

Automated Commercial Environment

Chapter 2: Creating ANSI Transactions

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U.S. Customs and
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2 Creating ANSI Transactions

In this Chapter

For this section	See page
2.1 Understanding ANSI	2
2.2 ANSI Message Segments Overview	3
2.3 Classification of Data Elements and Data Segments	5
2.4 Two ANSI data segments examples	9
2.5 Sample Manifest Submission	13
2.6 Accept/Reject Notification (355)	26
2.7 Modifying Trips and Shipments	28
2.8 Deleting versus delinking shipments	29

2.1 Understanding ANSI

In addition to the Control Segments and Variables (Header and Trailer Records), the deployment of ACE Truck Manifest includes the following ANSI interface transaction sets: the Customs Manifest Transaction set (309), the Customs Status Information Transaction set (350), the Customs Events Advisory Details Transaction set (353), the U.S. Customs Acceptance/Rejection Transaction set (355), the Customs Consist (Trip) Information Transaction set (358), and the Functional Acknowledgment Transaction Set (997).

2.1.1 Format Descriptions

The following is a summary of the X.12 messages that support Standard and Preferred manifest processing in ACE. These Transaction Sets may be exchanged between CBP and carriers and/or their authorized agents.

Format	Definition
Inbound Messages	
309	<p>A complete Manifest consists of unique Trip information and Shipment Information. The Trip information refers to: trip identification, conveyance identification, crew identification, and equipment information. Trip information may be supplied to CBP in either the 309 Customs Manifest transaction set or in a 358. If a complete manifest is transmitted to CBP both trip and individual shipment information is to be supplied in one 309 message. Shipments may be added/changed/deleted by including the M13 segment 'Manifest Amendment Details'. Empty pieces of equipment or instruments of International Trade (IIT) may also be manifested using a 309 transaction set.</p> <p>Used for:</p> <ul style="list-style-type: none"> 309 (W) – Complete Manifest 309 (P) – Unassociated Shipment Manifest 309 (T) – Transit Manifest (for future use) 309 (Y) - Amendment 309 (3) - Delete
358	<p>This transaction set provides CBP the trip level data and the data needed to match unassociated shipment manifest 309 messages to the appropriate trip. The 358 transaction set includes trip, conveyance, equipment, and crew details and may include Shipment Control Numbers (SCN's). The purpose of including SCN's within the 358 is to associate the individual 309 unassociated shipment manifest shipments with a trip. The 358 transaction set may also be used to delete and amend trip information and add and remove shipments from a trip. Empty pieces of equipment or Instruments of International Trade (IIT's) may also be manifested using the 358 transaction set.</p> <p>The 358 transaction set is used to identify boarded quantities of shipments that have been split. See <i>'Split Shipments, Chapter 5, Advance EDI Transactions.</i></p> <p>Used for:</p> <ul style="list-style-type: none"> 358 – Link Shipments to a trip 358 – Empty Truck

353	<p>This transaction set will be used by carriers to notify CBP of the end of manifest submission. The only exception to this is when a complete manifest is submitted via a 309 as an original manifest (309-W).</p> <p>This transaction set can also be used to arrive an in-bond or permit to transfer shipments.</p>
Outbound Messages	
355	<p>This transaction set is used by CBP to report errors and discrepancies discovered in the Customs Manifest (309 transaction set), Customs Events Advisory Details (353 transaction set), or Customs Consist (Trip) Information (358 transaction set) filed by carriers. This transaction set is also used to report the acceptance or rejection of a manifest once validated against the 'business' edits. These messages are generated with respect to data supplied to the application software, as opposed to the communications infrastructure Functional Acknowledgement (997 transaction set).</p>
350	<p>This transaction set is used by CBP to supply carriers with conveyance, equipment, crew, and shipment release and hold information.</p> <p>Appropriate Customs Status Information messages will be released to the carrier at time of the truck's arrival at the border.</p>
997	<p>This transaction set acknowledges the success or failure of message transactions sent to CBP after standard syntax compliance checking is done.</p> <p><u>The 997 functional acknowledgement is a response from the Customs translator and does not indicate any error response from the ACE application.</u></p> <p>It acknowledges:</p> <p>The communications infrastructure has received the message and can forward it to the appropriate application/subsystem. This acceptance is stored and may be sent to the carrier who transmitted the data, if requested.</p> <p>ISA (Interchange Control Header) and IEA (Interchange Control Trailer) records have been received before a functional acknowledgment can be generated.</p> <ul style="list-style-type: none"> ○ repeat

2.2 ANSI Message Segments Overview

Units of information used in data interchange relate to key functions or operational events. These units of information - transaction set, segment, data element - may be of variable length. This information is communicated between a user's computer system and computer systems of other users in the same community of interest. Major units of information are defined as transaction sets which are the structure for communicating information between systems. The transaction set equates to a document in a paperwork system, such as a bill of lading. The *transaction set* is comprised of segments (or lines of information) and the segments are individually comprised of *data elements*. A *data segment* is roughly equivalent to a line item or sub-line item on a document.

2.2.1 Transaction Set

A transaction set is an ordered group of standard data segments, in a predefined sequence, needed to provide all of the data required to define a complete transaction such as a bill of lading.

```

1  ISA*UU*                *UU*                *02*ZZZZ                *02*USCS                *041021*1730*~
2  GS*AO*ZZZZ*USCS*20050625*1615*79*X*00406USCBP
3  ST*309*0079
4  M10*ZZZZ*J***2453746GK422*TRUCK***W***QPSYS*****8
5  VEH**TP0123456789*****P031XV*****US**TR*****14197*MS
6  NM1*EJ*1*SPARROW*JACK
7  DMG*DB*19550404*M***8*US
8  REF*HD*Yes
9  REF*ACW*95453525**ZZ*US
10 REF*CDN*7820011*ON*ZZ*CA
11 REF*5K*6170363*FL**US
12 N3*1313 MOCKINGBIRD LANE
13 N4*ORLANDO**32837*US***FL
14 P4*3004*20061030***2359
15 LX*1
16 M11*2453746GK422*ORLANDO*****ORLANDO**ZZZZ*****ZZ
17 N1*SH*SHIPPER 1
18 N3*123 MAIN STREET
19 N4*MILTON**L9T4Z1*CA***MX
20 N1*CN*CONSIGNEE 1
21 N3*123 BACK STREET
22 N4*ORLANDO**32837*US***FL
23 VID*NC**NO NUMBERINO
24 N10*80*BLUE HATS*****L*100**BOX
25 SE*23*0079
26 GE*1*79
27 IEA*1*0000000079
28

```

Figure 2-1 - Example 309 Complete Transaction set

2.2.2 Data Element

The smallest information unit in the information structure is the data element. A data element may be a single character code, a series of characters constituting a literal description or a numeric quantity. The length characteristics of a data element may be fixed or variable, but they must be consistent with the data being transmitted.

For example: ZZZZ, 20060830, SPARROW*JACK

Reference Numbers

Each data element is assigned a unique reference number in the master data element list.

N102	93	Name	X AN 1/60
		Free-form name.	
		Required for CBSA and Aduana Mexico	

Figure 2-2 - Data Element 93 is NAME.

Data Element Reference Designator

Based upon the sequential position assignment of a data element in a data segment, each data element assumes a unique, alphanumeric location indicator for each data segment.

```
LX*1
M11*1234889GK046*ORLANDO*****ZZZZ*****ZZ
N1*SH*ACME SHIPPING CO LTD**
N3*123 LONGMEAD CROSSING*
N4*SILVER SPRING**20906*US***MD
N1*CN*ACME CONSIGNEE LTD1**
```

Figure 2-3 - The second data element in the N1 segment has a location N102 = ACME SHIPPING CO LTD.

2.2.3 Data Segment

A data segment is composed of a function identifier and one or more functionally related data elements positioned serially in a standard manner with a data element delimiter preceding each data element and a segment terminator character immediately following the last data element transmitted.

For example: M10*ZZZZ*J***2453970CQ763*TRUCK***W***QPS4U*****8

Data Segment Identifier

Each data segment has a unique identifier consisting of the combination of two or three alpha/numeric characters. The data segment identifiers are specified in the first positions of each individual segment.

```
ISA*00*          *00*          *02*ZZZZ          *02*USC
GS*AQ*ZZZZ*USCS*20050425*1615*74*X*00406USCBP
ST*309*0074
M10*ZZZZ*J***1234889GK046*TRUCK***W***OPSYS*****8
VEH**VIN123456*****P031XV*****US***TR*****14197*MS
CII*SKAPEGOT*POLICY555*2005**20000000
NM1*EI*1*MOUSE*MTCKEY
```

Figure 2-4 – Example data segments - ISA, GS, ST, M10, VEH, CII, NM1, etc.

Data Segment Terminator

Each data segment is terminated by a special character inserted in the data segment immediately following the last data element to be transmitted in ANSI at the 105th character position of the ISA segment..The non-printable new line (NL) (EBCDIC code) character or the CR/LF (ASCII code) character combination is used to terminate segments.

Data Element Delimiter

An asterisk (*) delimiter precedes each data element within a segment. When there is no data being transmitted for a defined element, the asterisk is transmitted to preserve the data element count unless the blank elements are the last in the segment. In that case, transmission of the data segment terminator code indicates that all non-transmitted elements are blank.

2.3 Classification of Data Elements and Data Segments

The following information should be used as a supplement to the IGs which are located at http://www.cbp.gov/xp/cgov/toolbox/about/modernization/carrier_info/ace_edi_drafts/edi_messages/. The parts of the transaction set are listed in the header information at the top of the following diagram:

- Position Number – For example, 010, 020, 025, etc.
- Segment ID – For example, ST, M10, VEH, etc.
- Name – For example, Transaction Set Header
- Required – Mandatory (M), Optional (O)
- Maximum Usage – For example, 1 time, 4 times, 10 times in the loop, etc.
- Loop Repeat – For example, LOOP ID NM1 = 999

EDI User Manual

NOTE The mandatory (M) segments in the Segment ID column for the 309 transaction set are: ST, M10, P4, LX, and SE. See ANSI 309 Index Diagram below.

Position Number	Seg ID	Name	Req	Max Use	Loop Repeat	Done	Limits
010	ST	Transaction Set Header	M	1			
020	M10	Manifest Identifying Information	M	1		Yes	Yes
025	VEH	Vehicle Information	O	4		Yes	Yes
026	M7	Seal Numbers	O	1		Yes	Yes
027	CII	Conveyance Insurance Information	O	3		Yes	Yes
LOOP ID - NM1					999		
028	NM1	Individual or Organizational Name	O	1		Yes	
029	DMG	Demographic Information	O	1		Yes	
031	REF	Reference Information	O	10		Yes	
033	N3	Party Location	O	18		Yes	
034	N4	Geographic Location	O	1		Yes	
LOOP ID - P4					20		
040	P4	Port Information	M	1		Yes	
LOOP ID - P4/LX					9999		
060	LX	Transaction Set Line Number	M	1		Yes	
070	M13	Manifest Amendment Details	O	1		Yes	
080	M11	Manifest Bill of Lading Details	O	1		Yes	
081	N9	Extended Reference Identification	O	999		Yes	
LOOP ID - P4/LX/M1					25		

Figure 2-5. ANSI Index 309 Transaction Set

The data element and data segment classifications, important to the edit and audit procedures incorporated in the EDI standards, are defined and applied as follows:

Names	Definitions
(M) Mandatory	Universally required information in all transactions
(X) Relational	Required information when the nature of a transaction necessitates that the data be provided. The condition is stated in the standards such that it can be interpreted by a computer program. (See next section.)
(O) Optional	Available information that may be useful to the receiver and may be included in the transaction set at the option of the sender.

2.3.1 Data Elements

All data elements incorporated in the data element list are assigned minimum required and maximum permissible character lengths.

The data element NAME may be expressed in one to 35 characters. Data element types are Numeric (Nn) (implies decimal point), Decimal Number (R) (Explicit Decimal Point), Identifier (ID), String (AN), Date (DT), Time (TM), Binary (BN) and Repeating. Motor does not utilize the Binary nor Repeating Data Elements.

NOTE For MOTOR transaction sets, all weights, quantities and volumes (other than those contained in the hazardous materials segments) will be in whole numbers only.

All numeric and decimal data elements may be transmitted with leading zeros; alphanumeric data element must be transmitted with no trailing blanks. ID values are transmitted precisely as they are shown in the code list where they are defined.

When applicable, relationships with other data elements in the segment are displayed in the segment diagrams with a notation indicating the type of relationship and the identity of the associated element(s) involved.

Example: P0809 for NM1

At the segment level, the IG includes Syntax notes that identify relationships between the Data Elements. The letter P indicates a paired relationship as described below. The numbers are groups of two digits which indicate the position of affected data elements in a segment. Thus, P0809 indicates that the eighth and ninth data elements in the segment are paired, that is, if one is given the other must also be given in order to have a clear meaning. The relational definitions of data elements are:

Names	Definition
P (paired)	If any data element specified in the relational condition is present, then all data elements specified must be present. Example 1: P0102 – For DMG segment, if either DMG01 or DMG02 is present, then the other is required. Example 2: P020304 - If either 02, 03, or 04 are present, then the others are required.
R (required)	At least one of the data elements specified in the relational condition must be present. It is permissible to use all. Example: For the REF segment if R0203 - At least one of REF02 or REF03 is required.
E (exclusion)	Only one of the data elements specified in the relational condition may be present. It is permissible that none of the data Example: For the N4 segment if E0207 - Only one of N402 or N407 may be present.
C (conditional)	If the first data element specified in a relational condition is present, then all other data elements must be present. However, any or all of the data elements not specified as the first data element may appear without requiring that the first data element be present. The order of the data elements in the Conditional relationship does not have to be the same as the order of the data elements in the segment. Subsequent data elements within the segment are marked conditional as their requirement is a condition of the presence of the first

EDI User Manual

	<p>data element listed.</p> <p>Example: For the VEH segment if C2617, if VEH26 is present then VEH17 is required.</p>
L (List Conditional)	<p>If the first data element specified in the relational condition is present, then at least one of the remaining data elements must be present. However, any or all of the remaining data elements not specified as the first data element may appear without requiring that the first data element is present. Like the Conditional relationship, the order of the data elements in the List Conditional relationship does not have to reflect the order of appearance in the segment.</p> <p>Example: For VEH segment L040507 - If VEH04 is present, then at least one of VEH05 or VEH07 is required.</p>

NOTE For a comprehensive list of elements combinations refer to the ANSI Implementation Guides.

2.3.2 Data Segments

Data segments are either mandatory, conditional or optional as defined for each transaction set. Data segments must be transmitted according to the specified standard sequence within a transaction set.

Repeatable Segments

Individual data segments may be repeated for a specific number of times according to user requirements (maximum use). Maximum use specifications are incorporated in the EDI edit tables. (A mandatory segment is mandatory for its first time of occurrence, that is, if a mandatory segment has a maximum use of 3, only 1 is mandatory and 2 more can be used if required.) Groups of segments may be repeated for a specific number of times as defined for loops below.

Repeatable Loops

Some segments in the EDI standards assume a special relationship with other segments. This necessitates a procedure under which groups of segments may be collectively repeated in a serial fashion for up to a specified maximum number of times (loop). This maximum is indicated by the loop index number appearing with the first segment in the loop. This group of segments is associated by the loop identifier.

The loop identifier consists of the segment ID followed by loop index, that is, P4/LX. Loops are either mandatory or optional. The classification of the first segment within the loop determines whether the loop is mandatory or optional.

If the **N1** segment loop is used and is optional, then the first segment is mandatory for each iteration. If an inner loop (or segment within an optional inner loop) is mandatory (for example, **LX** and **P4** segments) within an optional outer loop, it is only mandatory if the outer loop is present.

Position Number	Seg ID	Name	Req	Max Use	Loop Repeat
LOOP ID - P4					20
040	P4	Port Information	M	1	
LOOP ID - P4/LX					9999
060	LX	Transaction Set Line Number	M	1	
070	M13	Manifest Amendment Details	O	1	
080	M11	Manifest Bill of Lading Details	O	1	
081	N9	Extended Reference Identification	O	999	
LOOP ID - P4/LX/ N1					25
100	N1	Party Identification	O	1	
110	N3	Party Location	O	1	
115	N4	Geographic Location	O	2	
120	PER	Administrative Communications Contact	O	1	

Figure 2-6. Example Loop diagram from 309 index, see Appendix XX

2.4 Two ANSI data segments examples

To illustrate the principles which have been described above, we show in this section two standard required 309 transaction ANSI segments: a M10 (Manifest Identifying Information) segment and a NM1 (name and address) segment.

2.4.1 Date/time/period segment

Example 1 – Complete Manifest

M10*CARL*J***82405CQ003*TRUCK***W***QPS4U*****8

Manifest Identifying Information MANDATORY (can only be used ONE time)						Example	
User		M10	*	Limits	Definition		
M		M1001	*	4	Standard Carrier Alpha Code (SCAC) For CBP and CBSA: Truck carrier initiating manifest. (Preferred data element). For Aduana Mexico: Clave FFCC (proprietary ID). 4 numerics. Required.	M10*	CARL*
M		M1002	*	2	Transportation Method/Type Code (J - Truck) Code specifying the method or type of transportation for the shipment.	J*	
N/A		M1003	*		Country Code	*	
N/A		M1004	*		Vessel Code	*	
X		M1005	*	21	Vessel Name (Trip Number) or Name of ship as documented in 'Lloyd's Register of Ships.' For CBP: If trip number not known specify SYSTEM. For original standard and preferred manifest , this is the trip number. Truck manifest accepts only 21 positions. Truck manifest accepts only alpha-numerics with no embedded spaces or special characters.	82405CQ003*	
O		M1006	*	10	Flight / Voyage Number Identifying designator for the particular flight or voyage on which the cargo travels. For CBP: May contain a reference number such as the Julian date (YYDDD) to promote uniqueness. May contain 'TRUCK' in preliminary manifest. If nothing is indicated, system will default to 'TRUCK'.	TRUCK*	
N/A		M1007	*		Reference Identification	*	
N/A		M1008	*		Quantity	*	
M		M1009	*	1	Manifest Type Code - which identifies the type of manifest transmitted. In this case, Amendment to Manifest (change) For CBP, and CBSA: Used after sending a 358 Trip, or when amending/updating manifests or shipments.	Y*	
N/A		M1010	*		Vessel Code Qualifier	*	
N/A		M1011	*		Yes/No Condition or Response Code	*	
O		M1012	*	15	Reference Identification - defined for a particular Transaction Set, or as specified by the Reference Identification Qualifier.	QPS4U*	
N/A		M1013	*		TS Purpose Code	*	
O		M1014	*	2	Application Type	*	
O		M1015	*	1	Amendment Type Code identifying type of manifest amendment.	M*	
O		M1016	*	2	Amendment Code	03*	
O		M1017		1	Manifest Type Code identifying the type of manifest transmitted, in this case, Standard Manifest from Carrier to CBP.	8	

EDI User Manual

Example 2 – with the Trip amendment code

M10*ZZZZ*J***2453746MS000*TRUCK***Y***QPSYS***M*03*8

Manifest Identifying Information MANDATORY (can only be used ONE time)						Example	
User		M10	*	Limits	Definition		
M		M1001	*	4	Standard Carrier Alpha Code (SCAC) For CBP and CBSA: Truck carrier initiating manifest. (Preferred data element). For Aduana Mexico: Clave FFCC (proprietary ID). 4 numerics. Required.	M10*	
M		M1002	*	2	Transportation Method/Type Code (J - Truck) Code specifying the method or type of transportation for the shipment.	ZZZZ*	
N/A		M1003	*		Country Code	J*	
N/A		M1004	*		Vessel Code	*	
X		M1005	*	21	Vessel Name (Trip Number) or Name of ship as documented in 'Lloyd's Register of Ships.' For CBP: If trip number not known specify SYSTEM. For original standard and preferred manifest , this is the trip number. Truck manifest accepts only 21 positions. Truck manifest accepts only alpha- numerics with no embedded spaces or special characters.	*	
O		M1006	*	10	Flight / Voyage Number Identifying designator for the particular flight or voyage on which the cargo travels. For CBP: May contain a reference number such as the Julian date (YYDDD) to promote uniqueness. May contain 'TRUCK' in preliminary manifest. If nothing is indicated, system will default to 'TRUCK'.	2453746MS000*	
N/A		M1007	*		Reference Identification	TRUCK*	
N/A		M1008	*		Quantity	*	
M		M1009	*	1	Manifest Type Code - which identifies the type of manifest transmitted. In this case, Amendment to Manifest (change) For CBP, and CBSA: Used after sending a 358 Trip, or when amending/ updating manifests or shipments.	*	
N/A		M1010	*		Vessel Code Qualifier	Y*	
N/A		M1011	*		Yes/No Condition or Response Code	*	
O		M1012	*	15	Reference Identification - defined for a particular Transaction Set, or as specified by the Reference Identification Qualifier.	QPS4U*	
N/A		M1013	*		TS Purpose Code	*	
O		M1014	*	2	Application Type	*	
O		M1015	*	1	Amendment Type Code identifying type of manifest amendment.	M*	
O		M1016	*	2	Amendment Code	03*	
O		M1017		1	Manifest Type Code identifying the type of manifest transmitted, in this case, Standard Manifest from Carrier to CBP.	8	

Individual or Organizational Name segment

A NM1 segment is used in context where it is necessary to represent an Individual or Organizational Name. It consists of the segment tag NM1, a party qualifier which specifies the function of the NM1 segment in the context in which it occurs.

Example 1 - Name and Organization identified by code.

NM1*EJ*1*****A7*47192

Individual or Organization Name OPTIONAL					Example
User		NM1	*	Definition	
					NM1*
M		NM101	*	Entity ID Code indicating that this NM1 segment identifies the driver in this transaction.	EJ*
M		NM102	*	Entity Type Qualifier qualifying the type of entity.	1*
X		NM103	*	Name Last / Org Name, not necessary with ACE ID	*
O		NM104	*	Name First, not necessary with ACE ID	*
O		NM105	*	Name Middle	*
N/A		NM106	*	Name Prefix	*
N/A		NM107	*	Name Suffix	*
X		NM108	*	ID Code Qualifier (A7 - ACE ID, PY - Proximity Card) designating the system/method of code structure used for Identification	A7*
X		NM109		ID Code Identification Code identifying a party or other code. Required if NM108 is present. CBP Truck manifest accepts only 10 positions for ACE ID, 17 positions for proximity card. If Party is pre-registered in ACE, either ACE ID, legitimate Party proximity card to be provided in NM109.	47192
N/A		NM110		Entity Relation Code	
N/A		NM111		Entity ID Code	
N/A		NM112		Name Last / Org Name	

Example 2 - Name and address sent as structured text.

NM1*EJ*1*STEIN*FRANK*N

Individual or Organization Name OPTIONAL

User	NM1	*	Definition	Example
				NM1 *
M	NM101	*	Entity ID Code indicating that this NM1 segment identifies the driver in this transaction.	EJ*
M	NM102	*	Entity Type Qualifier qualifying the type of entity.	1 *
X	NM103	*	Name Last / Org Name, not necessary with ACE ID	STEIN*
O	NM104	*	Name First, not necessary with ACE ID	FRANK*
O	NM105	*	Name Middle	N*
N/A	NM106	*	Name Prefix	*
N/A	NM107	*	Name Suffix	*
X	NM108	*	ID Code Qualifier (A7 - ACE ID, PY - Proximity Card) designating the system/method of code structure used for Identification	*
X	NM109		ID Code Identification Code identifying a party or other code. Required if NM108 is present. CBP Truck manifest accepts only 10 positions for ACE ID, 17 positions for proximity card. If Party is pre-registered in ACE, either ACE ID, legitimate Party proximity card to be provided in NM109.	
N/A	NM110		Entity Relation Code	
N/A	NM111		Entity ID Code	
N/A	NM112		Name Last / Org Name	

It is hoped that these rather elementary examples will give some indication of the way in which standard segments provide very considerable flexibility and scope. These standard segments are the “building blocks” from which ANSI messages are constructed.

2.5 Sample Manifest Submission

The same two message scenarios are described for ANSI X.12 and EDIFACT. They are:

1. The One- Step Process A Complete e-manifest
2. The Three-Step Process consists of:
 - Unassociated shipment submission
 - Trip information submission with linking
 - Ending the Manifest

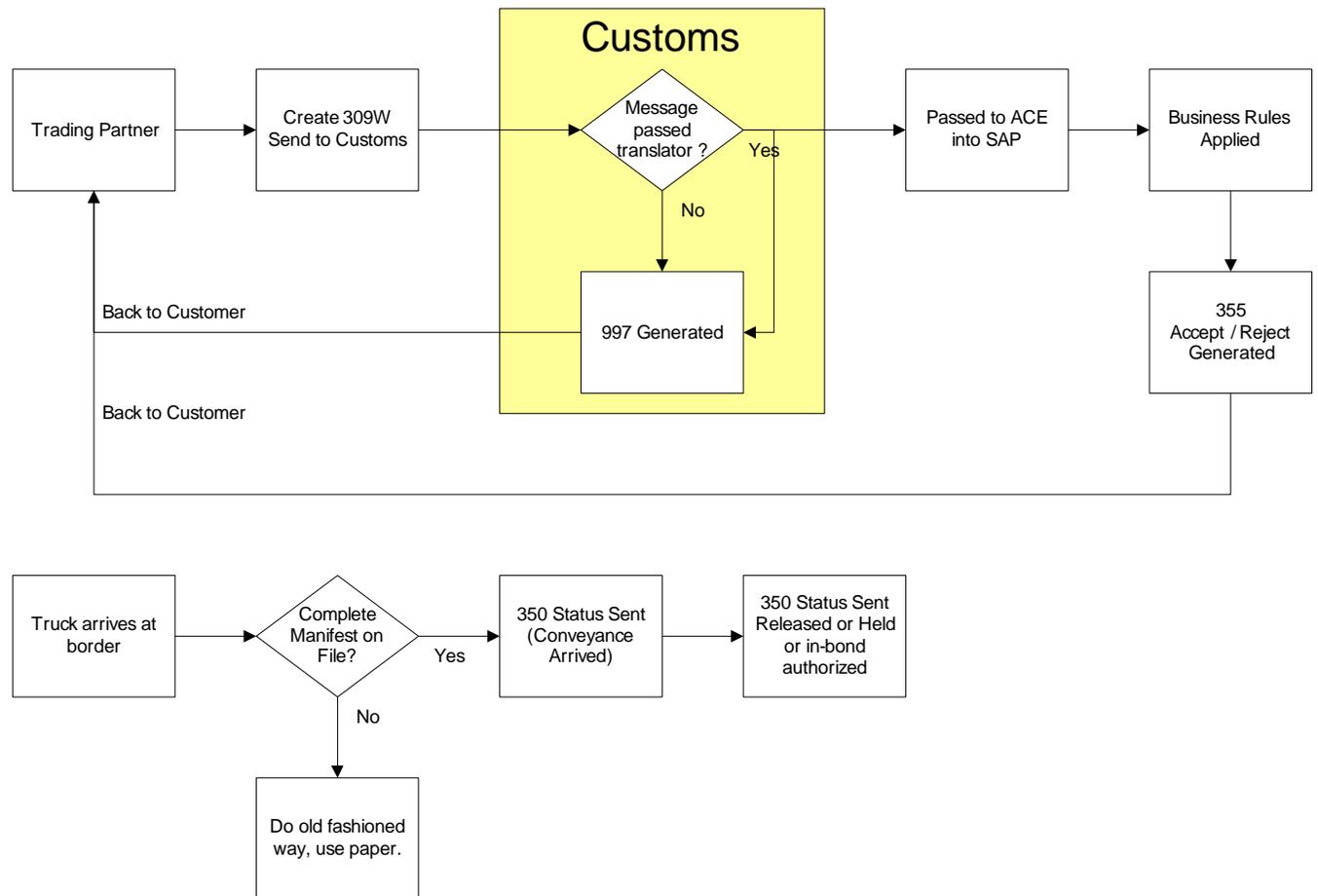
NOTE This document outlines the majority of cases that you will encounter but is not by any means inclusive of all situations.

2.5.1 Scenario 1 – The One Step Process or Complete Manifest

If a manifesting carrier is in possession of full shipment and trip information, the carrier may transmit an original manifest message (309 Customs Manifest) identifying the trip, conveyance, crew, equipment and shipments associated therewith. The following process diagram describes the flow:

One Step Process Flow

Figure 2-7. One Step process flow for a complete manifest



NOTE The complete 309 transaction set described below documents information for the minimum number of required data elements and segments to push a transaction successfully through the ACE system.

Example below displays a complete e-Manifest:

```

ISA*00**00**02*ZZZZ *ZZ*CBP-ACE-
TEST*050202*0914*U*00406*000000285*0*T*:
GS*AQ*ZZZZ*CBP-ACE-TEST*20050202*0914*412*X*004060USCBP
ST*309*0412
M10*ZZZZ*J***2453970CQ763*TRUCK***W***QPS4U*****8
VEH**VIN14197*****WA85799*****US***TR*****14197*FL
NM1*EJ*1*STEIN*FRANK*N
DMG*DB*19350724*M***8*FL
REF*ACW*US9454123**ZZ*US
REF*5K*FL64170363*FL**US
N3*1313 MOCKINGBIRD LANE
N4*ORLANDO**32837*US***FL
P4*0901*20060831***1900
LX*1
M11*2453970CQ063*01535*****00***ZZZZ*****K *CG
N9*8S*3833312112
N1*SH*ACME SHIPPING
N3*3131 BLACKBIRD STREET
N4*ORLANDO**32837*US***FL
N1*CN*ACME CONSIGNEE
N3*1313 MOCKINGBIRD LANE
N4*CHICKPEA**22206*US***MS
VID*FR**NO NUMBER*****GOIN4U**US**VA
N10*100*EDI MANUALS**J*0101200020*30*L*1000**CTN***USD
SE*22*0412
GE*1*412
IEA*1*000000285
    
```

Repeat again

309 Complete Transaction Set		
Segments	Description	Required
ISA	ISA*00**00**02*ZZZZ *ZZ*CBP-ACE-TEST*050202*0914*U*00406*000000285*0*T*:	Mandatory
GS	GS*AQ*ZZZZ*CBP-ACE-TEST*20050202*0914*412*X*004060USCBP	Mandatory
ST	ST*309*0412	Mandatory
M10	M10*ZZZZ*J***2453970CQ763*TRUCK***W***QPS4U*****8 M1001 Standard Carrier Alpha Code (SCAC) M1002 Transportation Method/Type Code, Truck = (J) M1005 Trip number, for example - 2453970CQ763 M1006 Truck = unassociated shipment manifest M1009 Manifest Type Code, Complete = (W) M1012 System Reference = QPS4U M1017 Manifest Type Code, Standard =	Mandatory

	(8)	
VEH	<p>VEH**VIN14197*****WA85799*****US ***TR*****14197*FL VEH02 VIN number = VIN1419778009945098763 VEH08 License plate = WA85799 VEH16 Country Code VEH19 Equipment description VEH25 DOT number VEH26 Country subdivision</p>	Optional or required depending on whether it's a complete or preliminary manifest
<p>SPECIAL NOTE There are three ways to identify Crew. They are:</p> <ul style="list-style-type: none"> • With ACE ID • With FAST ID • With Complete demographics, for this example, all demographics is documented 		
NM1	<p>NM1*EJ*1*STEIN*FRANK*N NM101 – Entity ID code - EJ NM102 – Entity qualifier – 1 NM103 – Name Last/ Org NM104 - Name First NM105 – Name Middle</p>	Optional
DMG	<p>DMG*DB*19350724*M**8*FL DMG01 Date Time Format qualifier DMG02 Time period, YYYYMMDD DMG03 Gender Code – M DMG06 Citizenship status code DMG07 state</p>	Optional
REF	<p>REF*ACW*US9454123**ZZ*US REF01 Reference number qualifier REF02 Reference Identification REF04 Reference number qualifier REF05 Country code</p>	Optional
REF	<p>REF*5K*FL64170363*FL**US REF01 Reference number qualifier REF02 Reference Identification REF03 Description REF05 Country code</p>	Optional
N3	<p>N3*1313 MOCKINGBIRD LANE N301 Address Information</p>	Optional
N4	<p>N4*ORLANDO**32837*US***FL N401 City name N403 Postal code N404 Country Code N407 Country Subdivision</p>	Optional
P4	<p>P4*0901*20060831***1900 P401 - port code - 0901</p>	Mandatory

	P402 - date of arrival, format of: CCYYMMDD P405 – time of arrival	
LX	LX*1 Mandatory - all the shipment information is indicated beneath	Mandatory
M11	M11*2453970CQ063*01535*****00***ZZ ZZ*****K*CG M1101 Shipment Control Number M1102 Location Identifier M1109 Bill of Lading Type Code M1112 SCAC M1126 Service Level Code	Optional
N9	N9*8S*3833312112 Extended Reference Identification For Broker Download: N901 Broker Identification N902 Entry Number	Optional
N1	N1*SH*ACME SHIPPING N101 Identity Code N102 Name	Optional
N3	N3*3131 BLACKBIRD STREET N301 Address Information	Optional
N4	N4*ORLANDO**32837*US***FL N401 City name N403 Postal code N404 Country Code N407 Country Subdivision	Optional
N1	N1*CN*ACME CONSIGNEE N101 Identity Code N102 Name	Optional
N3	N3*1313 MOCKINGBIRD LANE N301 Address Information	Optional
N4	N4*CHICKPEA**22206*US***MS N401 City name N403 Postal code N404 Country Code N407 Country Subdivision	Optional
VID	VID*FR**NO NUMBER*****GOIN4U**US**VA VID01 Equipment Description VID03 Equipment Number VID14 Reference Identifier (license plate of equipment) VID16 Country Code	Optional

	VID18 Country Subdivision	
<p>SPECIAL NOTE If you put an equipment number in the VID03 position, the ACE system will expect it to already be registered in ACE. No. If you put the ACE ID in VID17 ACE will expect the equipment number to be registered in the account. If the equipment number is entered in VIS03 it may or may not be registered in the account. VID03 is a mandatory element. If an equipment number is not known 'no number' must be supplied</p> <p>- Either the ACE ID or Equipment Number or License plate, State/Province, Country, or full equipment data is required.</p> <p>- CBP will accept 4 occurrences of license plates in the P4/LX/VID loop. If the VID is repeated in loops, only the VID03, VID14 and VID18 if applicable, should be supplied.</p> <p>-</p>		
N10	<p>N10*100*EDI MANUALS**J*0101200020*30*L*1000**CT N***USD N1001 Quantity N1002 Free from description N1004 Commodity Code Qualifier = J N1005 Commodity Code = 0101200020 N1006 Customs shipment value = 30 N1007 Weight Unit Code = L N1008 Weight = 1000 N1010 Manifest Unit Code N1013 Currency Code</p>	Optional
SE	SE*22*0412	Mandatory
GE	GE*1*412	Mandatory
IEA	IEA*1*000000285	Mandatory

NOTE This document provides a comprehensive explanation of requirements for the 309 format to pass successfully through a translator.

IMPORTANT NOTE: Optional fields may in fact in some cases be required based on the type of manifest being transmitted. Please refer to the IG and the Appendix for further clarification

2.5.2 Scenario 2 - The Three-Step Process

The Three-Step process is an unassociated shipment manifest linking to a Consist transaction set. It

- Unassociated shipment submission
- Consist transaction set submission with linking
- Ending the Manifest

The manifesting carrier may send individual unassociated shipment manifests (309 Customs Manifest) without identifying the trip, conveyance, crew, or equipment. When shipments are scheduled for movement, the manifesting carrier will transmit a 358 Customs Consist Information (Trip Information) transaction set providing trip, conveyance, crew, and equipment data. The 358 Customs Consist Information transaction set is then used to link unassociated shipment numbers to the Trip and the 353 Events Advisory Details message will be required to end the manifest.

The following process diagrams the unassociated shipment transaction set:

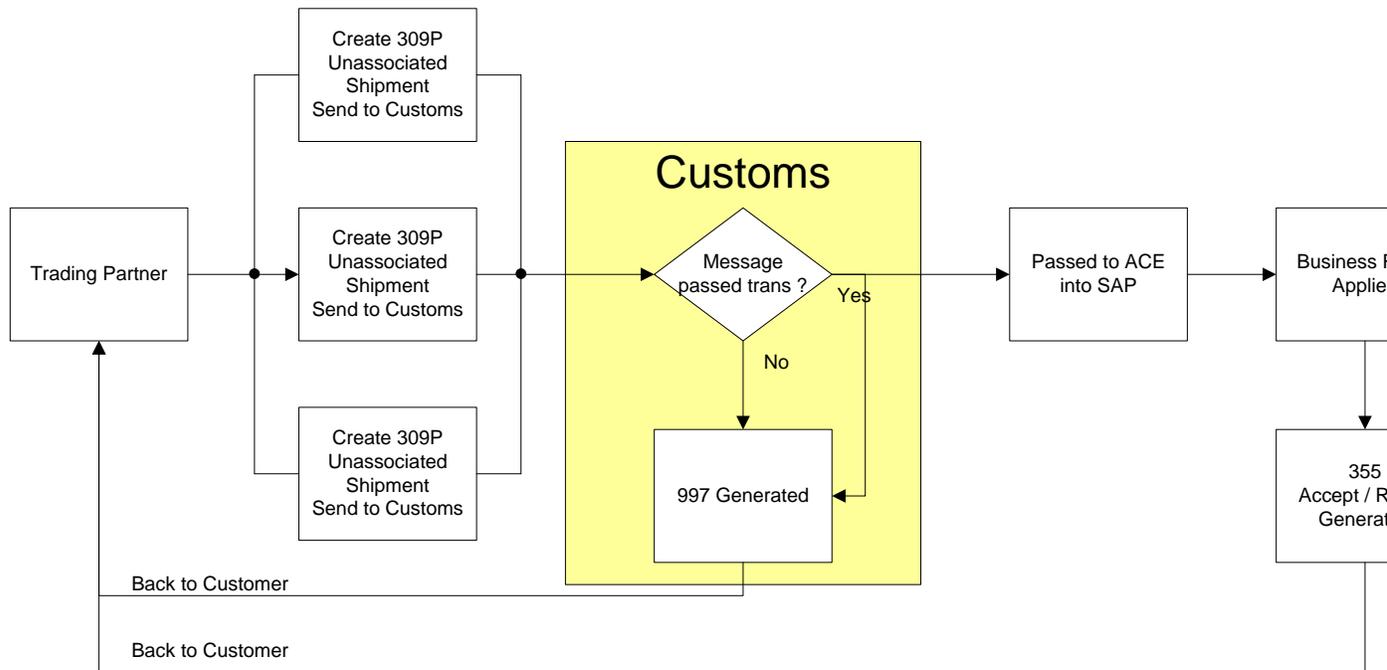


Figure 2-8. Unassociated Shipment Transaction Set

Creating an unassociated shipment

NOTE The M1009 has a 'P' denoting that this manifest is an preliminary or unassociated shipment.

Example below displays a 309 unassociated shipment transaction data set

```

ISA*00*          *00*          *02*ZZZZ          *ZZ*CBP-ACE-TEST
*050202*0914*U*00406*000000285*0*T*:
GS*AQ*ZZZZ*CBP-ACE-TEST*20050202*0914*412*X*004060USCBP
ST*309*0412
M10*ZZZZ*J***SYSTEM*TRUCK***P***QPS4U-000*****8
P4*3004*20060930***2359
LX*1
M11*2453665GK103*20195*****ZZZZ*****K *CG
N1*SH*SHIPPER 2
N3*123 MAIN STREET
N4*MILTON**L9T4Z1*CA***ON
N1*CN*CONSIGNEE 2
N3*123 TOON STREET
N4*ORLANDO**32837*US***FL
M12*61*V1929382919*4909*****ZZZZ*BI*47-1211242*****A123
VID*NC**NO NUMBER
N10*100*ITEM NUMBER 00*****100*L*1000**CTN***USD
SE*15*0412
GE*1*412
IEA*1*000000285
  
```

309 Preliminary		
Segments	Description	Required
ISA	ISA*00* *00* *02*ZZZZ *ZZ*CBP-ACE-TEST *050202*0914*U*00406*000000285*0*T*:	Mandatory
GS	GS*AQ*ZZZZ*CBP-ACE-TEST*20050202*0914*412*X*004060USCBP	Mandatory
ST	ST*309*0412	Mandatory
M10	M10*ZZZZ*J***SYSTEM*TRUCK***P***QPS4U-000*****8 M1001 - Standard Carrier Alpha Code (SCAC) M1002 - Transportation Method/Type Code (J) M1005 – System usually used for preliminary M1006 – Truck = preliminary manifest M1009 - Manifest Type Code, preliminary (P) M1012 – System Reference = QPS4U M1017 - Manifest Type Code, Standard = (8)	Mandatory
VEH	Not required for a preliminary manifest	Optional
P4	P4*3004*20060930***2359 P401 - port code - 3004 P402 - date of arrival, format of: YYYYMMDD P405 – time of arrival, this segment can be post dated 30 days from the system date.	Mandatory
LX	LX*1 All shipment information is indicated below this segment.	Mandatory
M11	M11*2453665GK103*20195*****ZZZZ*****K*CG M1101 Shipment Control Number M1102 Location Identifier M1109 Bill of Lading Type Code M1112 SCAC M1126 Service Level Code	Optional
N1	N1*SH*SHIPPER 2 N101 Identity Code N102 Name	Optional
N3	N3*123 MAIN STREET N301 Address Information	Optional
N4	N4*MILTON**L9T4Z1*CA***ON N401 City name N403 Postal code N404 Country Code	Optional

	N407 Country Subdivision	
N1	N1*CN*CONSIGNEE 2 N101 Identity Code N102 Name	Optional
N3	N3*123 TOON STREET N301 Address Information	Optional
N4	N4*ORLANDO**32837*US***FL N401 City name N403 Postal code N404 Country Code N407 Country Subdivision	Optional
M12	M12*61*V1929382919*4909****ZZZZ*BI*47-1211242*****A123 M1201 Customs Entry Type Code M1202 Customs Entry Number M1203 Location Identifier M1207 Standard Carrier Alpha Code SCAC M1208 Reference Number Qualifier M1209 Reference Identification M1214 Location Identifier	Optional
VID	VID*NC**NO NUMBER VID01 Equipment Description VID03 Equipment Number	Optional
<p>SPECIAL NOTE If you put an equipment number in the VID03 position, the ACE system will expect it to already be registered in ACE.</p> <ul style="list-style-type: none"> - Either the ACE ID or Equipment Number or License plate, State/Province, Country, or full equipment data is required. - CBP will accept 4 occurrences of license plates in the P4/LX/VID loop. If the VID is repeated in loops, only the VID03, VID14 and VID18 if applicable, should be supplied. - The VID segment is not currently used by CBSA. It is used as a trigger segment to allow the use of the N10 loop. The VID segment is not currently used by CBSA. It is used as a trigger segment to allow the use of the N10 loop. 		
N10	N10*100*ITEM NUMBER 00****100*L*1000**CTN***USD N1001 Quantity N1002 Free from description N1006 Customs shipment value = 100 N1007 Weight Unit Code = L N1008 Weight = 1000 N1010 Manifest Unit Code N1013 Currency Code	Optional
SE	SE*15*0412	Mandatory
GE	GE*1*412	Mandatory
IEA	IEA*1*000000285	Mandatory

The following process flow diagrams the 358 Consist transaction set:

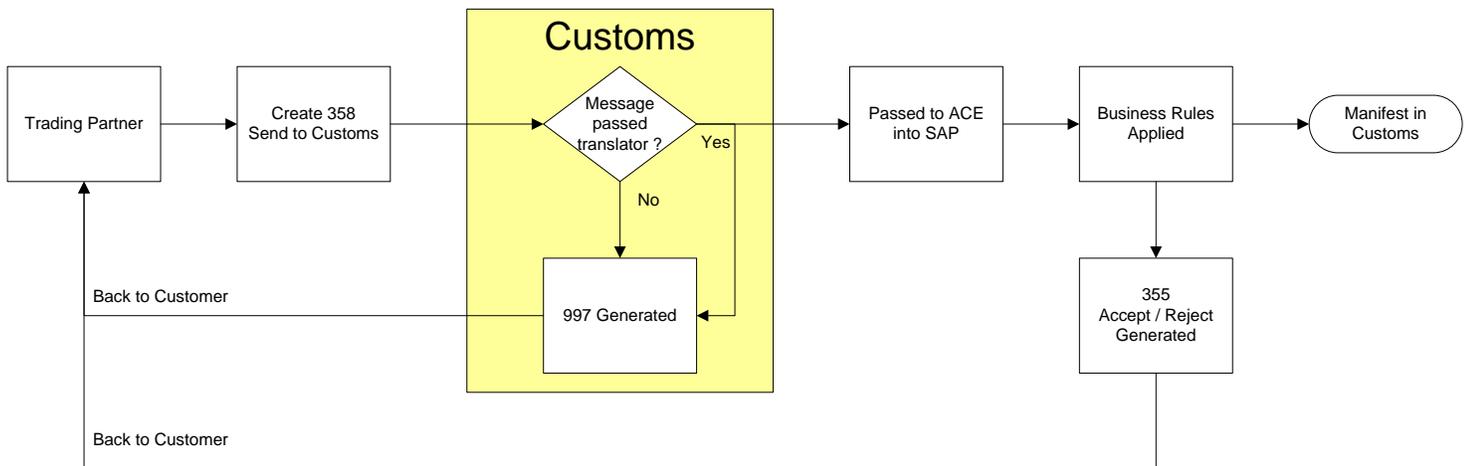


Figure 2-9 – 358 transaction set

Using a Consist Transaction Set to Create a Trip and Link Unassociated Shipments

NOTE The unassociated shipment is linked to the 358 by the **MBL** segment which contains the shipment control number of the unassociated shipment 309 transaction set. Another mandatory element is the update to the **M1009 = S**.

Example 358 Transaction Data Set

```

ISA*00*                *00*                *02*ZZZZ                *ZZ*CBP-
ACE-TEST      *050202*0934*U*00406*000000194*0*T* :
GS*BD*ZZZZ*CBP-ACE-TEST*20050202*0934*194*X*004060USCBP
ST*358*0194
M10*ZZZZ*J***777700GK002****S***QPS4U*****8
VEH**TP0123456789*****P031XV*****US***TR*****14197*MS
NM1*EJ*1*SPARROW*JACK
DMG*DB*19550404*M***8*US
REF*HD*Yes
REF*ACW*95453525**ZZ*US
REF*CDN*7820011*ON*ZZ*CA
REF*5K*6170363*FL**US
N3*1313 MOCKINGBIRD LANE
N4*ORLANDO**32837*US***FL
P4*3004*20060930***2359
VID*TL**12121212*****ACE012**US**VA
MBL*ZZZZ*2453665GK103
SE*15*0194
GE*1*194
IEA*1*000000194
  
```

Similar to 309. maybe could be dropped

358 Transaction Set		
Segments	Description	Required
ISA	ISA*00* *00* *02*ZZZZ *ZZ*CBP-ACE-TEST *050202*0934*U*00406*000000194*0*T*:	Mandatory

GS	GS*BD*ZZZZ*CBP-ACE-TEST*20050202*0934*194*X*004060USCBP	Mandatory
ST	ST*358*0194	Mandatory
M10	M10*ZZZZ*J***777700GK002****S***QPS4U *****8 M1001 Standard Carrier Alpha Code (SCAC) M1002 Transportation Method/Type Code (J) M1005 -Trip number 777700GK002 M1009 - Manifest Type Code message from Carrier to Customs (S) M1012 – System Reference = QPS4U M1017 - Manifest Type Code, Standard = (8)	Mandatory
VEH	VEH**TP0123456789*****P031XV*****U S***TR*****14197*MS VEH02 VIN number = TP0123456789 VEH08 License plate P031XV VEH16 Country Code VEH19 Equipment description = TR VEH25 DOT number = 14197 VEH26 Country subdivision = MS	Optional
NM1	NM1*EJ*1*SPARROW*JACK	Optional
DMG	DMG*DB*19550404*M***8*US	Optional
REF	REF*HD*Yes REF01 Reference number qualifier for Hazmat REF02 Reference Identification Yes/No	Optional
REF	REF*ACW*95453525**ZZ*US	Optional
REF	REF*CDN*7820011*ON*ZZ*CA	Optional
REF	REF*5K*6170363*FL**US	Optional
N3	N3*1313 MOCKINGBIRD LANE	Optional
N4	N4*ORLANDO**32837*US***FL	Optional
P4	P4*3004*20060930***2359 P401 - port code, P402 - date of arrival, format of: CCYYMMDD P405 – time of arrival	Mandatory
VID	VID*TL**12121212*****ACE012**US**V A	Optional
<p>SPECIAL NOTE If you put an equipment number in the VID03 position, the ACE system will expect it to already be registered in ACE.</p> <ul style="list-style-type: none"> - Either the ACE ID or Equipment Number or License plate, State/Province, Country, or full equipment data is required. - CBP will accept 4 occurrences of license plates in the P4/LX/VID loop. If the VID is repeated in loops, only the VID03, VID14 and VID18 if applicable, should be supplied. - 		
MBL	MBL*ZZZZ*2453665GK103	Optional

	MBL01 SCAC MBL02 Shipment Control Number	
SE	SE*15*0194	Mandatory
GE	GE*1*194	Mandatory
IEA	IEA*1*000000194	Mandatory

The following process flow diagrams the 353 transaction set:

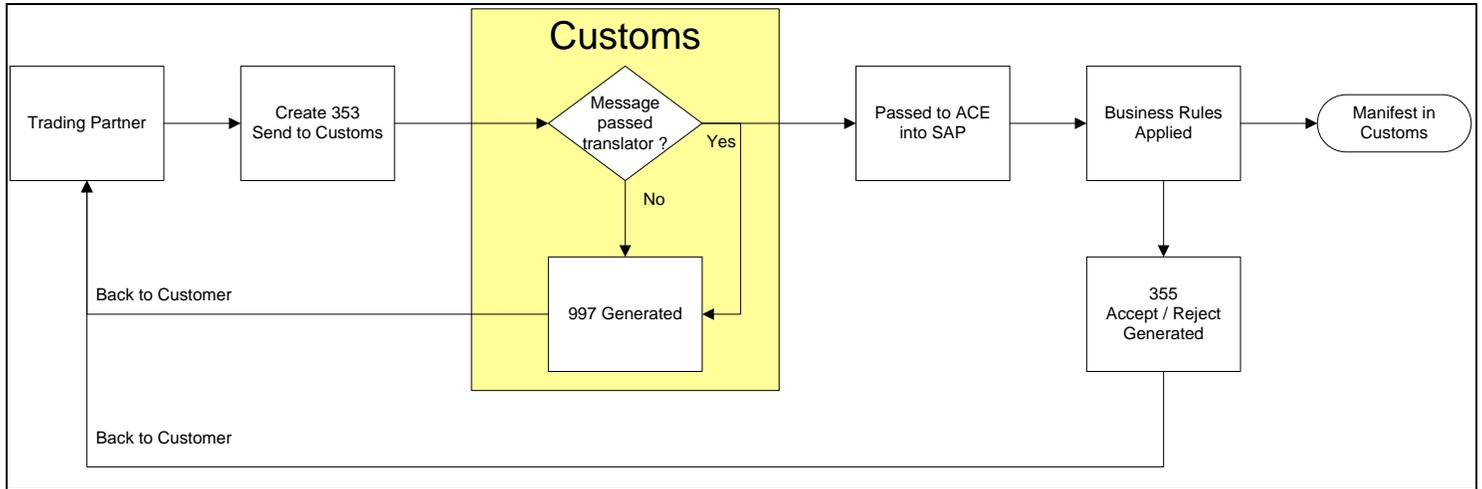


Figure 2-10. – 353 Transaction set process flow

Ending the Manifest with a 353

In the last step of the three step process, the manifesting carrier will be required to transmit a 353 Customs Events Advisory Details transaction set with a code 'Z' 'End of Manifest' in the M1501 element to signify the completion of the manifest. Once the 353 transaction set has been sent to indicate the manifest is complete, any changes to trip, conveyance, crew, equipment or shipment information will be considered a manifest amendment, and subject to the restrictions provided by law and Regulation.

NOTE The M1009 – 'Z' and the M1503 has the actual day of the manifest arrival which could be the system date.

Example 353 Transaction Set

```

ISA*00*                *00*                *02*ZZZZ                *02*USCS
*050202*1510*~*00406*000000027*0*T*:
GS*AX*ZZZZ*USCS*20041022*1615*27*X*00406USCBP
ST*353*0027
M10*ZZZZ*J***777700GK002****Z*****8
P4*3004*20060831***2359
M15*Z*EOM*20060822*3004**2359
SE*5*0027
GE*1*27
IEA*1*000000027
  
```

353 Transaction Set		
Segments	Description	Required
ISA	ISA*00* *00* *02*ZZZZ *02*USCS *050202*1510*~*00406*000000027*0*T*:	Mandatory
GS	GS*AX*ZZZZ*USCS*20041022*1615*27*X* 00406USCBP	Mandatory
ST	ST*353*0027	Mandatory
M10	M10*ZZZZ*J***777700GK002****Z*****8 M1001 SCAC M1002 Transportation Method/Type Code (J) M1005 Trip number M1009 - information on the trip being end of manifest (Z) M1017 - Manifest Type Code, Standard = (8)	Mandatory (IG reads optional, to comply with standards but this must be included)
P4	P4*3004*20060930***2359	Optional
M15	M15*Z*EOM*20060822*3004**2359 M1501 Notification Entity Qualifier, End of Manifest = Z M1502 Reference Number M1503 Date format CCYYMMDD M1505 Location Identifier port of exit M1507 Time 24-hour clock time as follows: HHMM,	Mandatory
SE	SE*5*0027	Mandatory
GE	GE*1*27	Mandatory
IEA	IEA*1*000000027	Mandatory

NOTE After the 353 submission, there is no need to send a second 353 for that Trip, see Appendix A - Troubleshooting the Three-Step Process.

2.6 Accept/Reject Notification (355)

The 355 transaction set is used by U.S. Customs to report errors and discrepancies discovered in the U.S. Customs transactions sets to carriers, terminal operators, port authorities, and service centers. An outbound 355 transaction set should **always** be displayed after an e-manifest submission.

The format of 355 notification follows the 309/358 transaction set format, that is all trip error information will be above the LX1 segment with shipment error information displayed below it.

The 355 transaction set will also identify errors encountered during validation of the original transaction in the K1 segments which are used to transmit information in both codified and free-form format for comment or special instruction.

The K3 segment transmits a fixed-format record or matrix contents. This is shown in diagram below:

K1* 0901*060XXXX Bill Rejected XXXX
 K1* 0901*415No Hazmat Contact
 And the K3 error messages indicate that out of the 5 shipments submitted - 4 were accepted and 1 shipment was rejected.
 K3*CARL06110612370001001 5 0 1 4 0000

NOTE For further information on the ACE 355 error codes see the 355 Implementation Guides, http://www.cbp.gov/xp/cgov/toolbox/about/modernization/carrier_info/ace_edi_drafts/edi_messages/ansi_message_sets/.

2.7 Modifying Trips and Shipments

The following segment information only lists the segments that need to be added or changed for transaction sets. For actual transaction set examples, see Appendix C – Transaction Set Examples.

2.7.1 Updating a Trip

Updating a trip takes place when for example a 309 (W) has been submitted and the manifest error code indicates that the manifest has been returned to preliminary.

Note This manifest has not been sent to CBP. The data has been accepted into the ACE system and is available to be updated, it is **not** available to CUSTOMS officers.

For example: If a carrier submits a complete 309 transaction set with five shipments and one of the shipments is rejected, The 309 transaction set is returned to preliminary with only four of the shipments; the fifth is missing due to it being rejected. ‘There are two options:

- First Option to fix the manifest - submit another 309 (Y) (M1009) without an amendment code in the (M1016)

For example: M10*ZZZZ*J*3746GKtest01*TRUCK***Y***QPSYS*****8**

There is no amendment code because the manifest is currently in a preliminary status. This kind of e-manifest submission can be used to add or update shipment(s) with the same trip number as the complete 309 above.

The carrier must then submit a 353 transaction set to end the manifest.

- Second Option is to Delete the original manifest and resubmit it- submit a 309 (3), then resubmit another 309 (W) with the correct data for all five shipments.

2.7.2 Amending a Trip or Shipment with another 309 transaction set

Amending a Trip or Shipment can only take place after a 309 (W) has been completed or if it has had an end of manifest 353 transaction set submitted The following are examples of Trip and Shipment amendments.

NOTE The P402 and P405 segment locations for the date and time cannot be amended.

For a Trip:

Submission of the amendment takes place after the initial 309 (W) complete.

M10*ZZZZ*J*3746GKtest01*TRUCK***Y***QPSYS***M*03*8**

Make appropriate updates to the Trip segment of the transaction set.

For Shipment(s):

M10*ZZZZ*J*3746GKtest01*TRUCK***Y***QPSYS***M*03*8**

Then in the LX*1 loop include the following M13 segment

M13*ZZZZ*3004*M*3746GKtest0103**

Make the appropriate updates to the shipment commodity.

Note: In truck manifest other segments and elements can be amended beside commodity. Some segments, such as N10, must be re-transmitted as a group regardless of which N10 has been changed

2.8 Deleting versus delinking shipments

The M13 exists in both the 309 (W) and Consist message type but there is one significant difference to be aware of. If you are using a 309 and include the M13 segment and M1303 is set to a 'D', this implies delete. That is, you will delete a shipment. If you are using the 358 and include the M13 segment and M1303 is set to a 'D', in this case that 'D' signifies that you are delinking a shipment. The following are examples of delinking and deleting shipments.

Delinking Shipments

If an e-manifest is deleted with a 309 (3) then everything contained in that e-manifest is deleted out of the ACE system, that is, **all the trip and shipment information**. If the carrier wants to keep all the shipment information and delete just the trip information, then they must **first delink** these shipments from the original trip with a 358 transaction set. These shipments are now unassociated with any trip and are still in the ACE system. These shipments can now be used on another trip.

To delink a shipment from a trip:

Use a 358 transaction set., then in the M13 segment enter the bill of lading number and the 'D' qualifier to delink the shipment. If there are multiple shipments getting delinked, multiple M13 segments will be required.

For example:

M13*ZZZZ*3004*D*2453664GK202**03

M13*ZZZZ*3004*D*2453664GK203**03

Deleting Trips

NOTE Deleting a Trip also deletes the shipment information.

In the 309 set, **M1009** location insert ' 3.'

For example, M10*ZZZZ*J***777700GK001****3*****8

Also in 358 set for an empty truck, code '3' in the M1009 will delete the whole manifest

Deleting Shipments

NOTE You may delete a shipment that is unassociated, which means it is not currently attached to a trip

Use a 309 transaction set, and then in the **M10** segment:

M10*ZZZZ*J*SYSTEM*TRUCK***Y***QPS4U*****8**

And in the M13 segment, M1303 = D, with the same SCN of the shipment to be deleted.

For example, M13*ZZZZ*3004*D*2453665GK102