



# 856 Ship Notice/Manifest

X12/V4010/856 : 856 Ship Notice/Manifest

**Version: 1.2**

|           |            |
|-----------|------------|
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# 856

## Ship Notice/Manifest

### Functional Group=SH

**Purpose:** This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

#### 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        | BSN       | Beginning Segment for Ship Notice | M          | 1              |               |              | Must use     |
| 040        | DTM       | Date/Time Reference               | 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 - HL</u> |           |                                                 |            |                | <u>200000</u> | <u>C2/010L</u> |              |
| 010                 | HL        | Hierarchical Level                              | M          | 1              |               |                | Must use     |
| 020                 | LIN       | Item Identification                             | M          | 1              |               |                | Must use     |
| 030                 | SN1       | Item Detail (Shipment)                          | O          | 1              |               |                | Used         |
| 050                 | PRF       | Purchase Order Reference                        | O          | 1              |               |                | Used         |
| 120                 | TD5       | Carrier Details (Routing Sequence/Transit Time) | O          | 12             |               |                | Used         |
| 150                 | REF       | Reference Identification                        | O          | >1             |               |                | Used         |
| 190                 | MAN       | Marks and Numbers                               | O          | >1             |               |                | Used         |
| <u>LOOP ID - N1</u> |           |                                                 |            |                | <u>200</u>    |                |              |
| 220                 | N1        | Name                                            | O          | 1              |               |                | Used         |
| 230                 | N2        | Additional Name Information                     | O          | 2              |               |                | Used         |
| 240                 | N3        | Address Information                             | O          | 2              |               |                | Used         |
| 250                 | N4        | Geographic Location                             | O          | 1              |               |                | Used         |

#### 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> |
|------------|-----------|-------------------------|------------|----------------|---------------|--------------|--------------|
| 010        | CTT       | Transaction Totals      | O          | 1              |               | N3/010       | Used         |
| 020        | SE        | Transaction Set Trailer | M          | 1              |               |              | Must use     |

#### 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> |
|------------|-----------|-----------------------------|------------|----------------|---------------|--------------|--------------|
|            | GE        | Functional Group Trailer    | M          | 1              |               |              | Must use     |
|            | IEA       | Interchange Control Trailer | M          | 1              |               |              | Must use     |

#### Notes:

3/010 Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

**Comments:**

2/010L The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

# 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     |
|            |           | <b>Description:</b> Code to identify the type of information in the Authorization Information<br><b>All valid standard codes are used. (Total Codes: 7)</b>                                                                         |            |             |                |              |
| ISA02      | I02       | Authorization Information                                                                                                                                                                                                           | M          | AN          | 10/10          | Must use     |
|            |           | <b>Description:</b> 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)       |            |             |                |              |
| ISA03      | I03       | Security Information Qualifier                                                                                                                                                                                                      | M          | ID          | 2/2            | Must use     |
|            |           | <b>Description:</b> Code to identify the type of information in the Security Information<br><b>All valid standard codes are used. (Total Codes: 2)</b>                                                                              |            |             |                |              |
| ISA04      | I04       | Security Information                                                                                                                                                                                                                | M          | AN          | 10/10          | Must use     |
|            |           | <b>Description:</b> 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)                   |            |             |                |              |
| ISA05      | I05       | Interchange ID Qualifier                                                                                                                                                                                                            | M          | ID          | 2/2            | Must use     |
|            |           | <b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified<br><b>All valid standard codes are used. (Total Codes: 38)</b>                   |            |             |                |              |
| ISA06      | I06       | Interchange Sender ID                                                                                                                                                                                                               | M          | AN          | 15/15          | Must use     |
|            |           | <b>Description:</b> 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                                      |            |             |                |              |
| ISA07      | I05       | Interchange ID Qualifier                                                                                                                                                                                                            | M          | ID          | 2/2            | Must use     |
|            |           | <b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified<br><b>All valid standard codes are used. (Total Codes: 38)</b>                   |            |             |                |              |
| ISA08      | I07       | Interchange Receiver ID                                                                                                                                                                                                             | M          | AN          | 15/15          | Must use     |
|            |           | <b>Description:</b> 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 |            |             |                |              |
| ISA09      | I08       | Interchange Date                                                                                                                                                                                                                    | M          | DT          | 6/6            | Must use     |
|            |           | <b>Description:</b> Date of the interchange                                                                                                                                                                                         |            |             |                |              |
| ISA10      | I09       | Interchange Time                                                                                                                                                                                                                    | M          | TM          | 4/4            | Must use     |
|            |           | <b>Description:</b> Time of the interchange                                                                                                                                                                                         |            |             |                |              |
| ISA11      | I10       | Interchange Control Standards Identifier                                                                                                                                                                                            | M          | ID          | 1/1            | Must use     |
|            |           | <b>Description:</b> Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer<br><b>All valid standard codes are used. (Total Codes: 1)</b>       |            |             |                |              |

|                                                                                                                                                                                                                                                                                                                          |     |                                           |                                                                                                                |    |     |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------|----------------------------------------------------------------------------------------------------------------|----|-----|----------|
| ISA12                                                                                                                                                                                                                                                                                                                    | I11 | <b>Interchange Control Version Number</b> | M                                                                                                              | ID | 5/5 | Must use |
| <b>Description:</b> Code specifying the version number of the interchange control segments                                                                                                                                                                                                                               |     |                                           |                                                                                                                |    |     |          |
| <b>Code List Summary</b> (Total Codes: 14, Included: 4)                                                                                                                                                                                                                                                                  |     |                                           |                                                                                                                |    |     |          |
|                                                                                                                                                                                                                                                                                                                          |     | <u><b>Code</b></u>                        | <u><b>Name</b></u>                                                                                             |    |     |          |
|                                                                                                                                                                                                                                                                                                                          |     | 00307                                     | Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1996 |    |     |          |
|                                                                                                                                                                                                                                                                                                                          |     | 00400                                     | Standard Issued as ANSI X12.5-1997                                                                             |    |     |          |
|                                                                                                                                                                                                                                                                                                                          |     | 00401                                     | Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997 |    |     |          |
|                                                                                                                                                                                                                                                                                                                          |     | 00402                                     | Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1998 |    |     |          |
| ISA13                                                                                                                                                                                                                                                                                                                    | I12 | <b>Interchange Control Number</b>         | M                                                                                                              | NO | 9/9 | Must use |
| <b>Description:</b> A control number assigned by the interchange sender                                                                                                                                                                                                                                                  |     |                                           |                                                                                                                |    |     |          |
| ISA14                                                                                                                                                                                                                                                                                                                    | I13 | <b>Acknowledgment Requested</b>           | M                                                                                                              | ID | 1/1 | Must use |
| <b>Description:</b> Code sent by the sender to request an interchange acknowledgment (TA1)                                                                                                                                                                                                                               |     |                                           |                                                                                                                |    |     |          |
| <b>All valid standard codes are used. (Total Codes: 2)</b>                                                                                                                                                                                                                                                               |     |                                           |                                                                                                                |    |     |          |
| ISA15                                                                                                                                                                                                                                                                                                                    | I14 | <b>Usage Indicator</b>                    | M                                                                                                              | ID | 1/1 | Must use |
| <b>Description:</b> Code to indicate whether data enclosed by this interchange envelope is test, production or information                                                                                                                                                                                               |     |                                           |                                                                                                                |    |     |          |
| <b>All valid standard codes are used. (Total Codes: 3)</b>                                                                                                                                                                                                                                                               |     |                                           |                                                                                                                |    |     |          |
| ISA16                                                                                                                                                                                                                                                                                                                    | I15 | <b>Component Element Separator</b>        | M                                                                                                              |    | 1/1 | Must use |
| <b>Description:</b> 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 |     |                                           |                                                                                                                |    |     |          |

**Comments:**

1. ISA|00| |00| |ZZ|DKEUS |ZZ|123456789 |210915|0932|U|00401|008904200|0|P|^}

# 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       | <b>Functional Identifier Code</b>                                                                            | M          | ID          | 2/2            | Must use     |
| <b>Description:</b> Code identifying a group of application related transaction sets                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                                                                                                              |            |             |                |              |
| <b>Code List Summary</b> (Total Codes: 240, Included: 1)                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |                                                                                                              |            |             |                |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | <u>Code</u> <u>Name</u>                                                                                      |            |             |                |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | SH      Ship Notice/Manifest (856)                                                                           |            |             |                |              |
| GS02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 142       | <b>Application Sender's Code</b>                                                                             | M          | AN          | 2/15           | Must use     |
| <b>Description:</b> Code identifying party sending transmission; codes agreed to by trading partners                                                                                                                                                                                                                                                                                                                                                                                                  |           |                                                                                                              |            |             |                |              |
| GS03                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 124       | <b>Application Receiver's Code</b>                                                                           | M          | AN          | 2/15           | Must use     |
| <b>Description:</b> Code identifying party receiving transmission; codes agreed to by trading partners                                                                                                                                                                                                                                                                                                                                                                                                |           |                                                                                                              |            |             |                |              |
| GS04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 373       | <b>Date</b>                                                                                                  | M          | DT          | 8/8            | Must use     |
| <b>Description:</b> Date expressed as CCYYMMDD                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                                                                                                              |            |             |                |              |
| GS05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 337       | <b>Time</b>                                                                                                  | M          | TM          | 4/8            | Must use     |
| <b>Description:</b> 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        | <b>Group Control Number</b>                                                                                  | M          | N0          | 1/9            | Must use     |
| <b>Description:</b> Assigned number originated and maintained by the sender                                                                                                                                                                                                                                                                                                                                                                                                                           |           |                                                                                                              |            |             |                |              |
| GS07                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 455       | <b>Responsible Agency Code</b>                                                                               | M          | ID          | 1/2            | Must use     |
| <b>Description:</b> Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480                                                                                                                                                                                                                                                                                                                                                                               |           |                                                                                                              |            |             |                |              |
| <b>Code List Summary</b> (Total Codes: 2, Included: 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |                                                                                                              |            |             |                |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | <u>Code</u> <u>Name</u>                                                                                      |            |             |                |              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           | X      Accredited Standards Committee X12                                                                    |            |             |                |              |
| GS08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 480       | <b>Version / Release / Industry Identifier Code</b>                                                          | M          | AN          | 1/12           | Must use     |
| <b>Description:</b> 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 |           |                                                                                                              |            |             |                |              |
| <b>Code List Summary</b> (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.
2. GS|SH|DKEUS|123456789|20210915|0932|8904200|X|004010}

# 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)

| <u>Code</u> | <u>Name</u>          |
|-------------|----------------------|
| 856         | Ship Notice/Manifest |

|      |     |                                |   |    |     |          |
|------|-----|--------------------------------|---|----|-----|----------|
| 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).

### Comments:

1. ST|856|0001}

# BSN Beginning Segment for Ship Notice

|                     |             |
|---------------------|-------------|
| Pos: 020            | Max: 1      |
| Heading - Mandatory |             |
| Loop: N/A           | Elements: 4 |

**User Option (Usage):** Must use

**Purpose:** To transmit identifying numbers, dates, and other basic data relating to 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> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------|------------|-------------|----------------|--------------|
| BSN01                                                                                                                                                                                                                                                                                                     | 353       | Transaction Set Purpose Code | M          | ID          | 2/2            | Must use     |
| <b>Description:</b> Code identifying purpose of transaction set<br><b>All valid standard codes are used. (Total Codes: 65)</b>                                                                                                                                                                            |           |                              |            |             |                |              |
| BSN02                                                                                                                                                                                                                                                                                                     | 396       | Shipment Identification      | M          | AN          | 2/30           | Must use     |
| <b>Description:</b> A unique control number assigned by the original shipper to identify a specific shipment                                                                                                                                                                                              |           |                              |            |             |                |              |
| BSN03                                                                                                                                                                                                                                                                                                     | 373       | Date                         | M          | DT          | 8/8            | Must use     |
| <b>Description:</b> Date expressed as CCYYMMDD                                                                                                                                                                                                                                                            |           |                              |            |             |                |              |
| BSN04                                                                                                                                                                                                                                                                                                     | 337       | Time                         | M          | TM          | 4/8            | Must use     |
| <b>Description:</b> 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) |           |                              |            |             |                |              |

## Syntax Rules:

1. C0706 - If BSN07 is present, then BSN06 is required.

## Semantics:

1. BSN03 is the date the shipment transaction set is created.
2. BSN04 is the time the shipment transaction set is created.

## Comments:

1. BSN|00|83967281|20210915|0931}

# DTM Date/Time Reference

|                    |             |
|--------------------|-------------|
| Pos: 040           | Max: 10     |
| Heading - Optional |             |
| Loop: N/A          | Elements: 2 |

**User Option (Usage):** Used

**Purpose:** To specify pertinent dates and times

## 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> |
|------------|-----------|---------------------|------------|-------------|----------------|--------------|
| DTM01      | 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: 2)

| <u>Code</u> | <u>Name</u>        |
|-------------|--------------------|
| 011         | Shipped            |
| 017         | Estimated Delivery |

|       |     |      |   |    |     |      |
|-------|-----|------|---|----|-----|------|
| DTM02 | 373 | Date | X | DT | 8/8 | Used |
|-------|-----|------|---|----|-----|------|

**Description:** Date expressed as CCYYMMDD

## Syntax Rules:

1. R020305 - At least one of DTM02, DTM03 or DTM05 is required.
2. C0403 - If DTM04 is present, then DTM03 is required.
3. P0506 - If either DTM05 or DTM06 is present, then the other is required.

## Comments:

1. DTM|011|20210915}
2. DTM|017|20210917}

# Loop Hierarchical Level

|           |                |
|-----------|----------------|
| Pos: 010  | Repeat: 200000 |
| Mandatory |                |
| Loop: HL  | Elements: N/A  |

**User Option (Usage):** Must use

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data segments

## 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        | HL        | Hierarchical Level                              | M          | 1              |               | Must use     |
| 020        | LIN       | Item Identification                             | M          | 1              |               | Must use     |
| 030        | SN1       | Item Detail (Shipment)                          | O          | 1              |               | Used         |
| 050        | PRF       | Purchase Order Reference                        | O          | 1              |               | Used         |
| 120        | TD5       | Carrier Details (Routing Sequence/Transit Time) | O          | 12             |               | Used         |
| 150        | REF       | Reference Identification                        | O          | >1             |               | Used         |
| 190        | MAN       | Marks and Numbers                               | O          | >1             |               | Used         |
| 220        |           | Loop N1                                         | O          |                | 200           | Used         |

## Comments:

1. HL|1|1|S}

# HL

## Hierarchical Level

|                    |             |
|--------------------|-------------|
| Pos: 010           | Max: 1      |
| Detail - Mandatory |             |
| Loop: HL           | Elements: 3 |

**User Option (Usage):** Must use

**Purpose:** To identify dependencies among and the content of hierarchically related groups of data 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> |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------|------------|-------------|----------------|--------------|
| HL01                                                                                                                                           | 628       | <b>Hierarchical ID Number</b>        | M          | AN          | 1/12           | Must use     |
| <b>Description:</b> A unique number assigned by the sender to identify a particular data segment in a hierarchical structure                   |           |                                      |            |             |                |              |
| HL02                                                                                                                                           | 734       | <b>Hierarchical Parent ID Number</b> | O          | AN          | 1/12           | Used         |
| <b>Description:</b> Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to |           |                                      |            |             |                |              |
| HL03                                                                                                                                           | 735       | <b>Hierarchical Level Code</b>       | M          | ID          | 1/2            | Must use     |
| <b>Description:</b> Code defining the characteristic of a level in a hierarchical structure                                                    |           |                                      |            |             |                |              |

**Code List Summary** (Total Codes: 170, Included: 4)

| <u>Code</u> | <u>Name</u> |
|-------------|-------------|
| I           | Item        |
| O           | Order       |
| P           | Pack        |
| S           | Shipment    |

### Comments:

1. The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
2. The HL segment defines a top-down/left-right ordered structure.
3. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
4. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
5. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
6. HL[1]1[S]

# LIN

## Item Identification

|                    |              |
|--------------------|--------------|
| Pos: 020           | Max: 1       |
| Detail - Mandatory |              |
| Loop: HL           | Elements: 12 |

**User Option (Usage):** Must use

**Purpose:** To specify basic item identification 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> |
|------------|-----------|-----------------------------------------------------------------------------------------------------------------|------------|---------------------------------|----------------|--------------|
| LIN01      | 350       | Assigned Identification                                                                                         | O          | AN                              | 1/20           | Used         |
|            |           | <b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set               |            |                                 |                |              |
| LIN02      | 235       | Product/Service ID Qualifier                                                                                    | M          | ID                              | 2/2            | Must use     |
|            |           | <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) |            |                                 |                |              |
|            |           | <b>Code List Summary</b> (Total Codes: 477, Included: 1)                                                        |            |                                 |                |              |
|            |           | <u>Code</u>                                                                                                     |            | <u>Name</u>                     |                |              |
|            |           | VP                                                                                                              |            | Vendor's (Seller's) Part Number |                |              |
| LIN03      | 234       | Product/Service ID                                                                                              | C          | AN                              | 1/48           | Used         |
|            |           | <b>Description:</b> Identifying number for a product or service                                                 |            |                                 |                |              |
| LIN04      | 235       | Product/Service ID Qualifier                                                                                    | X          | ID                              | 2/2            | Used         |
|            |           | <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) |            |                                 |                |              |
|            |           | <b>Code List Summary</b> (Total Codes: 477, Included: 1)                                                        |            |                                 |                |              |
|            |           | <u>Code</u>                                                                                                     |            | <u>Name</u>                     |                |              |
|            |           | MG                                                                                                              |            | Manufacturer's Part Number      |                |              |
| LIN05      | 234       | Product/Service ID                                                                                              | X          | AN                              | 1/48           | Used         |
|            |           | <b>Description:</b> Identifying number for a product or service                                                 |            |                                 |                |              |
| LIN06      | 235       | Product/Service ID Qualifier                                                                                    | X          | ID                              | 2/2            | Used         |
|            |           | <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) |            |                                 |                |              |
|            |           | <b>Code List Summary</b> (Total Codes: 477, Included: 1)                                                        |            |                                 |                |              |
|            |           | <u>Code</u>                                                                                                     |            | <u>Name</u>                     |                |              |
|            |           | BP                                                                                                              |            | Buyer's Part Number             |                |              |
| LIN07      | 234       | Product/Service ID                                                                                              | X          | AN                              | 1/48           | Used         |
|            |           | <b>Description:</b> Identifying number for a product or service                                                 |            |                                 |                |              |
| LIN08      | 235       | Product/Service ID Qualifier                                                                                    | X          | ID                              | 2/2            | Used         |
|            |           | <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) |            |                                 |                |              |
|            |           | <b>Code List Summary</b> (Total Codes: 477, Included: 1)                                                        |            |                                 |                |              |
|            |           | <u>Code</u>                                                                                                     |            | <u>Name</u>                     |                |              |
|            |           | MF                                                                                                              |            | Manufacturer                    |                |              |
| LIN09      | 234       | Product/Service ID                                                                                              | X          | AN                              | 1/48           | Used         |
|            |           | <b>Description:</b> Identifying number for a product or service                                                 |            |                                 |                |              |
| LIN10      | 235       | Product/Service ID Qualifier                                                                                    | X          | ID                              | 2/2            | Used         |
|            |           | <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) |            |                                 |                |              |

**Code List Summary** (Total Codes: 477, Included: 1)

|       |     | <u>Code</u>                                                     | <u>Name</u>            |    |      |      |
|-------|-----|-----------------------------------------------------------------|------------------------|----|------|------|
|       |     | CH                                                              | Country of Origin Code |    |      |      |
| LIN11 | 234 | <b>Product/Service ID</b>                                       | X                      | AN | 1/48 | Used |
|       |     | <b>Description:</b> Identifying number for a product or service |                        |    |      |      |
| LIN13 | 234 | <b>Product/Service ID</b>                                       | X                      | AN | 1/48 | Used |
|       |     | <b>Description:</b> Identifying number for a product or service |                        |    |      |      |

**Syntax Rules:**

1. P0405 - If either LIN04 or LIN05 is present, then the other is required.
2. P0607 - If either LIN06 or LIN07 is present, then the other is required.
3. P0809 - If either LIN08 or LIN09 is present, then the other is required.
4. P1011 - If either LIN10 or LIN11 is present, then the other is required.
5. P1213 - If either LIN12 or LIN13 is present, then the other is required.
6. P1415 - If either LIN14 or LIN15 is present, then the other is required.
7. P1617 - If either LIN16 or LIN17 is present, then the other is required.
8. P1819 - If either LIN18 or LIN19 is present, then the other is required.
9. P2021 - If either LIN20 or LIN21 is present, then the other is required.
10. P2223 - If either LIN22 or LIN23 is present, then the other is required.
11. P2425 - If either LIN24 or LIN25 is present, then the other is required.
12. P2627 - If either LIN26 or LIN27 is present, then the other is required.
13. P2829 - If either LIN28 or LIN29 is present, then the other is required.
14. P3031 - If either LIN30 or LIN31 is present, then the other is required.

**Semantics:**

1. LIN01 is the line item identification

**Comments:**

1. See the Data Dictionary for a complete list of IDs.
2. LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
3. LIN|7|VP|DA1206D301R-10|MG|DA1206D301R-10|BP|0719800211|MF|LAIRD-SIGNAL INTEGRITY PRODUCTS|CH|CN}

# SN1 Item Detail (Shipment)

|                   |             |
|-------------------|-------------|
| Pos: 030          | Max: 1      |
| Detail - Optional |             |
| Loop: HL          | Elements: 3 |

**User Option (Usage):** Used

**Purpose:** To specify line-item detail relative to shipment

## 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> |
|------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------|-------------|-------------|----------------|--------------|
| SN101                                                                                                                              | 350       | Assigned Identification            | O           | AN          | 1/20           | Used         |
| <b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set                                  |           |                                    |             |             |                |              |
| SN102                                                                                                                              | 382       | Number of Units Shipped            | M           | R           | 1/10           | Must use     |
| <b>Description:</b> Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set             |           |                                    |             |             |                |              |
| SN103                                                                                                                              | 355       | Unit or Basis for Measurement Code | M           | ID          | 2/2            | Must use     |
| <b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken |           |                                    |             |             |                |              |
| <b>Code List Summary</b> (Total Codes: 794, Included: 1)                                                                           |           |                                    |             |             |                |              |
|                                                                                                                                    |           | <u>Code</u>                        | <u>Name</u> |             |                |              |
|                                                                                                                                    |           | EA                                 | Each        |             |                |              |

## Syntax Rules:

1. P0506 - If either SN105 or SN106 is present, then the other is required.

## Semantics:

1. SN101 is the ship notice line-item identification.

## Comments:

1. SN103 defines the unit of measurement for SN102.
2. SN1|7|3000|EA}

# PRF Purchase Order Reference

|                   |             |
|-------------------|-------------|
| Pos: 050          | Max: 1      |
| Detail - Optional |             |
| Loop: HL          | Elements: 1 |

**User Option (Usage):** Used

**Purpose:** To provide reference to a specific purchase order

## 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> |
|------------|-----------|-----------------------|------------|-------------|----------------|--------------|
| PRF01      | 324       | Purchase Order Number | M          | AN          | 1/22           | Must use     |

**Description:** Identifying number for Purchase Order assigned by the orderer/purchaser

## Semantics:

1. PRF04 is the date assigned by the purchaser to purchase order.

## Comments:

1. PRF|270824}

# TD5

## Carrier Details (Routing Sequence/Transit Time)

|                   |             |
|-------------------|-------------|
| Pos: 120          | Max: 12     |
| Detail - Optional |             |
| Loop: HL          | Elements: 5 |

**User Option (Usage):** Used

**Purpose:** To specify the carrier and sequence of routing and provide transit time 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> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------|------------|------------------------------------|----------------|--------------|
| TD501                                                                                                                                                            | 133       | <b>Routing Sequence Code</b>           | O          | ID                                 | 1/2            | Not used     |
| <b>Description:</b> Code describing the relationship of a carrier to a specific shipment movement<br><b>All valid standard codes are used. (Total Codes: 23)</b> |           |                                        |            |                                    |                |              |
| TD502                                                                                                                                                            | 66        | <b>Identification Code Qualifier</b>   | X          | ID                                 | 1/2            | Used         |
| <b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)                                                       |           |                                        |            |                                    |                |              |
| <b>Code List Summary</b> (Total Codes: 215, Included: 1)                                                                                                         |           |                                        |            |                                    |                |              |
|                                                                                                                                                                  |           | <u>Code</u>                            |            | <u>Name</u>                        |                |              |
|                                                                                                                                                                  |           | 2                                      |            | Standard Carrier Alpha Code (SCAC) |                |              |
| TD503                                                                                                                                                            | 67        | <b>Identification Code</b>             | X          | AN                                 | 2/80           | Used         |
| <b>Description:</b> Code identifying a party or other code                                                                                                       |           |                                        |            |                                    |                |              |
| TD504                                                                                                                                                            | 91        | <b>Transportation Method/Type Code</b> | X          | ID                                 | 1/2            | Used         |
| <b>Description:</b> Code specifying the method or type of transportation for the shipment                                                                        |           |                                        |            |                                    |                |              |
| <b>Code List Summary</b> (Total Codes: 71, Included: 3)                                                                                                          |           |                                        |            |                                    |                |              |
|                                                                                                                                                                  |           | <u>Code</u>                            |            | <u>Name</u>                        |                |              |
|                                                                                                                                                                  |           | A                                      |            | Air                                |                |              |
|                                                                                                                                                                  |           | J                                      |            | Motor                              |                |              |
|                                                                                                                                                                  |           | ZZ                                     |            | Mutually defined                   |                |              |
| TD505                                                                                                                                                            | 387       | <b>Routing</b>                         | X          | AN                                 | 1/35           | Used         |
| <b>Description:</b> Free-form description of the routing or requested routing for shipment, or the originating carrier's identity                                |           |                                        |            |                                    |                |              |

### Syntax Rules:

1. R0204050612 - At least one of TD502, TD504, TD505, TD506 or TD512 is required.
2. C0203 - If TD502 is present, then TD503 is required.
3. C0708 - If TD507 is present, then TD508 is required.
4. C1011 - If TD510 is present, then TD511 is required.
5. C1312 - If TD513 is present, then TD512 is required.
6. C1413 - If TD514 is present, then TD513 is required.
7. C1512 - If TD515 is present, then TD512 is required.

### Comments:

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.
2. TD5||2|FEDX|A|FEDX ECONOMY SERVICE|

# REF Reference Identification

|                   |             |
|-------------------|-------------|
| Pos: 150          | Max: >1     |
| Detail - Optional |             |
| Loop: HL          | Elements: 2 |

**User Option (Usage):** Used

**Purpose:** To specify identifying 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> |
|------------|-----------|------------------------------------|------------|-------------|----------------|--------------|
| REF01      | 128       | Reference Identification Qualifier | M          | ID          | 2/3            | Must use     |

**Description:** Code qualifying the Reference Identification

**Code List Summary** (Total Codes: 1503, Included: 2)

| <u>Code</u> | <u>Name</u>           |
|-------------|-----------------------|
| 2I          | Tracking Number       |
| PO          | Purchase Order Number |

|       |     |                          |   |    |      |      |
|-------|-----|--------------------------|---|----|------|------|
| REF02 | 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 REF02 or REF03 is required.

## Semantics:

1. REF04 contains data relating to the value cited in REF02.

## Comments:

1. REF|CN|538254188688}

# MAN Marks and Numbers

|                   |             |
|-------------------|-------------|
| Pos: 190          | Max: >1     |
| Detail - Optional |             |
| Loop: HL          | Elements: 2 |

**User Option (Usage):** Used

**Purpose:** To indicate identifying marks and numbers for shipping containers

## 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> |
|------------|-----------|-----------------------------|------------|-------------|----------------|--------------|
| MAN01      | 88        | Marks and Numbers Qualifier | M          | ID          | 1/2            | Must use     |

**Description:** Code specifying the application or source of Marks and Numbers (87)

**Code List Summary** (Total Codes: 20, Included: 1)

| <u>Code</u> | <u>Name</u>      |
|-------------|------------------|
| SM          | Shipper Assigned |

|       |    |                   |   |    |      |          |
|-------|----|-------------------|---|----|------|----------|
| MAN02 | 87 | Marks and Numbers | M | AN | 1/48 | Must use |
|-------|----|-------------------|---|----|------|----------|

**Description:** Marks and numbers used to identify a shipment or parts of a shipment

## Syntax Rules:

1. P0405 - If either MAN04 or MAN05 is present, then the other is required.
2. C0605 - If MAN06 is present, then MAN05 is required.

## Semantics:

1. MAN01/MAN02 and MAN04/MAN05 may be used to identify two different marks and numbers assigned to the same physical container.
2. When both MAN02 and MAN03 are used, MAN02 is the starting number of a sequential range and MAN03 is the ending number of that range.
3. When both MAN05 and MAN06 are used, MAN05 is the starting number of a sequential range, and MAN06 is the ending number of that range.

## Comments:

1. MAN|SM|538254188688}

# Loop Name

|          |               |
|----------|---------------|
| Pos: 220 | Repeat: 200   |
|          | Optional      |
| Loop: N1 | Elements: N/A |

**User Option (Usage):** Used

**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> |
|------------|-----------|-----------------------------|------------|----------------|---------------|--------------|
| 220        | N1        | Name                        | O          | 1              |               | Used         |
| 230        | N2        | Additional Name Information | O          | 2              |               | Used         |
| 240        | N3        | Address Information         | O          | 2              |               | Used         |
| 250        | N4        | Geographic Location         | O          | 1              |               | Used         |

# N1

## Name

|                   |             |
|-------------------|-------------|
| Pos: 220          | Max: 1      |
| Detail - Optional |             |
| Loop: N1          | Elements: 4 |

**User Option (Usage):** Used

**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     |
| <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual |           |                               |            |                                      |                |              |
| <b>Code List Summary</b> (Total Codes: 1312, Included: 2)                                                     |           |                               |            |                                      |                |              |
|                                                                                                               |           | <u>Code</u>                   |            | <u>Name</u>                          |                |              |
|                                                                                                               |           | BT                            |            | Bill-to-Party                        |                |              |
|                                                                                                               |           | ST                            |            | Ship To                              |                |              |
| N102                                                                                                          | 93        | Name                          | X          | AN                                   | 1/60           | Used         |
| <b>Description:</b> Free-form name                                                                            |           |                               |            |                                      |                |              |
| N103                                                                                                          | 66        | Identification Code Qualifier | X          | ID                                   | 1/2            | Used         |
| <b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)    |           |                               |            |                                      |                |              |
| <b>Code List Summary</b> (Total Codes: 215, Included: 2)                                                      |           |                               |            |                                      |                |              |
|                                                                                                               |           | <u>Code</u>                   |            | <u>Name</u>                          |                |              |
|                                                                                                               |           | 91                            |            | Assigned by Seller or Seller's Agent |                |              |
|                                                                                                               |           | 92                            |            | Assigned by Buyer or Buyer's Agent   |                |              |
| N104                                                                                                          | 67        | Identification Code           | X          | AN                                   | 2/80           | Used         |
| <b>Description:</b> Code identifying a party or other code                                                    |           |                               |            |                                      |                |              |

### 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. N1|BT|BILLING CO|92|12345}
3. N1|ST|SHIPPING CO|92|54321}

# N2

## Additional Name Information

|                   |             |
|-------------------|-------------|
| Pos: 230          | Max: 2      |
| Detail - Optional |             |
| Loop: N1          | Elements: 2 |

**User Option (Usage):** Used

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

### 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> |
|------------|-----------|-----------------------------|------------|-------------|----------------|--------------|
| 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 |            |             |                |              |

### Comments:

1. N2|DOCK A}

# N3

## Address Information

|                   |             |
|-------------------|-------------|
| Pos: 240          | Max: 2      |
| Detail - Optional |             |
| Loop: N1          | Elements: 2 |

**User Option (Usage):** Used

**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 |           |                     |            |             |                |              |

### Comments:

1. N3|1 CTY RD WHS 1}

# N4

## Geographic Location

|                   |             |
|-------------------|-------------|
| Pos: 250          | Max: 1      |
| Detail - Optional |             |
| Loop: N1          | Elements: 4 |

**User Option (Usage):** Used

**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                                                                                                                      | O          | AN          | 2/30           | Used         |
|            |           | <b>Description:</b> Free-form text for city name                                                                               |            |             |                |              |
| N402       | 156       | State or Province Code                                                                                                         | O          | ID          | 2/2            | Used         |
|            |           | <b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency                                 |            |             |                |              |
| N403       | 116       | Postal Code                                                                                                                    | O          | ID          | 3/15           | Used         |
|            |           | <b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States) |            |             |                |              |
| N404       | 26        | Country Code                                                                                                                   | O          | ID          | 2/3            | Used         |
|            |           | <b>Description:</b> Code identifying the country                                                                               |            |             |                |              |

### Syntax Rules:

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

### Comments:

1. N402 is required only if city name (N401) is in the U.S. or Canada.
2. N4|MINNEAPOLIS|MN|555550000|US}

# CTT Transaction Totals

|                    |             |
|--------------------|-------------|
| Pos: 010           | Max: 1      |
| Summary - Optional |             |
| Loop: N/A          | Elements: 2 |

**User Option (Usage):** Used

**Purpose:** To transmit a hash total for a specific element 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> |
|------------|-----------|----------------------|------------|-------------|----------------|--------------|
| CTT01      | 354       | Number of Line Items | M          | N0          | 1/6            | Must use     |

**Description:** Total number of line items in the transaction set

|       |     |            |   |   |      |      |
|-------|-----|------------|---|---|------|------|
| CTT02 | 347 | Hash Total | O | R | 1/10 | Used |
|-------|-----|------------|---|---|------|------|

**Description:** 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.

## Syntax Rules:

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.
2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

## Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.
2. CTT|1|3475}

# SE

## Transaction Set Trailer

|                     |             |
|---------------------|-------------|
| Pos: 020            | 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     |
| <b>Description:</b> 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     |
| <b>Description:</b> 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.
2. SE|25|0001}

# 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:

| <u>Ref</u>                                                                                                                                                                       | <u>Id</u> | <u>Element Name</u>                 | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------|------------|-------------|----------------|--------------|
| GE01                                                                                                                                                                             | 97        | Number of Transaction Sets Included | M          | N0          | 1/6            | Must use     |
| <b>Description:</b> 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     |
| <b>Description:</b> 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.
2. GE|1|8904200}

# 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:

| <u>Ref</u>                                                                                | <u>Id</u> | <u>Element Name</u>                  | <u>Req</u> | <u>Type</u> | <u>Min/Max</u> | <u>Usage</u> |
|-------------------------------------------------------------------------------------------|-----------|--------------------------------------|------------|-------------|----------------|--------------|
| IEA01                                                                                     | I16       | Number of Included Functional Groups | M          | N0          | 1/5            | Must use     |
| <b>Description:</b> A count of the number of functional groups included in an interchange |           |                                      |            |             |                |              |
| IEA02                                                                                     | I12       | Interchange Control Number           | M          | N0          | 9/9            | Must use     |
| <b>Description:</b> A control number assigned by the interchange sender                   |           |                                      |            |             |                |              |

### Comments:

1. IEA|1|008904200}

# EDI Sample

ISA|00| |00| |ZZ|DKEUS |ZZ|123456789 |210916|1302|U|00401|008915849|0|P|^}  
GS|SH|DKEUS|123456789|20210916|1302|8915849|X|004010}  
ST|856|0001}  
BSN|00|84011897|20210916|1302}  
DTM|011|20210916}  
DTM|017|20210917}  
HL|1|1|S}  
TD5||2|UPS|A|UPS 1 DAY AIR}  
REF|CN|1Z5674320111361573}  
N1|BT|BILLING CO|92|12345}  
N3|1 CTY RD WHS 1}  
N4|MINNEAPOLIS|MN|567010000|US}  
N1|ST|BILLING CO|92|12345}  
N2|BUYER 1}  
N3|1 CTY RD WHS 1}  
N4|MINNEAPOLIS|MN|567010000|US}  
HL|2|1|O}  
PRF|318002|||20210916}  
HL|3|2|P}  
MAN|SM|1Z5674320111361573}  
HL|4|3|I}  
LIN|7|BP|0719800211|VP|DA1206D301R-10|MG|DA1206D301R-10|MF|LAIRD PRODUCTS|CH|CN}  
SN1|1|25|EA}  
SE|24|0001}  
GE|1|8915849}  
IEA|1|008915849}