



## **EDI Mapping to send in an EDI 404 corrector**

## **Canadian National Railway - Electronic Commerce**

The enclosed documentation covers information required to submit an EDI 404 corrector transmission to update or add segments to an existing 404 transmission.

**Canadian National Railway - Electronic Commerce  
Original 404 transmission**

CN is currently using the X12 Standard Version/Release 7010/RAIL

Sample EDI Transmission with required data for the 404 Transaction Set

**ISA\*00\*        \*00\*        \*ZZ\*GENERIC        \*02\*CN  
\*171228\*1339\*U\*00701\*006298413\*0\*P\*>  
GS\*SR\*GENERIC\*CN\*20171228\*1336\*98826\*X\*007010  
ST\*404\*988260001  
BX\*00\*R\*PP\*\*CN\*L\*B  
BNX\*R\*\*S  
M3\*R\*20171228\*1336\*ET  
N9\*BM\*1257\*\*20171228\*1336  
N7\*CN\*123456\*213360\*N\*\*\*\*\*RR  
F9\*\*WATSON\*SK  
D9\*\*VANCOUVER\*BC  
N1\*SH\*GENERIC CARLOAD INC  
N3\*123 ROAD  
N4\*WATSON\*SK\*S0K 4V0  
PER\*IC\*CONTACT NAME\*TE\*123-123-1234  
N1\*CN\*GENERIC CONSIGNEE CO  
N3\*12 SMITH STREET  
N4\*VANCOUVER\*BC\*V5K 1P7  
N1\*PF\*GENERIC CARLOAD INC  
N3\*123 ROAD  
N4\*WATSON\*SK\*S0K 4V0  
R2\*CN\*S\*\*\*\*R  
LX\*1  
L5\*1\*WALLBOARD\*3275440\*T  
L0\*1\*\*\*213360\*N\*\*\*1\*CLD  
SE\*27\*988260001  
GE\*1\*98826  
IEA\*1\*006298413**

**Canadian National Railway - Electronic Commerce  
Corrector 404 transmission**

CN is currently using the X12 Standard Version/Release 7010/RAIL

Sample EDI Transmission with required data for the submission of the 404 **corrector** transmission. In this case, we are adding an embargo number and embargo permit number.

ISA\*00\*        \*00\*        \*ZZ\*GENERIC        \*02\*CN  
\*171228\*1339\*U\*00701\*006298413\*0\*P\*>  
GS\*SR\*GENERIC\*CN\*20171228\*1336\*98826\*X\*007010  
ST\*404\*988260001  
**ZC1\*\*CN\*123456\*1257\*20171228\*CO\*CN\*R**  
BX\*00\*R\*PP\*\*CN\*L\*B  
BNX\*R\*\*S  
M3\*R\*20171228\*1336\*ET  
N9\*BM\*1257\*\*20171228\*1336  
**N9\*EN\*CN002218**  
**N9\*EB\*CN2218DE18**  
N7\*CN\*123456\*213360\*N\*\*\*\*\*RR  
F9\*\*WATSON\*SK  
D9\*\*VANCOUVER\*BC  
N1\*SH\*GENERIC CARLOAD INC  
N3\*123 ROAD  
N4\*WATSON\*SK\*S0K 4V0  
PER\*IC\*CONTACT NAME\*TE\*123-123-1234  
N1\*CN\*GENERIC CONSIGNEE CO  
N3\*12 SMITH STREET  
N4\*VANCOUVER\*BC\*V5K 1P7  
N1\*PF\*GENERIC CARLOAD INC  
N3\*123 ROAD  
N4\*WATSON\*SK\*S0K 4V0  
R2\*CN\*S\*\*\*\*R  
LX\*1  
L5\*1\*WALLBOARD\*3275440\*T  
L0\*1\*\*\*213360\*N\*\*\*1\*CLD  
SE\*27\*988260001  
GE\*1\*98826  
IEA\*1\*006298413

**ISA Segment: Interchange Control Header**

**ISA\*00\*      \*00\*      \*ZZ\*GENERIC      \*02\*CN  
\*171228\*1339\*U\*00701\*006298413\*0\*P\*>**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
ISA01	Authorization Information Qualifier	I01	ID	2/2
ISA02	Authorization Information (ten spaces)	I02	AN	10/10
ISA03	Security Information Qualifier	I03	ID	2/2
ISA04	Security Information (ten spaces)	I04	AN	10/10
ISA05	Interchange ID Qualifier	I05	ID	2/2
ISA06	Interchange Sender ID (GENERIC - fill out field with spaces)	I06	AN	15/15
ISA07	Interchange ID Qualifier (If RR SCAC use 02)	I05	ID	2/2
ISA08	Interchange Receiver ID (CN - fill out field with spaces)	I07	AN	15/15
ISA09	Interchange Date (YYMMDD)	I08	DT	6/6
ISA10	Interchange Time (HHMM)	I09	TM	4/4
ISA11	Repetition Separator (Suggest “^”)	I65		1/1
ISA12	Interchange Control Version Number (Value 00701)	I11	ID	5/5
ISA13	Interchange Control Number (a control number assigned by sender)	I12	N0	9/9
ISA14	Acknowledgment Requested (0 = none requested, 1= requested)	I13	ID	1/1
ISA15	Usage Indicator (P = Production, T = Test)	I14	ID	1/1
ISA16	Component Element Separator (Suggest “.”)	I15		1/1

**GS Segment: Functional Group Header**

**GS\*SR\*GENERIC\*CN\*20171228\*1336\*98826\*X\*007010**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
GS01	Functional Identifier Code (SR = Rail Carrier Shipment Information)	479	ID	2/2
GS02	Application Sender's Code (Customer's sender ID)	142	AN	2/15
GS03	Application Receiver's Code (CN = Canadian National)	124	AN	2/15
GS04	Date (YYYYMMDD)	373	DT	8/8
GS05	Time (HHMMSS)	337	TM	4/8
GS06	Group Control Number (Assigned number originated and maintained by the sender)	28	N0	1/9
GS07	Responsible Agency Code (X = Accredited Standards Committee X12)	455	ID	1/2
GS08	Version / Release / Industry Identity (CN is using version 007010 of the X12 EDI Standards)	480	AN	1/12

**ST Segment: Transaction Set Header**

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

**ST\*404\*988260001**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
ST01	Transaction Set Identifier Code (404 = Rail Carrier Shipment Information (Bill of Lading))	143	ID	3/3
ST02	Transaction Set Control Number (Sequential control number generated by Customer)	329	AN	4/9

## ZC1 Segment: Beginning Segment for Data Correction or Change

**ZC1\*\*CN\*123456\*1257\*20171228\*CO\*CN\*R**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
ZC102	Equipment Initial	206	AN	1/4
ZC103	Equipment Number	207	AN	1/15
ZC104	Transaction Reference Number (This is the N9*BM (Bill of lading) from the original 404)	244	AN	1/50
ZC105	Transaction Reference Date (This is the N904 on the original 404 – (YYYYMMDD))	243	DT	8/8
ZC106	Correction Indicator Code (CO=correct the EDI 404 sent) (CA=cancel the EDI 404 sent)	202	ID	2/2
ZC107	Standard Alpha Carrier Code (Use CN for corrections originating on CN lines)	140	ID	2/4
ZC108	Transportation Method/Type Code (R=rail) (X=intermodal)	91	ID	1/2

**Changes can be accepted with a ZC corrector, if conveyance already under CN control (in gate), for the following:**

Weight code	BNX01
Weight Agreement	N9*WM
STCC	L503
Quantity of articles	L008/L009
Seal numbers	M701
Flat deck delivery	H3*FDD

## BX Segment: General Shipment Information

**BX\*00\*R\*PP\*\*CN\*L\*B**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
BX01	Transaction Set Purpose Code (00 = Original)	353	ID	2/2
BX02	Transportation Method/Type Code (R = Rail)	91	ID	1/2
BX03	Shipment Method of Payment (PP = Prepaid, CC = Collect)	146	ID	2/2
BX05	Standard Carrier Alpha Code (CN = CN Rail)	140	ID	2/4
BX06	Weight Unit Code (L = Pounds, K= Kilograms)	188	ID	1/1
BX07	Shipment Qualifier (B = Bill of Lading for Individual Shipment)	147	ID	1/1

### **BNX Segment: Rail Shipment Information**

#### **BNX\*R\*\*S**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
BNX01	Shipment Weight Code (A = Wgt Agreement Number) (N = Per Car Charge) (R = Rail Carrier Scale)	460	ID	1/1
BNX03	Billing Code (S = Single Shipment Billing)	11	ID	1/1

### **M3 Segment: Release**

Indicates whether shipment is to be released for movement when the transmission is received or will be released through other means.

#### **M3\*R\*20171228\*1454**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
M301	Release Code (R = Release with Shipment Information)	132	ID	1/1
M302	Release Date (CCYYMMDD)	373	DT	8/8
M303	Release Time (HHMM, 24 hour clock 0001-2359)	337	TM	4/6



### N9 Segment: Reference Number

Allows Reference Numbers to be sent to CN. At least one N9 containing a Bill of Lading number must be included. This number will be included on all other documents such as Freight Invoice and Remittance/Payment.

**N9\*BM\*1257\*\*20171228\*1336**

**N9\*EN\*CN002218**

**N9\*EB\*CN2218DE18**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N901	Reference Number Qualifier (BM = Bill of Lading number) (WM = Weight Agreement Number (PO = Purchase order Number) (EN=embargo number) (EB=embargo permit number)	128	ID	2/3
N902	Reference Number (Max 15 characters for B/L # (BM))	127	AN	1/30
N904	Date (CCYYMMDD, required for B/L (BM))	373	DT	8/8
N905	Time (HHMM, 24 hour clock 0001-2359 or HHMMSS or HHMMSSD or HHMMSSDD H=hours 00-23 M=minutes 00-59 S=seconds 00-59 DD=decimal seconds in tenths and hundredths 00-99)	337	TM	4/8

### N7 Segment: Equipment Details

**N7\*CN\*123456\*213360\*N\*\*\*\*\*RR**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N701	Equipment Initial	206	AN	1/4
N702	Equipment Number	207	AN	1/15
N703	Weight	81	R	1/10
N704	Weight Qualifier (E = Estimated Weight) (N = Net Weight)	187	ID	1/2
N711	Equipment Description Code (RR = Railcar }	40	ID	2/2

**F9 Segment: Origin**

Indicates the origin of the shipment, the point from which it is shipped. The spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

**F9\*\*WATSON\*SK**

Data Seq	Element Name	Data Element	Data Type	Characters Min/Max
F902	Origin Station	19	AN	2/30
F903	State or Province Code	156	ID	2/2

**D9 Segment: Destination**

Indicates the destination of the shipment, the point at which it will be unloaded or where the transportation responsibility reverts to the consignee. The spelling should be in accordance with that listed in the Standard Point Location Code (SPLC) standard available from the National Motor Freight Tariff Association (USA) or the National Transportation Agency (Canada). CN can provide spellings for your stations.

**D9\*\*VANCOUVER\*BC**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
D902	Destination Station	19	AN	2/30
D903	State or Province Code	156	ID	2/2

**N1 Segment: Name**

Associated to the N3 and N4 segments below. N1, N3 and N4 segments are repeated for the Consignee and any other Additional Parties to the shipment.

**N1\*SH\*GENERIC CARLOAD INC  
N3\*123 ROAD  
N4\*WATSON\*SK\*S0K 4V0  
N1\*CN\*GENERIC CONSIGNEE CO  
N3\*12 SMITH STREET  
N4\*VANCOUVER\*BC\*V5K 1P7  
N1\*PF\*GENERIC CARLOAD INC  
N3\*123 ROAD  
N4\*WATSON\*SK\*S0K 4V0**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N101	Entity Identifier Code (SH = Shipper) (CN = Consignee) (C1 = Care of Party) (PF = Payer of Freight)	98	ID	2/3
N102	Name	93	AN	1/35

**N3 Segment: Address**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N301	Address Information	166	AN	1/30
N302	Address Information	166	AN	1/30

**N4 Segment: City**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
N401	City Name	19	AN	2/30
N402	State or Province Code	156	ID	2/2
N403	Postal Code	116	ID	3/15

**PER Segment: Administrative Communications Contact****PER\*IC\*CONTACT NAME\*TE\*123-123-1234**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
PER01	Contact function code (IC = Information contact)	366	ID	2/2
PER02	Name	93	ID	1/60
PER03	Communication number qualifier (TE=telephone)	365	ID	2/2
PER04	Communication number	364	ID	1/25

**R2 Segment: Route Information**

One R2 segment for each railroad in the route. CN can provide route information for your shipments (ie: Railroad SCAC's and junctions).

**R2\*CN\*S\*\*\*\*R**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
R201	Standard Carrier Alpha Code (SCAC) (CN = Canadian National etc)	140	ID	2/4
R202	Routing Sequence Code (S = Origin Carrier, Shipper's Routing (Rail))	133	ID	1/2
R206	Transportation Method/Type Code (R = Rail)	91	ID	1/2

**LX Segment: Assigned Number****LX\*1**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
LX01	Assigned Number (Number assigned for differentiation within a transaction set)	554	N0	1/6

**L5 Segment: Commodity Description**

CN can provide Standard Transportation Commodity Codes (STCC) for your commodities. The commodity code is required only on the first L5 segment. Additional L5 segments can be used to provide additional description of lading.

**L5\*1\*WALLBOARD\*3275440\*T**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L501	Line Number	213	N0	1/6
L502	Commodity Description	79	AN	1/50
L503	Commodity Code (7 digit Standard Transportation Commodity Code (STCC)) (eg. WALLBOARD = 3275440)	22	AN	1/30
L504	Commodity Code Qualifier (T = Standard Transportation Commodity Code (STCC))	23	ID	1/1

**L0 Segment: Line Item, Quantity and Weight****L0\*1\*\*\*213360\*N\*\*\*1\*CLD**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
L001	Lading Line Item Number	213	N0	1/6
L004	Weight	81	R	1/10
L005	Weight Qualifier (E = Estimated Weight) (N = Net Weight)	187	ID	1/2
L008	Lading Quantity	80	N0	1/7
L009	Packaging Form Code (CLD = Carload)	211	ID	3/3

**SE Segment: Transaction Set Trailer**

**SE\*27\*988260001**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
SE01	Number Of Included Segments (Includes ST and SE segments)	96	N0	1/10
SE02	Transaction Set Control Number (Repeated from ST segment ST02)	329	AN	4/9

**GE Segment: Functional Group Trailer**

**GE\*1\*98826**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
GE01	Number of Transaction Sets Included	97	N0	1/6
GE02	Group Control Number (Repeated from GS segment GS06)	28	N0	1/9

**IEA Segment: Interchange Control Trailer**

**IEA\*1\*006298413**

Element Seq	Element Name	Data Element	Data Type	Characters Min/Max
IEA01	Number of included Functional Groups	I16	N0	1/5
IEA02	Interchange Control Number (Same number as ISA13)	I12	N0	9/9

## **Criteria for changes to EDI 404 for Carload Shipments**

1. If a ZC1 segment exists in the EDI 404, it will be used to complete the match and update the original EDI 404.
2. If no ZC1 segment is indicated on the EDI 404, the following criteria must be met:

Must be an Inbound EDI 404

The waybill in CN's system must be active

Must match on the original Sender ID (GS02)

Must match on the equipment initial/number (N701 and N702)

Must match on the bill of lading number (N9\*BM)

### **The following changes CANNOT be accepted to the following data/profiles:**

- Shipper Customer (N1\*SH and corresponding N3 and N4 segments)
- Consignee Customer (N1\*CN and corresponding N3 and N4 segments)
- Care of Customer (N1\*C1 and corresponding N3 and N4 segments)
- Shipped From Customer (N1\*SF and corresponding N3 and N4 segments)
- Payer of Freight Customer (N1\*PF and corresponding N3 and N4 segments)
- Movement Revenue Code (BX03 segment)
- Stop-Off Profile (S1, S2 and S9 segments)
- Load/empty status (BX07 segment)
- Route (R2 segment)
- Special Condition Codes (H3 segment)
- PPSI/temperature (PS segment)

**The following changes CAN be accepted to the following data/profiles:**

**NB:** acceptable changes must run through existing logic in our SRS mainframe system and generate a new waybill version upon execution.

- All parties indicated in the N1 segment, except as noted above (items 1-5)
- Metric/Imperial Weight Measure (BX06 segment)
- Net Weight (N703 and L004 segments)
- Weight Code (BNX01)
- Weight Agreement (BNX\*A segment)
- Bill of Lading Number (N9\*BM segment)
- STCC (L503 segment)
- Commodity Profile (L0 segment)
- Dangerous Profile (LH1, LH2, LH3, LFH, LH4, PER segments)
- Quantity of articles (L008 segment)
- Package type code (L009 segment)
- Seal numbers (M7 segment)
- Vessel Profile (CM segment)
- Goods and services tax code (BX13 segment)
- Freeform (L502 segment)
- Vehicle Profile (VC segment)
- Grain Profile (GA segments)
- Reference Numbers (N9 segments)
- Contract Profile (PI segment)
- Customs Profile (X1 segment)
- Shipper contact profile (PER segment)

## **Criteria for changes to EDI 404 for Intermodal Shipments**

1. If a ZC1 segment exists in the EDI 404, it will be used to complete the match and update the original EDI 404.
2. If no ZC1 segment is indicated on the EDI 404, the following criteria must be met:

Must be an Inbound EDI 404

The waybill in CN's system must be active

Must match on the original Sender ID (GS02)

Must match on the equipment initial/number (N701 and N702)

Must match on the bill of lading number (N9\*BM)

### **The following changes CANNOT be accepted to the following data/profiles:**

- Shipper Customer (N1\*SH and corresponding N3 and N4 segments)
- Shipped From Customer (N1\*SF and corresponding N3 and N4 segments)
- Destination Intermodal Terminal (the N4 segment for the N1\*CN or N1\*C1 segments)
- Payer of Freight Customer (N1\*PF and corresponding N3 and N4 segments)
- Movement Revenue Code (BX03 segment)
- Load/empty status (BX07 segment)
- Net Weight (N703 and L004 segments)  
\*\*\* is allowed if the unit is not assigned or ramped to a car
- PPSI/temperature (PS segment)
- Temperature for gensets (PS segment)
- Intermodal Plan Code which affects origin dray (R205 segment)
- Route (R2 segment)
- Car Kind (N711, N715, and N720 segments)
- Special Condition Codes (H3 segment)
- Vessel Profile (CM segment)



**The following changes CAN be accepted to the following data/profiles:**

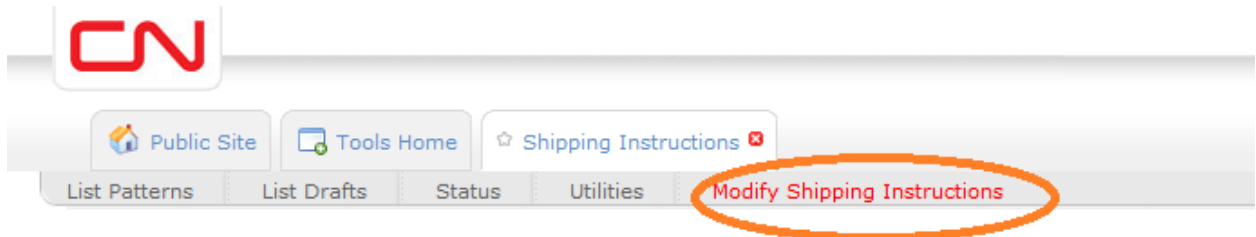
**NB:** acceptable changes must run through existing logic in our SRS mainframe system and generate a new waybill version upon execution.

- All parties indicated in the N1 segment, except as noted above (items 1-4)
- Weight Code (BNX01)
- Weight Agreement (BNX\*A segment)
- Bill of Lading Number (N9\*BM segment)
- STCC (L503 segment)
- Commodity Profile (L0 segment)
- Dangerous Profile (LH1, LH2, LH3, LFH, LH4, PER segments)
- Stop-Off Profile (S1, S2 and S9 segments)
- Quantity of articles (L008 segment)
- Package type code (L009 segment)
- Intermodal Plan Code which affects destination dray (R205 segment)  
\*\*\*Except if the Waybill Reference Number (N901 segment) is M5 (CSA shipment), then the Intermodal Plan code cannot change from \*7 or \*0
- Seal numbers (M7 segment)
- Goods and services tax code (BX13 segment)
- Flat Deck Delivery (H3\*FDD segment)
- Freeform (L502 segment)
- Vehicle Profile (VC segment)
- Grain Profile (GA segments)
- Reference Numbers (N9 segments)
- Contract Profile (PI segment)
- Customs Profile (X1 segment)
- Shipper contact profile (PER segment)

## Canadian National Railway - Electronic Commerce Corrector to Shipping Instructions on the eBusiness website

Sample Shipping Instructions with required data for the submission to Modify Shipping Instructions.

Changes to a CN website Shipping Instructions can only be made by the original user that submitted the original Shipping Instructions.



Indicate the equipment initial and number you wish to retrieve the Shipping Instructions and then press Submit.

Retrieve one or more IDs to retrieve the Shipping Instructions for viewing/editing:

Equipment IDs  Shipper Supplied Reference Number

zimu239501 indicate the container initial/number or "Recall Last"

On the far right hand side, you will see the View/Edit column. Place your cursor on the blue radial button to Edit and click.

Modify Shipping Instructions									
Equipment ID	Ref. No	Waybill Status	Load/Empty	Origin	Destination	Consignee	Contents	Links	View / Edit
ZIMU 239501	ZC1CORRECTOR	Active	Load	Brantford, ON	Winnipeg, MB	Loblaws Inc	2032985 : Ravioli Or Tamales Canned Cooked Or Preserved		

Place cursor here and enter

This will retrieve the Shipping Instructions that was submitted. Any fields that are in grey are not adjustable.

## Modify Shipping Instructions

Mandatory fields are indicated with an asterisk(\*)

Enter Key Information and Dates

Shipping Date: \*// 2018 01 24

? Equipment ID: \* Initials: Number: ? U  
zimu 239501

EquipmentList

? Price Reference:

? Minimum Car E  
? Car Block Incentive

fields that appear in grey are not adjustable

Once you are finished with the adjustment, click Submit.

### Changes that can be accepted with a corrector, if conveyance already under CN control (in gate), are the following:

- Unit of Measure
- Weight Type
- Product
- Packages/Packaging Type
- Seal numbers
- Special Handling

