410 Rail Carrier Freight Details and Invoice

X12/V4010/410: 410 Rail Carrier Freight Details and Invoice

Version: 1.0

Company:	**JR Simplot Company**
Modified:	**8/29/2018**

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410 Rail Carrier Freight Details and Invoice

Functional Group=IR

Purpose: This Draft Standard for Trial Use contains the format and establishes the data contents of the Rail Carrier Freight Details and Invoice Transaction Set (410) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide detailed information of charges associated with a rail movement. The information is provided by a rail carrier and is sent to the freight payer.

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1			Must use
020	B3B	Beginning Segment for Carrier's Invoice	M	1			Must use
040	N9	Reference Identification	O	30			Used
040	N9	Reference Identification	O	30			Used
LOOP ID - N7					**500**		
050	N7	Equipment Details	M	1			Must use
080	M7	Seal Numbers	O	5			Used
130	N8	Waybill Reference	M	499			Must use
140	F9	Origin Station	M	1			Must use
150	D9	Destination Station	M	1			Must use
LOOP ID - N1					**10**		
160	N1	Name	O	1			Used
165	N2	Additional Name Information	O	2			Used
170	N3	Address Information	O	2			Used
180	N4	Geographic Location	O	1			Used
LOOP ID - N1					**10**		
160	N1	Name	O	1			Used
165	N2	Additional Name Information	O	2			Used
170	N3	Address Information	O	2			Used
180	N4	Geographic Location	O	1			Used
LOOP ID - N1					**10**		
160	N1	Name	O	1			Used
170	N3	Address Information	O	2			Used
180	N4	Geographic Location	O	1			Used
400	R2	Route Information	O	13			Used
LOOP ID - LX					**25**		
430	LX	Assigned Number	M	1			Must use
440	L5	Description, Marks and Numbers	M	15			Must use
LOOP ID - L0					**25**		
460	L0	Line Item - Quantity and Weight	M	1			Must use
470	L1	Rate and Charges	M	10			Must use
480	PI	Price Authority Identification	O	30			Used

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
540	L3	Total Weight and Charges	M	1			Must use
570	SE	Transaction Set Trailer	M	1			Must use

Transaction Example:

ST*410*004340001\r
B3B*228712359*PP*20180817*123456*20180901*BNSF*R*006230CS***USD\r
N9*BM*006230CS**20180816\r
N9*CD*0294740003\r
N9*CO*BP\r
N7*UTLX*674804*190316*N*62700******TN*****A******T104\r
M7*123456\r
N8*123456*12345678\r
F9*66604*City*State*****123456\r
D9*04066*City*State*****123456\r
N1*SH*Shipper Name\r
N3*Shipper Address\r
N4*City*State*65432\r
N1*CN*JR SIMPLOT CO\r
N3*Consignee Address\r
N4*City*State*12345\r
N1*PF*JR SIMPLOT CO\r
N3*P.O. BOX 12345\r
N4*City*State*12345\r
R2*Carrier Name*S*City***R\r
R2*UP*1\r
LX*1\r
L5*1*SULPHUR, LIQUID OR MOLTEN*4561234*T\r
L0*1*190316*LB*190316*N\r
L1*1*00.00*PT*123456**123456*************USD\r
PI*TS*0000012345***ABCD*ABCD**0000001234\r
L3*****123456**654321\r
SE*28*004340001\r

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

All valid standard codes are used. (Total Codes: 298)

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).

B3B Beginning Segment for Carrier's Invoice

Pos: 020	**Max: 1**
Heading - Mandatory	
Loop: N/A	**Elements: 9**

User Option (Usage): Must use

Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B01	76	**Invoice Number**	M	AN	1/22	Must use

Description: Identifying number assigned by issuer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B02	146	**Shipment Method of Payment**	M	ID	2/2	Must use

Description: Code identifying payment terms for transportation charges
All valid standard codes are used. (Total Codes: 28)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B03	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B04	193	**Net Amount Due**	M	N2	1/12	Must use

Description: Total charges to be paid by the receiver of this transaction set expressed in the standard monetary denomination for the currency specified

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B05	373	**Date**	O	DT	8/8	Used

Description: Date expressed as CCYYMMDD

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B06	140	**Standard Carrier Alpha Code**	M	ID	2/4	Must use

Description: Standard Carrier Alpha Code

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B07	91	**Transportation Method/Type Code**	M	ID	1/2	Must use

Description: Code specifying the method or type of transportation for the shipment
All valid standard codes are used. (Total Codes: 71)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B08	145	**Shipment Identification Number**	O	AN	1/30	Used

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)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
B3B11	100	**Currency Code**	O	ID	3/3	Used

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

Semantics:

1. B3B03 is the billing date.
2. B3B05 is the payment due date.
3. B3B11 defines the currency used in the transaction.

Comments:

1. The B3B09 default value is pounds.

N9 Reference Identification

Pos: 040	Max: 30
Heading - Optional	
Loop: N/A	**Elements: 3**

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N901	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
N902	127	**Reference Identification**	X	AN	1/30	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N904	373	**Date**	O	DT	8/8	Used

Description: Date expressed as CCYYMMDD

Syntax Rules:

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

Semantics:

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

N9   Reference Identification

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N901	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
CO	Customer Order Number

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N902	127	**Reference Identification**	X	AN	1/30	Used

      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.
2. C0605 - If N906 is present, then N905 is required.

Semantics:

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

Loop Equipment Details

Pos: 050	Repeat: 500
Mandatory	
Loop: N7	**Elements: N/A**

User Option (Usage): Must use

Purpose: To identify the equipment

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
050	N7	Equipment Details	M	1		Must use
080	M7	Seal Numbers	O	5		Used

N7 Equipment Details

<table>
<tr><td>Pos: 050</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: N7</td><td>Elements: 8</td></tr>
</table>

User Option (Usage): Must use
Purpose: To identify the equipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N701	206	**Equipment Initial**	O	AN	1/4	Used
		Description: Prefix or alphabetic part of an equipment unit's identifying number				
N702	207	**Equipment Number**	M	AN	1/10	Must use
		Description: Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)				
N703	81	**Weight**	X	R	1/10	Used
		Description: Numeric value of weight				
N704	187	**Weight Qualifier**	X	ID	1/2	Used
		Description: Code defining the type of weight **All valid standard codes are used. (Total Codes: 51)**				
N705	167	**Tare Weight**	X	N0	3/8	Used
		Description: Weight of the equipment				
N711	40	**Equipment Description Code**	O	ID	2/2	Used
		Description: Code identifying type of equipment used for shipment **All valid standard codes are used. (Total Codes: 134)**				
N716	571	**Tare Qualifier Code**	X	ID	1/1	Used
		Description: Code identifying the type of tare **All valid standard codes are used. (Total Codes: 2)**				
N722	24	**Equipment Type**	O	ID	4/4	Used
		Description: Code identifying equipment type				

Syntax Rules:

1. P0304 - If either N703 or N704 is present, then the other is required.
2. P0516 - If either N705 or N716 is present, then the other is required.
3. P0809 - If either N708 or N709 is present, then the other is required.

Semantics:

1. N712 is the owner of the equipment.
2. N723 is the operator or carrier of the rights of the equipment.

Comments:

1. N701 is mandatory for rail transactions.
2. N720 and N721 are expressed in inches.

M7   Seal Numbers

User Option (Usage): Used

Purpose: To record seal numbers used and the organization that applied the seals

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
M701	225	**Seal Number**	M	AN	2/15	Must use

> **Description:** Unique number on seal used to close a shipment

Comments:

1. M705 indicates the name of the organization which applied the seal(s).

N8   Waybill Reference

<table>
<tr><td>Pos: 130</td><td>Max: 499</td></tr>
<tr><td colspan="2" align="center">Heading - Mandatory</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 2</td></tr>
</table>

User Option (Usage): Must use

Purpose: To identify the waybill and to specify the equipment used and the destination details

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N801	186	**Waybill Number**	M	N0	1/6	Must use

Description: Carrier accounting number of the waybill for the inbound movement

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N802	373	**Date**	M	DT	8/8	Must use

Description: Date expressed as CCYYMMDD

Syntax Rules:

1. P030405 - If either N803, N804 or N805 are present, then the others are required.
2. P0607 - If either N806 or N807 is present, then the other is required.
3. P0809 - If either N808 or N809 is present, then the other is required.
4. P1011 - If either N810 or N811 is present, then the other is required.

Semantics:

1. N802 is the waybill date.
2. N808 is the destination station of movement.
3. N810 will contain destination railroad initial Standard Carrier Alpha Code (SCAC).
4. N811 will contain railroad destination Freight Station Accounting Code (FSAC).

Comments:

1. Waybill type should be transmitted only when the transaction set involves a multiple Car/TOFC/COFC shipment or a conveying flat car. Waybill type should not be sent on a single Car/TOFC/COFC.
2. N807 is the waybill date.

F9   Origin Station

Pos: 140	**Max: 1**
Heading - Mandatory	
Loop: N/A	**Elements: 4**

User Option (Usage): Must use

Purpose: To identify the rail origin of the shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
F901	573	**Freight Station Accounting Code**	O	ID	1/5	Used
		Description: Code (Freight Station Accounting) (AAR Managed Code for Locations)				
F902	19	**City Name**	M	AN	2/30	Must use
		Description: Free-form text for city name				
F903	156	**State or Province Code**	M	ID	2/2	Must use
		Description: Code (Standard State/Province) as defined by appropriate government agency				
F908	154	**Standard Point Location Code**	O	ID	6/9	Used
		Description: Code (Standard Point Location) defined by NMFTA point development group as the official code assigned to a city or point (for ratemaking purposes) within a city				

Semantics:

1. F902 is the origin station for movement.
2. F904 is the country code for the city named in the F902.
3. F905 is the freight station accounting code of the origin junction settlement carrier.
4. F908 is the Standard Point Location Code (SPLC) for the city named in the F902.
5. F909 is the postal code for the city named in the F902.
6. F910 is the Standard Point Location Code (SPLC) for the city named in the F906.
7. F911 is the postal code for the city named in the F906.
8. F912 is the country code for the city named in the F906.

Comments:

1. F905 is the freight station accounting code of the city named in F906.

D9 Destination Station

Pos: 150	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

User Option (Usage): Must use

Purpose: To identify the rail destination of the shipment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
D901	573	**Freight Station Accounting Code**	O	ID	1/5	Used

Description: Code (Freight Station Accounting) (AAR Managed Code for Locations)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
D902	19	**City Name**	M	AN	2/30	Must use

Description: Free-form text for city name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
D903	156	**State or Province Code**	M	ID	2/2	Must use

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
D908	154	**Standard Point Location Code**	O	ID	6/9	Used

Description: Code (Standard Point Location) defined by NMFTA point development group as the official code assigned to a city or point (for ratemaking purposes) within a city

Semantics:

1. D902 is the destination station of movement.
2. D904 is the country code for the city named in the D902.
3. D905 is the freight station accounting code of the destination junction settlement carrier.
4. D908 is the Standard Point Location Code (SPLC) for the city named in the D902.
5. D909 is the postal code for the city names in the D902.
6. D910 is the Standard Point Location Code (SPLC) for the city named in the D906.
7. D911 is the postal code for the city named in the D906.
8. D912 is the country code for the city named in the D906.

Comments:

1. D905 is the freight station accounting code of the city name in D906.

Loop Name

Pos: 160	**Repeat: 10**
Optional	
Loop: N1	**Elements: N/A**

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
160	N1	Name	O	1		Used
165	N2	Additional Name Information	O	2		Used
170	N3	Address Information	O	2		Used
180	N4	Geographic Location	O	1		Used

N1 **Name**

User Option (Usage): Used

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

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: 1)

Code	Name
SH	Shipper

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	X	AN	1/60	Used

Description: Free-form name

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. 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.
2. N105 and N106 further define the type of entity in N101.

N2   Additional Name Information

Pos: 165	**Max: 2**
Heading - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 170	**Max: 2**
Heading - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

Purpose: To specify the location of the named party

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: 180	**Max: 1**
Heading - Optional	
Loop: N1	**Elements: 3**

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used

Description: Free-form text for city name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N402	156	**State or Province Code**	O	ID	2/2	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N403	116	**Postal Code**	O	ID	3/15	Used

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

Syntax Rules:

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

Comments:

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

Loop Name

<div style="border:1px solid">

Pos: 160   **Repeat: 10**

Optional

Loop: N1   **Elements: N/A**

</div>

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
160	N1	Name	O	1		Used
165	N2	Additional Name Information	O	2		Used
170	N3	Address Information	O	2		Used
180	N4	Geographic Location	O	1		Used

N1 Name

User Option (Usage): Used

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

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: 1)

Code	Name
CN	Consignee

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	X	AN	1/60	Used

Description: Free-form name

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. 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.
2. N105 and N106 further define the type of entity in N101.

N2 Additional Name Information

Pos: 165	Max: 2
Heading - Optional	
Loop: N1	**Elements: 2**

User Option (Usage): Used

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N201	93	**Name**	M	AN	1/60	Must use
		Description: Free-form name				
N202	93	**Name**	O	AN	1/60	Used
		Description: Free-form name				

N3 Address Information

Pos: 170		**Max: 2**
	Heading - Optional	
Loop: N1		**Elements: 2**

User Option (Usage): Used

Purpose: To specify the location of the named party

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

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used

    Description: Free-form text for city name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N402	156	**State or Province Code**	O	ID	2/2	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N403	116	**Postal Code**	O	ID	3/15	Used

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

Syntax Rules:

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

Comments:

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

Loop Name

User Option (Usage): Used

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
160	N1	Name	O	1		Used
170	N3	Address Information	O	2		Used
180	N4	Geographic Location	O	1		Used

N1   Name

User Option (Usage): Used

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

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: 1)

Code	Name
PF	Party to Receive Freight Bill

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N102	93	**Name**	X	AN	1/60	Used

Description: Free-form name

Syntax Rules:

1. R0203 - At least one of N102 or N103 is required.
2. 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.
2. N105 and N106 further define the type of entity in N101.

N3 Address Information

Pos: 170		**Max: 2**
	Heading - Optional	
Loop: N1		**Elements: 2**

User Option (Usage): Used

Purpose: To specify the location of the named party

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

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N401	19	**City Name**	O	AN	2/30	Used

Description: Free-form text for city name

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N402	156	**State or Province Code**	O	ID	2/2	Used

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
N403	116	**Postal Code**	O	ID	3/15	Used

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

Syntax Rules:

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

Comments:

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

R2 Route Information

<table>
<tr><td>Pos: 400</td><td>Max: 13</td></tr>
<tr><td colspan="2">Heading - Optional</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 4</td></tr>
</table>

User Option (Usage): Used

Purpose: To specify carrier and routing sequences and details

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
R201	140	**Standard Carrier Alpha Code**	M	ID	2/4	Must use
		Description: Standard Carrier Alpha Code				
R202	133	**Routing Sequence Code**	M	ID	1/2	Must use
		Description: Code describing the relationship of a carrier to a specific shipment movement				

CodeList Summary (Total Codes: 23, Included: 3)

Code	Name
1	1st Carrier after Origin Carrier
R	Origin Carrier, Rule 11 Shipment
S	Origin Carrier, Shipper's Routing (Rail)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
R203	19	**City Name**	O	AN	2/30	Used
		Description: Free-form text for city name				
R206	91	**Transportation Method/Type Code**	O	ID	1/2	Used

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

All valid standard codes are used. (Total Codes: 71)

Syntax Rules:

1. C0807 - If R208 is present, then R207 is required.

Semantics:

1. R203 is the station or city name at which carriers interchange shipments.
2. R210 is the billing date.

Loop Assigned Number

User Option (Usage): Must use
Purpose: To reference a line number in a transaction set

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
430	LX	Assigned Number	M	1		Must use
440	L5	Description, Marks and Numbers	M	15		Must use
460		Loop L0	M		25	Must use

LX   Assigned Number

User Option (Usage): Must use

Purpose: To reference a line number in a transaction set

Element Summary:

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

Description: Number assigned for differentiation within a transaction set

L5 Description, Marks and Numbers

Pos: 440	**Max: 15**
Heading - Mandatory	
Loop: LX	**Elements: 4**

User Option (Usage): Must use

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
L501	213	**Lading Line Item Number**	O	N0	1/3	Used
		Description: Sequential line number for a lading item				
L502	79	**Lading Description**	O	AN	1/50	Used
		Description: Description of an item as required for rating and billing purposes				
L503	22	**Commodity Code**	X	AN	1/30	Used
		Description: Code describing a commodity or group of commodities				
L504	23	**Commodity Code Qualifier**	X	ID	1/1	Used
		Description: Code identifying the commodity coding system used for Commodity Code				

CodeList Summary (Total Codes: 23, Included: 1)

Code	Name
T	Standard Transportation Commodity Code (STCC)

Syntax Rules:

1. P0304 - If either L503 or L504 is present, then the other is required.
2. C0706 - If L507 is present, then L506 is required.
3. P0809 - If either L508 or L509 is present, then the other is required.

Comments:

1. L502 may be used to send quantity information as part of the product description.

Loop Line Item - Quantity and Weight

Pos: 460	Repeat: 25
Mandatory	
Loop: L0	Elements: N/A

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

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
460	L0	Line Item - Quantity and Weight	M	1		Must use
470	L1	Rate and Charges	M	10		Must use
480	PI	Price Authority Identification	O	30		Used

L0 Line Item - Quantity and Weight

<table>
<tr><td>Pos: 460</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: L0</td><td>Elements: 5</td></tr>
</table>

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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
L001	213	**Lading Line Item Number**	O	N0	1/3	Used
		Description: Sequential line number for a lading item				
L002	220	**Billed/Rated-as Quantity**	X	R	1/11	Used
		Description: Basis for rating (miles, value, volume, etc.); Note: Weight may be defined by either data element 220 or 81				
L003	221	**Billed/Rated-as Qualifier**	X	ID	2/2	Used
		Description: Code identifying the type of quantity or value on which the rate or item pricing is based **All valid standard codes are used. (Total Codes: 47)**				
L004	81	**Weight**	X	R	1/10	Used
		Description: Numeric value of weight				
L005	187	**Weight Qualifier**	X	ID	1/2	Used
		Description: Code defining the type of weight				

CodeList Summary (Total Codes: 51, Included: 1)

Code	Name
N	Actual Net Weight

Syntax Rules:

1. P0203 - If either L002 or L003 is present, then the other is required.
2. P0405 - If either L004 or L005 is present, then the other is required.
3. P0607 - If either L006 or L007 is present, then the other is required.
4. P0809 - If either L008 or L009 is present, then the other is required.
5. C1104 - If L011 is present, then L004 is required.
6. P1315 - If either L013 or L015 is present, then the other is required.

Semantics:

1. L008 is the number of handling units of the line item tendered to the carrier.
2. L013 can only be used if the code in L009 is PLT, SKD, or SLP.
3. L015 designates whether the carrier will be required to verify the number of units contained on a pallet, slip sheet or skid. Code "Y" indicates that the carrier will be required to verify. Code "N" indicates that the carrier will not be required to verify.

Comments:

1. L013 is used to convey the total number of boxes, cartons, or pieces contained on a pallet, skid, or slip sheet for the line item.

L1 Rate and Charges

<table>
<tr><td>Pos: 470</td><td>Max: 10</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: L0</td><td>Elements: 7</td></tr>
</table>

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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
L101	213	**Lading Line Item Number**	O	N0	1/3	Used

Description: Sequential line number for a lading item

L102	60	**Freight Rate**	X	R	1/9	Used

Description: Rate that applies to the specific commodity

L103	122	**Rate/Value Qualifier**	X	ID	2/2	Used

Description: Code qualifying how to extend charges or interpret value

CodeList Summary (Total Codes: 163, Included: 2)

Code	Name
PM	Per Mile
PT	Per Net Ton

L104	58	**Charge**	X	N2	1/12	Used

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

L106	117	**Prepaid Amount**	X	N2	1/9	Used

Description: Money paid at point of origin (usually by shipper) expressed in the standard monetary denomination for the currency specified

L108	150	**Special Charge or Allowance Code**	O	ID	3/3	Used

Description: Code identifying type of special charge or allowance
All valid standard codes are used. (Total Codes: 1073)

L120	100	**Currency Code**	O	ID	3/3	Used

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

Syntax Rules:

1. P0203 - If either L102 or L103 is present, then the other is required.
2. R040506 - At least one of L104, L105 or L106 is required.
3. P1415 - If either L114 or L115 is present, then the other is required.
4. P1718 - If either L117 or L118 is present, then the other is required.

Semantics:

1. L119 is the percent used to determine the charge in L104.
2. L120, if used, indicates the currency for all monetary amounts in this L1 segment.
3. L121 is the origin rated as charge amount.

PI Price Authority Identification

Pos: 480	**Max: 30**
Heading - Optional	
Loop: L0	**Elements: 4**

User Option (Usage): Used

Purpose: To communicate basis of pricing, such as contract number, quote number, or tariff number

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PI01	128	**Reference Identification Qualifier**	M	ID	2/3	Must use

    Description: Code qualifying the Reference Identification
    All valid standard codes are used. (Total Codes: 1503)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PI02	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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PI05	168	**Tariff Agency Code**	O	ID	1/4	Used

    Description: Code defining the tariff bureau or tariff publishing agent that governs the rates applied to this shipment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PI06	965	**Issuing Carrier Identifier**	O	AN	1/10	Used

    Description: Identification assigned by issuing carrier

Syntax Rules:

1. C1412 - If PI14 is present, then PI12 is required.
2. C1513 - If PI15 is present, then PI13 is required.

Semantics:

1. PI07 is the price authority suffix for the contract.
2. PI08 is the price authority item number.
3. PI09 is the price authority supplement.
4. PI10 is the price authority section number.
5. PI11 is the price authority suffix for tariff.
6. PI12 is the effective date.
7. PI13 is the expiration date.

L3   Total Weight and Charges

Pos: 540	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

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:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
L305	58	**Charge**	O	N2	1/12	Used

> **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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
L307	117	**Prepaid Amount**	O	N2	1/9	Used

> **Description:** Money paid at point of origin (usually by shipper) expressed in the standard monetary denomination for the currency specified

Syntax Rules:

1. P0102 - If either L301 or L302 is present, then the other is required.
2. P0304 - If either L303 or L304 is present, then the other is required.
3. P0910 - If either L309 or L310 is present, then the other is required.
4. C1201 - If L312 is present, then L301 is required.
5. P1415 - If either L314 or L315 is present, then the other is required.

Semantics:

1. L305 is the total charges.

SE Transaction Set Trailer

<table>
<tr><td>Pos: 570</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 2</td></tr>
</table>

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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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.