<u>Code</u>	<u>Name</u>	CC	Collect	PP	Prepaid (by Seller)	TP	Third Party Pay
<u>Code</u>	<u>Name</u>													
CC	Collect													
PP	Prepaid (by Seller)													
TP	Third Party Pay													
B305	188	Weight Unit Code	O	ID	1/1	Used								
<p>Description: Code specifying the weight unit</p> <p>All valid standard codes are used. (Total Codes: 8)</p>														
B306	373	Date	M	DT	8/8	Must use								
<p>Description: Date expressed as CCYYMMDD</p> <p>User Note 1: <i>Invoice date</i></p>														
B307	193	Net Amount Due	M	N2	1/12	Must use								
<p>Description: Total charges to be paid by the receiver of this transaction set expressed in the standard monetary denomination for the currency specified</p>														
B308	202	Correction Indicator	O	ID	2/2	Used								
<p>Description: Code used to indicate that the transaction set contains information which corrects previous information</p> <p>Code List Summary (Total Codes: 36, Included: 2)</p>														

		<u>Code</u>	<u>Name</u>				
		BD	Balance Due Billing				
		CO	Correction				
B309	32	Delivery Date		M	DT	8/8	Must use
		Description: Date for delivery of cargo to final consignee or to next mode expressed in format CCYYMMDD					
B310	374	Date/Time Qualifier		M	ID	3/3	Must use
		Description: Code specifying type of date or time, or both date and time					
		Code List Summary (Total Codes: 1112, Included: 1)					
		<u>Code</u>	<u>Name</u>				
		035	Delivered				
B311	140	Standard Carrier Alpha Code		M	ID	2/4	Must use
		Description: Standard Carrier Alpha Code					
B312	373	Date		O	DT	8/8	Used
		Description: Date expressed as CCYYMMDD					
B313	375	Tariff Service Code		O	ID	2/2	Used
		Description: Code specifying the types of services for rating purposes					
		All valid standard codes are used. (Total Codes: 79)					
B314	335	Transportation Terms Code		O	ID	3/3	Used
		Description: Code identifying the trade terms which apply to the shipment transportation responsibility					
		All valid standard codes are used. (Total Codes: 25)					

Syntax Rules:

1. P0910 - If either B309 or B310 is present, then the other is required.

Semantics:

1. B306 is the billing date.
2. On collect freight bills the data in B309 will be the actual delivery date. For the shipments invoiced prior to delivery, the B309 will be the estimated date of delivery.
3. If B314 is used, B304 will indicate the party or parties responsible for payment of the transportation terms identified in B314.

B3A Invoice Type

Pos: 030	Max: 1
Heading - Optional	
Loop: N/A	Elements: 2

User Option (Usage): Used

Purpose: To indicate type of invoice and number of shipments

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
B3A01	640	Transaction Type Code	M	ID	2/2	Must use

Description: Code specifying the type of transaction

Code List Summary (Total Codes: 446, Included: 1)

Code Name

21 Air Import Invoice

B3A02	21	Number of Shipments	O	N0	1/5	Used
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Description: Total number of shipments on this transaction

Comments:

1. B3A02 is the number of shipments invoiced.

C3 Currency

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

User Option (Usage): Used

Purpose: To specify the currency being used in the transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
C301	100	Currency Code	M	ID	3/3	Must use

Description: Code (Standard ISO) for country in whose currency the charges are specified

Semantics:

1. C301 is the billing currency.
2. C303 is the payment currency.
3. C304 is the rated currency.

Comments:

1. Currency is implied by the code for the country in whose currency the monetary amounts are specified.

Loop Name

Pos: 075	Repeat: 3
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:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
075	N1	Name	M	1		Must use
090	N3	Address Information	M	2		Must use
100	N4	Geographic Location	M	1		Must use
110	N9	Reference Identification	O	10		Used

N1 Name

Pos: 075	Max: 1
Heading - Mandatory	
Loop: N1	Elements: 2

User Option (Usage): Must use

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

Element Summary:

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

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

Code List Summary (Total Codes: 1312, Included: 4)

Code Name

BT	Bill-to-Party
CN	Consignee
PR	Payer
SH	Shipper

N102	93	Name	M	AN	1/60	Must use
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Description: Free-form name

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.

N3 Address Information

Pos: 090	Max: 2
Heading - Mandatory	
Loop: N1	Elements: 2

User Option (Usage): Must use

Purpose: To specify the location of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	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 - Mandatory	
Loop: N1	Elements: 4

User Option (Usage): Must use

Purpose: To specify the geographic place of the named party

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name	M	AN	2/30	Must use
		Description: Free-form text for city name				
N402	156	State or Province Code	O	ID	2/2	Recommended
		Description: Code (Standard State/Province) as defined by appropriate government agency				
N403	116	Postal Code	O	ID	3/15	Recommended
		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				

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.

N9 Reference Identification

Pos: 110	Max: 10
Heading - Optional	
Loop: N1	Elements: 2

User Option (Usage): Used

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N901	128	Reference Identification Qualifier	M	ID	2/3	Must use

Description: Code qualifying the Reference Identification

Code List Summary (Total Codes: 1503, Included: 3)

Code Name

- AW Air Waybill Number
- CR Customer Reference Number
- SI Shipper's Identifying Number for Shipment (SID)

N902	127	Reference Identification	M	AN	1/30	Must use
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Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Syntax Rules:

1. R0203 - At least one of N902 or N903 is required.

Loop Assigned Number

Pos: 010	Repeat: 9999
Mandatory	
Loop: LX	Elements: N/A

User Option (Usage): Must use

Purpose: To reference a line number in a transaction set

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
010	LX	Assigned Number	M	1		Must use
090	R1	Route Information (Air)	M	1		Must use
150		Loop L5	M		4	Must use

LX Assigned Number

Pos: 010	Max: 1
Detail - Mandatory	
Loop: LX	Elements: 1

User Option (Usage): Must use

Purpose: To reference a line number in a transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LX01	554	Assigned Number	M	N0	1/6	Must use

Description: Number assigned for differentiation within a transaction set

R1 Route Information (Air)

Pos: 090	Max: 1
Detail - Mandatory	
Loop: LX	Elements: 3

User Option (Usage): Must use

Purpose: To specify airline and airport routing sequences

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
R103	5	Airport Code	M	ID	3/5	Must use
		Description: Code (IATA) for airport				
R104	4	Air Carrier Code	M	ID	3/3	Must use
		Description: Code (IATA) for the air carrier				
R105	5	Airport Code	M	ID	3/5	Must use
		Description: Code (IATA) for airport				

Loop Description, Marks and Numbers

Pos: 150	Repeat: 4
Mandatory	
Loop: L5	Elements: N/A

User Option (Usage): Must use

Purpose: To specify the line item in terms of description, quantity, packaging, and marks and numbers

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
150	L5	Description, Marks and Numbers	M	1		Must use
160	L0	Line Item - Quantity and Weight	M	1		Must use
163	L4	Measurement	O	4		Used
165	L10	Weight	M	4		Must use
167	SL1	Tariff Reference	O	1		Used
175		Loop L1	M		30	Must use

L5 Description, Marks and Numbers

Pos: 150	Max: 1
Detail - Mandatory	
Loop: L5	Elements: 2

User Option (Usage): Must use

Purpose: To specify the line item in terms of description, quantity, packaging, and marks and numbers

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L501	213	Lading Line Item Number	M	N0	1/3	Must use
Description: Sequential line number for a lading item						
L502	79	Lading Description	M	AN	1/50	Must use
Description: Description of an item as required for rating and billing purposes						

Comments:

1.

L0 Line Item - Quantity and Weight

Pos: 160	Max: 1
Detail - Mandatory	
Loop: L5	Elements: 8

User Option (Usage): Must use

Purpose: To specify quantity, weight, volume, and type of service for a line item including applicable "quantity/rate-as" data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L001	213	Lading Line Item Number	M	N0	1/3	Must use
		Description: Sequential line number for a lading item				
L004	81	Weight	M	R	1/10	Must use
		Description: Numeric value of weight				
L005	187	Weight Qualifier	M	ID	1/2	Must use
		Description: Code defining the type of weight				
		Code List Summary (Total Codes: 51, Included: 1)				
		<u>Code</u>	<u>Name</u>			
		B	Billed Weight			
L006	183	Volume	M	R	1/8	Must use
		Description: Value of volumetric measure				
L007	184	Volume Unit Qualifier	X	ID	1/1	Recommended
		Description: Code identifying the volume unit				
		Code List Summary (Total Codes: 16, Included: 1)				
		<u>Code</u>	<u>Name</u>			
		X	Cubic Meters			
L008	80	Lading Quantity	X	N0	1/7	Recommended
		Description: Number of units (pieces) of the lading commodity				
L009	211	Packaging Form Code	M	ID	3/3	Must use
		Description: Code for packaging form of the lading quantity				
		Code List Summary (Total Codes: 134, Included: 4)				
		<u>Code</u>	<u>Name</u>			
		BOX	Box			
		CTN	Carton			
		PCS	Pieces			
		PKG	Package			
L011	188	Weight Unit Code	M	ID	1/1	Must use
		Description: Code specifying the weight unit				
		Code List Summary (Total Codes: 8, Included: 1)				

<u>Code</u>	<u>Name</u>
K	Kilograms

Syntax Rules:

1. P0405 - If either L004 or L005 is present, then the other is required.
2. P0607 - If either L006 or L007 is present, then the other is required.
3. P0809 - If either L008 or L009 is present, then the other is required.
4. C1104 - If L011 is present, then L004 is required.

Semantics:

1. L008 is the number of handling units of the line item tendered to the carrier.

L4 Measurement

Pos: 163	Max: 4
Detail - Optional	
Loop: L5	Elements: 4

User Option (Usage): Used

Purpose: To describe physical dimensions and quantities

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L401	82	Length	M	R	1/8	Must use
		Description: Largest horizontal dimension of an object measured when the object is in the upright position				
L402	189	Width	M	R	1/8	Must use
		Description: Shorter measurement of the two horizontal dimensions measured with the object in the upright position				
L403	65	Height	M	R	1/8	Must use
		Description: Vertical dimension of an object measured when the object is in the upright position				
L404	90	Measurement Unit Qualifier	M	ID	1/1	Must use
		Description: Code specifying the linear dimensional unit				
		All valid standard codes are used. (Total Codes: 4)				

Semantics:

1. L406 is the Rounding in Pattern for dimensional shipments.

L10 Weight

Pos: 165	Max: 4
Detail - Mandatory	
Loop: L5	Elements: 3

User Option (Usage): Must use

Purpose: To transmit weight information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L1001	81	Weight	M	R	1/10	Must use
		Description: Numeric value of weight				
L1002	187	Weight Qualifier	M	ID	1/2	Must use
		Description: Code defining the type of weight				
		Code List Summary (Total Codes: 51, Included: 2)				
		<u>Code</u> <u>Name</u>				
		B Billed Weight				
		G Gross Weight				
L1003	188	Weight Unit Code	M	ID	1/1	Must use
		Description: Code specifying the weight unit				
		Code List Summary (Total Codes: 8, Included: 4)				
		<u>Code</u> <u>Name</u>				
		E Metric Ton				
		K Kilograms				
		L Pounds				
		O Ounces				

SL1 Tariff Reference

Pos: 167	Max: 1
Detail - Optional	
Loop: L5	Elements: 4

User Option (Usage): Used

Purpose: To reference details of the tariff used to arrive at applicable rates or charges for customer-requested service

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SL101	284	Service Level Code	M	ID	2/2	Must use

Description: Code indicating the level of transportation service or the billing service offered by the transportation carrier

Code List Summary (Total Codes: 66, Included: 6)

Code Name

3D	Three Day Service
AC	Air Cargo
IE	Expedited Service - Worldwide
SA	Same Day
SC	Second Day Air
ST	Standard Class

SL102	171	Tariff Number	O	AN	1/7	Used
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Description: Standard tariff number for the tariff which governs the rates applied to the commodity item(s)

SL103	22	Commodity Code	X	AN	1/30	Used
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Description: Code describing a commodity or group of commodities

SL104	320	Scale	X	AN	1/10	Used
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Description: A carrier-maintained reference used to further identify a schedule of rates within a tariff

Syntax Rules:

1. R0304 - At least one of SL103 or SL104 is required.

Semantics:

1. SL101 is the service requested by the customer.
2. SL105 is the effective date.
3. SL106 is the service provided by the carrier.

Comments:

1. Scale and commodity codes are proprietary codes maintained by the carrier.

Loop Rate and Charges

Pos: 175	Repeat: 30
Mandatory	
Loop: L1	Elements: N/A

User Option (Usage): Must use

Purpose: To specify rate and charges detail relative to a line item including freight charges, advances, special charges, and entitlements

Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
175	L1	Rate and Charges	M	1		Must use

L1 Rate and Charges

Pos: 175	Max: 1
Detail - Mandatory	
Loop: L1	Elements: 7

User Option (Usage): Must use

Purpose: To specify rate and charges detail relative to a line item including freight charges, advances, special charges, and entitlements

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L101	213	Lading Line Item Number	M	N0	1/3	Must use
		Description: Sequential line number for a lading item				
L102	60	Freight Rate	X	R	1/9	Recommended
		Description: Rate that applies to the specific commodity				
L104	58	Charge	M	N2	1/12	Must use
		Description: For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified				
L105	191	Advances	X	N2	1/9	Used
		Description: Incidental charges occurring during transportation which are not generally considered to be freight charges (examples - stop charges, diversion and reconsignment, icing) expressed in the standard monetary denomination for the currency specified				
L108	150	Special Charge or Allowance Code	M	ID	3/3	Must use
		Description: Code identifying type of special charge or allowance				
		Code List Summary (Total Codes: 1077, Included: 11)				
		Code	Name			
		360	Export Customs Clearance			
		400	Freight			
		BSC	Bunker Surcharge			
		CCE	Import Customs Clearance Charges			
		DEL	Delivery Charge			
		DTH	THC (Terminal Handling Charge) - Import			
		DTY	Duty			
		HHB	Handling			
		OTH	THC (Terminal Handling Charge) - Export			
		PUC	Pick-up Charge			
		SEC	Special Equipment Charge			
L111	16	Charge Method of Payment	O	ID	1/1	Used
		Description: Code defining method of payment				
L112	276	Special Charge Description	M	AN	2/25	Must use
		Description: Identification of special charge; this data element is used whenever an applicable code cannot be found in data element 150				

Syntax Rules:

1. R040506 - At least one of L104, L105 or L106 is required.

L3 Total Weight and Charges

Pos: 015	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 7

User Option (Usage): Must use

Purpose: To specify the total shipment in terms of weight, volume, rates, charges, advances, and prepaid amounts applicable to one or more line items

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
L301	81	Weight	M	R	1/10	Must use
		Description: Numeric value of weight				
L302	187	Weight Qualifier	M	ID	1/2	Must use
		Description: Code defining the type of weight				
		Code List Summary (Total Codes: 51, Included: 1)				
		Code	Name			
		B	Billed Weight			
L305	58	Charge	M	N2	1/12	Must use
		Description: For a line item: freight or special charge; for the total invoice: the total charges -- expressed in the standard monetary denomination for the currency specified				
L309	183	Volume	X	R	1/8	Recommended
		Description: Value of volumetric measure				
L310	184	Volume Unit Qualifier	X	ID	1/1	Recommended
		Description: Code identifying the volume unit				
L311	80	Lading Quantity	M	N0	1/7	Used
		Description: Number of units (pieces) of the lading commodity				
L312	188	Weight Unit Code	M	ID	1/1	Must use
		Description: Code specifying the weight unit				
		Code List Summary (Total Codes: 8, Included: 1)				
		Code	Name			
		K	Kilograms			

Syntax Rules:

1. P0102 - If either L301 or L302 is present, then the other is required.
2. C1201 - If L312 is present, then L301 is required.

Semantics:

1. L305 is the total charges.

SE Transaction Set Trailer

Pos: 045	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 2

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	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.

ISA*00* *00* *ZZ*FRTFORWARDER *ZZ*RBTWMCCTEST
*210726*2204*U*00401*100000048*1*T*>
GS*IA*FRTFORWARDER*RBTWMCCTEST*20210726*2204*100000048*X*004010
ST*110*0001
B3*B*4052472777*1000000123*PP*K*20210724*405825**20210723*035*EXDO*202107
23**CIF
B3A*21*1
C3*USD
N1*SH*Medical Systems Inc
N3*4450 Johnson Way
N4*Palo Alto*CA*94304*US
N1*CN*Medical Systems
N3*c/o Expeditors Interational SRL*Malpensa Airport
N4*Milano*MI**IT
N1*BT*Medical Systems Inc
N3*4450 Johnson Way
N4*Palo Alto*CA*94304*US
N9*CR*C456789521
N9*AW*4052472777
LX*1
R1***SFO*EXP*MXP
L5*1*ITEM DETAILS
L0*1***96.0*B*1.028*X*1*PCS**K
L4*53.00*37.00*32.00*N
L10*171.5*B*K
L10*96.0*G*K
SL1*AC***AA
L1*1***15435****400****AIR FREIGHT
L1*2***20025****DEL****DELIVERY CHARGE
L1*3***5145****PUC****PICKUP CHARGE
L3*171.5*B***405825*****1*K
SE*28*0001
GE*1*100000048
IEA*1*100000048