



Tower Automotive North American EDI

IMPLEMENTATION GUIDELINES FOR AIAG (ANSI ASC X12)
SHIP NOTICE/MANIFEST TRANSACTION SET

Version 004010

856

Revision 1 – March 2007



Tower ISA/IEA & GS/GE Enveloping

Introduction:

This section outlines the ISA & GS enveloping structure that should be used when communicating with Tower Automotive

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ISA	Interchange Control Header	M	1		
Must Use	020	GS	Functional Group Header	M	1		
Must Use	030	GE	Functional Group Trailer	O	1		
Must Use	040	IEA	Interchange Control Trailer	O	1		

Segment: **ISA** Interchange Control Header

Loop:
Level: Interchange
Usage: Mandatory
Max Use: 1
Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Syntax Notes:

Semantic Notes:

- Comments:**
1. When transmitting to or receiving from Tower Automotive, the ISA06 or ISA08 will be used to identify the Tower facility. Tower will use DUNs number to identify each Tower location. Please refer to Appendix A for a list of the Tower location DUNs numbers.
 2. When transmitting to or receiving from Tower Automotive, the ISA06 or ISA08 will be used to identify the Supplier facility. The Supplier's DUNs number must be used to identify the Supplier.
 3. The Interchange ID Qualifier (ISA05 and ISA07) must be 'ZZ'.
 4. **Tower requires the Element Separator, Sub Element Separator and Segment Terminator contain the following values:**

Element Separator:	*	(2A)
Sub Element Separator:		(7C)
Segment Terminator:	~	(7E)

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	ISA01	I01 Authorization Information Qualifier Code to identify the type of information in the Authorization Information 00 No Authorization Information Present (No Meaningful Information in I02)	M ID 2/2
>>	ISA02	I02 Authorization Information 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) Use spaces	M AN 10/10
>>	ISA03	I03 Security Information Qualifier Code to identify the type of information in the Security Information 00 No Security Information Present (No Meaningful Information in I04)	M ID 2/2
>>	ISA04	I04 Security Information 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) Use spaces	M AN 10/10
>>	ISA05	I05 Interchange ID Qualifier	M ID 2/2

			Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	
			ZZ Mutually Defined	
>>	ISA06	I06	Interchange Sender ID	M ID 15/15
			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
			Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	
			ZZ Mutually Defined	
>>	ISA08	I07	Interchange Receiver ID	M ID 15/15
			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
			Date of the interchange	
>>	ISA10	I09	Interchange Time	M TM 4/4
			Time of the interchange	
>>	ISA11	I10	Interchange Control Standards Identifier	M ID 1/1
			Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer	
			U U.S. EDI Community of ASC X12, TDCC, and UCS	
>>	ISA12	I11	Interchange Control Version Number	M ID 5/5
			This version number covers the interchange control segments	
			00400 Standard Issued as ANSI X12.5-1992	
>>	ISA13	I12	Interchange Control Number	M N0 9/9
			A control number assigned by the interchange sender	
>>	ISA14	I13	Acknowledgment Requested	M ID 1/1
			Code sent by the sender to request an interchange acknowledgment (TA1)	
			0 No Acknowledgment Requested	
>>	ISA15	I14	Test Indicator	M ID 1/1
			Code to indicate whether data enclosed by this interchange envelope is test or production	
			P Production Data	
			T Test Data	
>>	ISA16	I15	Component Element Separator	M AN 1/1
			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	

Segment: **GS** Functional Group Header

Loop:

Level: Interchange

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a functional group and to provide control information

Syntax Notes:

Semantic Notes:

Comments: 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.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	GS01	479 Functional Identifier Code	M ID 2/2
		Code identifying a group of application related transaction sets	
>>	GS02	142 Application Sender's Code	M ID 2/12
		Code identifying party sending transmission; codes agreed to by trading partners	
		This code should match the sender code in the ISA segment	
>>	GS03	124 Application Receiver's Code	M ID 2/12
		Code identifying party receiving transmission. Codes agreed to by trading partners	
		This code should match the receiver code in the ISA segment	
>>	GS04	29 Group Date	M DT 8/8
		Date sender generated a functional group of transaction sets.	
>>	GS05	30 Group Time	M TM 4/4
		Time (HHMM) when the sender generated a functional group of transaction sets (local time at sender's location).	
>>	GS06	28 Group Control Number	M N0 1/9
		Assigned number originated and maintained by the sender	
>>	GS07	455 Responsible Agency Code	M ID 1/2
		Code used in conjunction with Data Element 480 to identify the issuer of the standard	
		Use "X"	
		X	ANSI X12
>>	GS08	480 Version / Release / Industry Identifier Code	M ID 1/12
		Code indicating the version, release, subrelease and industry identifier of the EDI standard being used. Positions 1-3, version number; positions 4-6, release and subrelease level of version; positions 7-12, industry or trade association identifier (optionally assigned by user).	
		Use "004010"	
		004010	Version 004, Release 10

Segment: **GE** Functional Group Trailer

Loop:

Level: Interchange

Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of a functional group and to provide control information

Syntax Notes:

Semantic Notes:

Comments: 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.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	GE01	97 Number of Transaction Sets Included	M N0 1/6 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 Assigned number originated and maintained by the sender This must be the same control number as in element GS06.

Segment: **IEA** Interchange Control Trailer

Loop:

Level: Interchange

Usage: Mandatory

Max Use: 1

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Syntax Notes:

Semantic Notes:

Comments: 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.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	IEA01	I16 Number of Included Functional Groups	M N0 1/5
		A count of the number of functional groups included in an interchange	
>>	IEA02	I12 Interchange Control Number	M N0 9/9
		A control number assigned by the interchange sender	
		This must be the same as the control number in ISA13.	

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Functional Group ID=**SH**

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	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	M	10		

Detail: Shipment Level

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - HL			200000	
Must Use	010	HL	Hierarchical Level	M	1		c1
Use	080	MEA	Measurements	O	40		
Use	110	TD1	Carrier Details (Quantity and Weight)	O	20		
Use	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
Use	130	TD3	Carrier Details (Equipment)	O	12		
Use	150	REF	Reference Identification	O	>1		
			LOOP ID - N1			200	
Must Use	220	N1	Name	O	1		

Detail: Order Level

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	HL	Hierarchical Level	M	1		
Must Use	020	LIN	Item Identification	M	1		
Must Use	030	SN1	Item Detail (Shipment)	M	1		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	010	CTT	Transaction Totals	O	1		n1
Must Use	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

- 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.
- The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

Segment: **ST** Transaction Set Header

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

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

Syntax Notes:

Semantic Notes: **1** The transaction set identifier (ST01) is 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:

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
>>	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 3/3
>>	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

Segment: **BSN** Beginning Segment for Ship Notice

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

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

Syntax Notes: 1 BSN06 and BSN07 differentiate the functionality of use for the transaction set.

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

Comments:

BSN*00*3033338*20070413*1259

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> BSN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original	M ID 2/2
>> BSN02	396	Shipment Identification A unique control number assigned by the original shipper to identify a specific shipment Shipment Identification Number (SID) that identifies the shipment	M AN 2/30
>> BSN03	373	Date Date expressed as CCYYMMDD ASN creation date	M DT 8/8
>> BSN04	337	Time 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) ASN creation time	M TM 4/8

Segment: **DTM** Date/Time Reference

Position: 040

Loop:

Level: Heading

Usage: Mandatory

Max Use: 10

Purpose: To specify pertinent dates and times

- Syntax Notes:**
- 1 At least one of DTM02 DTM03 or DTM05 is required.
 - 2 If DTM04 is present, then DTM03 is required.

Semantic Notes:

Comments:

DTM*011*20070413*1229*ET

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 011 Shipped	M ID 3/3
>> DTM02	373	Date Date expressed as CCYYMMDD	M DT 8/8
>> DTM03	337	Time 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)	M TM 4/8
DTM04	623	Time Code Code identifying the time zone from where the shipment originates. Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 2/2

Segment: **HL** Hierarchical Level
Position: 010
Loop: HL Mandatory
Level: Shipment
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

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.
The HL segment defines a top-down/left-right ordered structure.
- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

HL*1**S

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
>>	HL01 628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
	HL02 734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12
>>	HL03 735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M ID 1/2
		S Shipment	

Segment: **MEA** Measurements

Position: 080

Loop: HL Mandatory

Level: Shipment

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights.

Syntax Notes: 1 At least one of MEA03 is required.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

MEA*PD*G*9168*LB

MEA*PD*N*8550*LB

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> MEA01	737	Measurement Reference ID Code Code identifying the broad category to which a measurement applies PD Physical Dimensions	M ID 2/2
>> MEA02	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies G Gross Weight LN Length N Actual Net Weight TH Thickness WD Width WT Weight	M ID 1/3
>> MEA03	739	Measurement Value The value of the measurement	M R 1/20
>> MEA04	355	Composite Unit of Measure To identify a composite unit of measure	M

Segment: **TD1** Carrier Details (Quantity and Weight)

Position: 110

Loop: HL Mandatory

Level: Shipment

Usage: Optional

Max Use: 20

Purpose: To specify the transportation details relative to commodity, weight, and quantity

Syntax Notes: 1 If TD101 is present, then TD102 is required.

Semantic Notes:

Comments:

TD1*PLT94*1

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>>	TD101	103 Packaging Code Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; If the Data Element is used, then Part 1 is always required Refer to 003040 Data Element Dictionary for acceptable code values.	M AN 3/5
>>	TD102	80 Lading Quantity Number of units (pieces) of the lading commodity Number of packages for the entire ASN	M N0 1/7

Segment: **TD5** Carrier Details (Routing Sequence/Transit Time)

Position: 120

Loop: HL Mandatory

Level: Shipment

Usage: Optional

Max Use: 12

Purpose: To specify the carrier and sequence of routing and provide transit time information

- Syntax Notes:**
- 1 At least one of TD502 TD504 TD505 TD506 or TD512 is required.
 - 2 If TD502 is present, then TD503 is required.

Semantic Notes:

- 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.

TD5*B*2*CETR*LT

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> TD501	133	Routing Sequence Code Code describing the relationship of a carrier to a specific shipment movement	M ID 1/2
		B Origin/Delivery Carrier (Any Mode)	
		O Origin Carrier (Air, Motor, or Ocean)	
		S Origin Carrier, Shipper's Routing (Rail)	
>> TD502	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	M ID 1/2
		2 Standard Carrier Alpha Code (SCAC)	
>> TD503	67	Identification Code Code identifying a party or other code	M AN 2/80
		Carrier's SCAC code	
>> TD504	91	Transportation Method/Type Code Code specifying the method or type of transportation for the shipment	M ID 1/2
		A Air	
		AC Air Charter	
		AE Air Express	
		D Parcel Post	
		E Expedited Truck	
		LT Less Than Trailer Load (LTL)	
		M Motor (Common Carrier)	
		P Private Carrier	
		R Rail	
		U Private Parcel Service	

Segment: **TD3** Carrier Details (Equipment)

Position: 130

Loop: HL Mandatory

Level: Shipment

Usage: Optional

Max Use: 12

Purpose: To specify transportation details relating to the equipment used by the carrier

- Syntax Notes:**
- 1 Only one of TD301 or TD310 may be present.
 - 2 If TD302 is present, then TD303 is required.

Semantic Notes:

Comments:

TD3*RR*XCUC*14108

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>>	TD301	40 Equipment Description Code Code identifying type of equipment used for shipment Refer to 003040 Data Element Dictionary for acceptable code values.	M ID 2/2
>>	TD302	206 Equipment Initial Prefix or alphabetic part of an equipment unit's identifying number	O AN 1/4
>>	TD303	207 Equipment Number Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred) Trailer number if sent by motor Air Bill number if sent by air Railcar number if sent by rail ISO container if sent by ocean	M AN 1/10

Segment: **REF** Reference Identification

Position: 150

Loop: HL Mandatory

Level: Shipment

Usage: Optional

Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 1 At least one of REF02 or REF03 is required.

Semantic Notes:

Comments:

REF*BM*S0000093

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		BM Bill of Lading Number	
		CN Carrier's Reference Number (Not Recommended)	
		HC Heat Code	
		LS Bar Code Serial Number	
		PK Packing List Number	
		S3 Specification Number	
		SO Shipper's Order (Invoice) Number	
		ZZ Mutually Defined	
>> REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30

Segment: **N1** Name

Position: 220

Loop: N1 Optional (Must Use)

Level: Shipment

Usage: Mandatory

Max Use: 1

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

- Syntax Notes:**
- 1 At least one of N102 or N103 is required.
 - 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:

- 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.

N1*SU**1*1987654

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>>	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual ST Ship To SU Supplier/Manufacturer	M ID 2/3
>>	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 92 Assigned by Buyer	M ID 1/2
>>	N104	67 Identification Code Code identifying a party or other code DUN and Bradstreet (DUNS) number or Tower assigned Supplier ID	M AN 2/80

Segment: **HL** Hierarchical Level
Position: 010
Loop:
Level: Order
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:

Semantic Notes:

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.
The HL segment defines a top-down/left-right ordered structure.
- 2 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.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 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.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

HL*2*1*I

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>>	HL01	628 Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
	HL02	734 Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12
>>	HL03	735 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure	M ID 1/2
		I Item	

Segment: **LIN** Item Identification

Position: 020

Loop:

Level: Item

Usage: Mandatory

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes: 1 If either LIN04 or LIN05 is present, then the other is required.

Semantic Notes: 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.

LIN**BP*04616403*PL*1

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
>> LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number	M ID 2/2
>> LIN03	234	Product/Service ID Identifying number for a product or service Part or returnable container number	M AN 1/48
LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) PL Purchase Order Line Number	X ID 2/2
LIN05	234	Product/Service ID Identifying number for a product or service	X AN 1/48

Segment: **SN1** Item Detail (Shipment)
Position: 030
Loop:
Level: Item
Usage: Mandatory
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: 1 If either SN105 or SN106 is present, then the other is required.
Semantic Notes: 1 SN101 is the ship notice line-item identification.
Comments: 1 SN103 defines the unit of measurement for both SN102 and SN104.

SN1**33*EA*60047

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>>	SN102 382	Number of Units Shipped Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set Quantity of item shipped	M R 1/10
>>	SN103 355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Use unit of measure from 830 Planning Schedule Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 2/2
	SN104 646	Quantity Shipped to Date Number of units shipped to date Cumulative quantity shipped, including this ASN	O R 1/15

Segment: **PRF** Purchase Order Reference

Position: 030

Loop:

Level: Item

Usage: Optional

Max Use: 1

Purpose: To provide reference to a specific purchase order

Syntax Notes:

Semantic Notes:

Comments:

PRF*6-2000

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
PRF01	324	Purchase Order Number	M AN 1/22

Identifying number for Purchase Order assigned by the purchaser

Segment: **CTT** Transaction Totals

Position: 010

Loop:

Level: Summary

Usage: Optional

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set

Syntax Notes:

Semantic Notes: **1** This segment is intended to provide hash totals to validate transaction completeness and correctness.

Comments:

CTT*1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
>>	CTT01	354	Number of Line Items Total number of line items in the transaction set	M N0 1/6

Segment: **SE** Transaction Set Trailer
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
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)

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

SE*36*000000914

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
>>	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
>>	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9



SAMPLE DATA FILE

ST*856*000000914
 BSN*00*3033338*20071110*1259
 DTM*011*20071110*1257*ET
 HL*1**S
 MEA*PD*G*9160*LB
 MEA*PD*N*8560*LB
 TD1*COL52*4
 TD5*B*2*XCUO*LT
 TD3*TL*XCUO*14108
 REF*BM*3033338
 REF*CN*99087789
 N1*ST**1*123456789
 N1*SU**1*456987321
 HL*2*1*I
 LIN*BP*04616403*PL*1
 SN1**940*EA*607710
 PRF*6-2000

CTT*1
 SE*19*000000914

Heading Area

ST*856*000000914 BSN*00*3033338*20071110*1259 DTM*011*20001110*1257*ET	Transaction Set = 856 Transaction Set Control Number = 000000914 Original Transmission = 00 Shipment Identification Number (SID) = 3033338 Date Transaction Set was Created = 20071110 Time Transaction Set was Created = 1259 Date/Time refers to Shipment = 011 Date of Shipment = 20071110 Time of Shipment = 1257 Time Code = ET (Eastern Time Zone)
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Shipment

HL*1**S MEA*PD*G*9160*LB MEA*PD*N*8560*LB	Hierarchical ID Number = 1 Hierarchical Parent ID = Blank Hierarchical Level Code = S (Shipment) Measurement Reference ID = PD (Physical Dimensions) Measurement Qualifier = G (Gross Weight) Measurement Value = 9160 Unit of Measure = LB Measurement Reference ID = PD (Physical Dimensions) Measurement Qualifier = N (Net Weight) Measurement Value = 8560 Unit of Measure = LB
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TD1*COL52*4	Packaging Code = COL52 Lading Quantity = 4 (number of pallets in this shipment)
TD5*B*2*XCUO*LT	Routing Sequence Code = B IF Code Qualifier = 2 (Standard Carrier Alpha Code – SCAC) ID Code = XCUO (SCAC for the carrier) Transportation Method/Type code = LT
TD3*TL*TIIW*14108	Equipment Description Code = TL (Trailer) Equipment Initial = TIIW (Alphabetic ID on Trailer) Equipment Number = 14108
REF*BM*3033338	Reference Number Qualifier = BM (Bill of Lading) Reference Number = 3033338 (Bill of Lading Number)
REF*CN*99087789	Reference Number Qualifier = CN (Carrier reference number) Reference Number = 99087789
N1*ST**01*123456789	Entity ID Code = ST (Ship To) Name = Not used ID Code Qualifier = 01 (DUNS Number) ID Code = 123456789
N1*SU**01*456987321	Entity ID Code = SU (Supplier) Name = Not Used ID Code Qualifier = 01 (DUNS Number) ID Code = 456987321

Item Details

HL*2*1*I	Hierarchical ID Number = 2 Hierarchical Parent ID = 1 (Refers back to the shipment level) Hierarchical Level Code = I (Item Level)
LIN*BP*04616403*PL*1	Assigned Identification = Not used Product Service ID Qualifier = BP (Buyers Part) Product Service ID = 04616403 (Tower Part Number) Product Service ID Qualifier = PL (P.O. Line Number) Product Service ID = 1
SN1**940*EA*607710	Number of Units Shipped = 940 940 shipped of part number 04616403 Unit of Measure = EA (Each) Quantity Shipped to Date = 607710 607710 Shipped this model year

PRF*6-2000	Purchase Order Number = 6-2000
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Summary Area

CTT*1	Number of Line Items = 1
SE*19*000000914	Number of segments in Transaction Set = 19 Transaction Set Control Number = 000000914 same as ST02

Appendix A

Tower Location List:

LOCATION	QUALIFIER	ID
Tower Auburn	ZZ	006407126
Tower Bardstown	ZZ	879719912
Tower Bellevue	ZZ	623470416
Tower Bluffton	ZZ	045244985
Tower Chicago	ZZ	139890557
Tower Clinton	ZZ	928966266
Tower Elkton	ZZ	005398615
Tower Madison	ZZ	009348384
Tower Meridian	ZZ	779947717
Tower Plymouth	ZZ	956723399
Tower Smyrna	ZZ	139890615
Tower Traverse City	ZZ	877233502



Appendix B

Contact Information:

Tower IT Contact information:

IT Helpdesk:

Phone: 877-999-4877

Email: it.helpdesk@towerautomotive.com