Toyota Boshoku America

Supplier EDI Implementation Manual

Version 4.3

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Document Control

Change Record

Date	Author	Version	Change Reference
12/08/2014	John Pressly	4.0	No Previous Document in WORD format
12/31/2014	John Pressly	4.1	Added 856 transaction back in
01/19/2015	Vic Culp	4.1	General syntax and formatting changes
01/20/2015	Tony Anderson	4.2	Corrected 862 spec and merged KDDI 856 for Contract Mfg. Update TOC and TOF
01/28/2015	Tony Anderson	4.3	Modified 856 segment usage, removed Contract Mfg info

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Forward

The widespread implementation of EDI (Electronic Data Interchange) throughout the auto industry has revolutionized the way trading partners conduct business. When incorporating EDI into trading partners' business processes benefits include:

- Reduced costs
- Reduced transaction cycle timing
- Increased transaction accuracy

Toyota Boshoku America's (TBA) EDI program was started in order for TBA and our suppliers to experience these EDI benefits in our business relationship. The purpose of the TBA EDI Implementation Manual is to help suppliers understand TBA's EDI program and successfully comply with TBA's expectations for EDI implementation.

The TBA EDI Implementation Manual will provide our suppliers with reference material for implementing the following transactions:

830 Order Forecast

856 Advance Shipping Notice

862 Shipping Schedule (Used as Firm Order by TBA)

997 Functional Acknowledgement

TBA requests that each member of your organization affected by these transactions have access to this manual.

Overview of TBA's EDI Implementation Manual

The TBA EDI Implementation Manual includes the following material:

- Section 1.0 - TBA's EDI Program
- Section 2.0 - EDI Implementation Process
- Section 3.0 - TBA EDI Technical Specifications
- Section 4.0 - Moving EDI Transactions Into Production

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1.0 TBA's EDI Program

TBA's EDI Philosophy

Toyota Boshoku America is committed to improving the business relationship we have with our suppliers. TBA's EDI program was put in place for this purpose – to improve our business relationship. As part of the EDI program, TBA is committed to providing our suppliers with the necessary resources and support needed to comply with the program's expectations. TBA also realizes that the success of the EDI program is highly dependent on suppliers making TBA's EDI efforts an integral part of our business relationship. Therefore, TBA's EDI program is being implemented with the belief that through a cooperative effort between TBA and the supplier, a common improvement in our business relationship will evolve from the EDI program.

Benefits of Implementing EDI with TBA

Four key benefits should be evident when a supplier implements EDI with TBA. They are the following:

- Improved Cash Management
- Improved transaction cycle timing
- Decreased cost to operations
- Improved transaction accuracy

Supplier EDI implementation is a protocol which improves transaction costs for both TBA and the supplier. Handling transactions by other methods requires manual labor spent producing the transaction, costs in mailing or faxing the transaction, and further manual processes in receiving and utilizing the transaction. EDI transactions eliminate much of the non-value added resources required to handle transactions.

EDI also reduces transaction cycle timing. This enables suppliers and TBA to see the end result of the transaction sooner than with manually handled transactions. The reason for reduced transaction cycle timing is that the transaction is not dependent on a human to fax or mail the transaction between trading partners. EDI is an aspect of Electronic Commerce that is improving the speed of doing business today.

Operation efficiencies in both TBA and our Supplier facilities are due to the reliability of the EDI information. This reliability and efficient communication means that a smoother flow through the facility is possible. TBA can plan on a reliable supply of raw materials to fulfill our Customers' needs.

Perhaps the most important benefit of doing EDI with TBA is the increase in accuracy of the transactions being sent and received by TBA. An integrated EDI program is not reliant on human input of data or legibility of a fax. The precision of TBA's manufacturing processes requires accuracy of the order forecast to our suppliers, and EDI assures this high level of accuracy.

2.0 EDI and TBA's Implementation Process

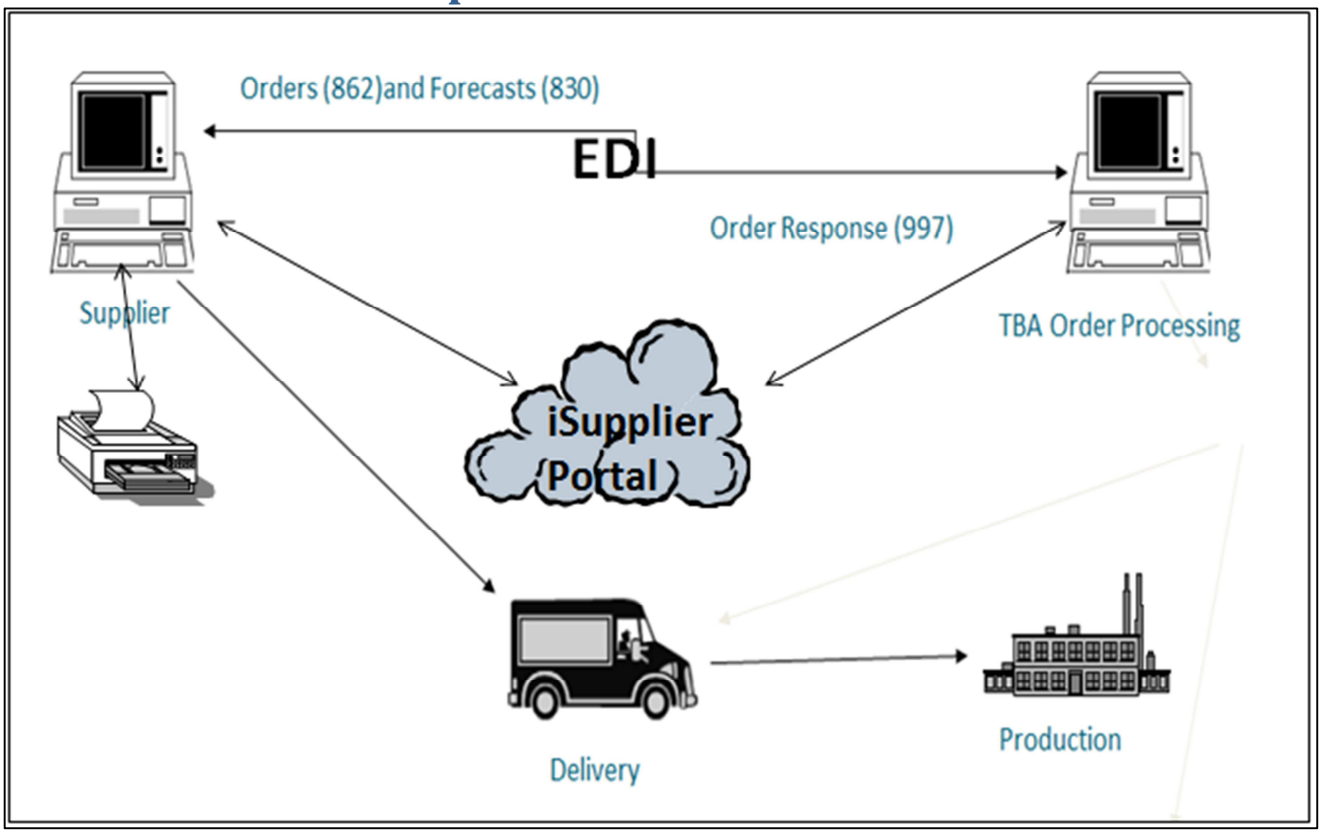


Figure 1 EDI Relationship between Suppliers and TBA

Comments

The EDI implementation process is driven by TBA's goal to achieve 100% supplier EDI implementation Please pay special attention to the three areas of the EDI implementation process below. A strong commitment to these three areas will be vital to your company's successful implementation of each transaction by the milestone dates.

1. Supplier Preparation: The success of the TBA EDI Program is dependent on each supplier's preparation for each transaction's implementation. Each supplier needs to assess their ability to comply with TBA's transaction guidelines immediately and inform TBA of their assessment in the EDI survey.

2. Communication with TBA: The supplier should review the entire EDI kick-off package material upon receipt. Suppliers should direct any questions to the TBA contact listed for the project (see contacts page in Appendices).

3. Testing Transactions: Ensure your company is ready to test by the scheduled test date for each transaction. Work diligently to resolve problems with your VAN or EDI software provider in order to complete testing by the required "testing completed" milestone. Also, keep your TBA buyer informed of your company's EDI implementation status. Notify TBA with the test results.

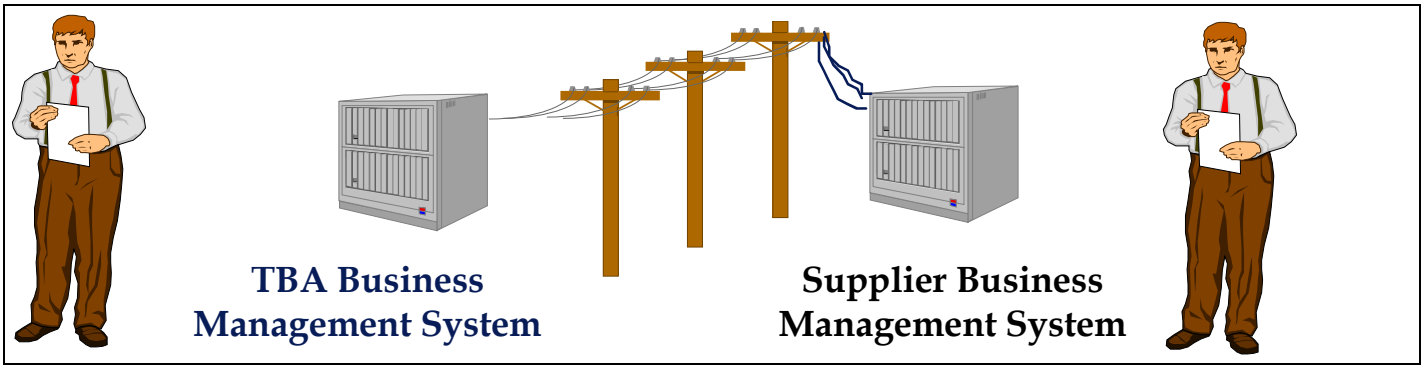


Figure 2 EDI to Suppliers

Numerous TBA suppliers have expressed an interest in establishing an EDI link with us. Establishing this capability for our Suppliers is part of this project, and consists of the following tasks:

1. PC or Purchasing establishes a list of vendors at each plant
2. PC or Purchasing contacts the vendors and establishes their interest and capabilities to implement EDI.
3. Setting up an EDI link, mapping, and logic within the plant system.
4. Supplier documentation generated and test cases and data set up by IT.
5. Certification testing of participating Suppliers.
6. IT support helps vendors with guidance on implementation of EDI with TBA, on a case by case basis.

The TBA Supplier EDI system must have the capability to issue a forecast to our suppliers, send orders, receive ASNs, and receive and send acknowledgements of the receipt of the transaction. Additional features are available via the Sterling/IBM system selected by TBA.

Scope of EDI

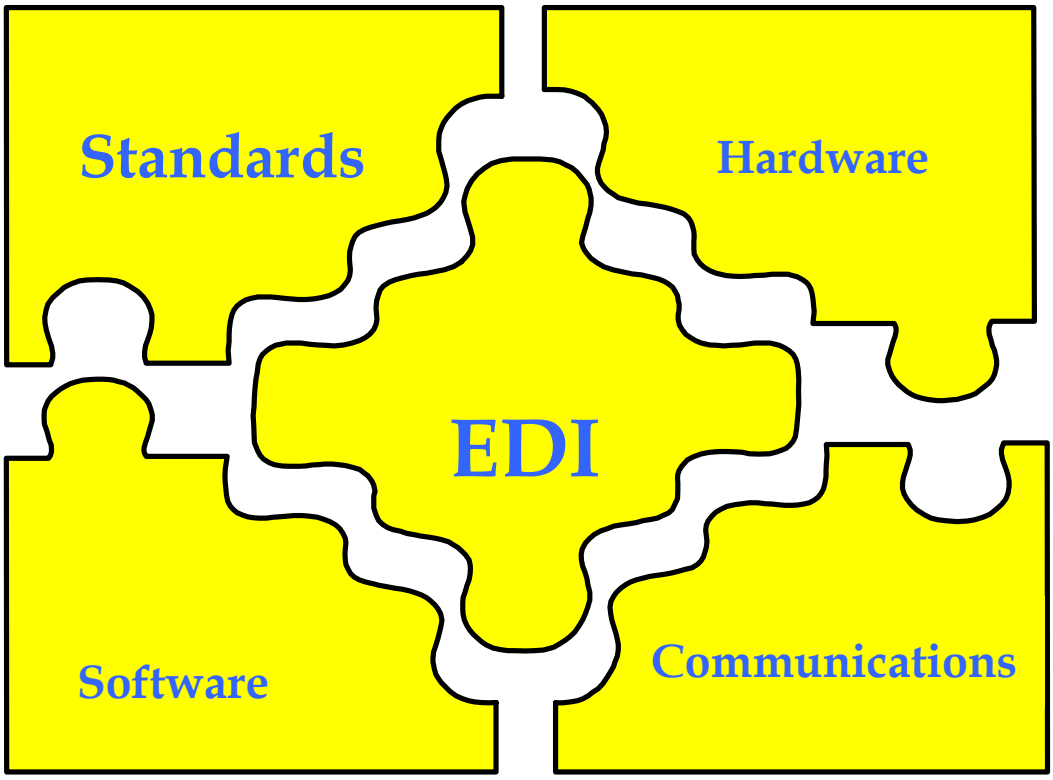


Figure 3 Pieces of the EDI Puzzle

Components of EDI

EDI can be formally defined as the transfer of structured data, by agreed message standards, from one computer system to another without human intervention. This transfer requires strict control in order to reliably communicate the commercial information required to conduct business among companies around the world. The components are the following:

Standards

- There are numerous standards under the umbrella of EDI. The relevant standard to TBA is The US standard ANSI ASC X12 (X12) which is predominant in North America.

If you are unable to meet this standard and must use other standards, contact your TBA IT or your TBA BUYER.

Communications

There are many ways to transfer the information from one enterprise to another reliably in the execution of the EDI process, such as the following:

- Internet (Web-based or email)
- Value-added networks (VAN)

TBA currently uses Sterling/IBM as its VAN supplier.

Hardware

EDI communication for a business is not an inexpensive solution. It requires a significant investment in hardware to be effective. Even as computer infrastructure was becoming more affordable it still takes many companies a substantial time investment to bring their infrastructure to a level which could facilitate the

execution of Electronic Data Interchange. TBA has invested in the required technology in order to gain the benefits of EDI for ourselves and our business partners.

Software

TBA utilizes IBM/Sterling software for the mapping of received transactions into our database and for mapping to the X12 standard transactions that we send to our Suppliers.

Overview of EDI Implementation Process at TBA

Supplier Transaction Flow

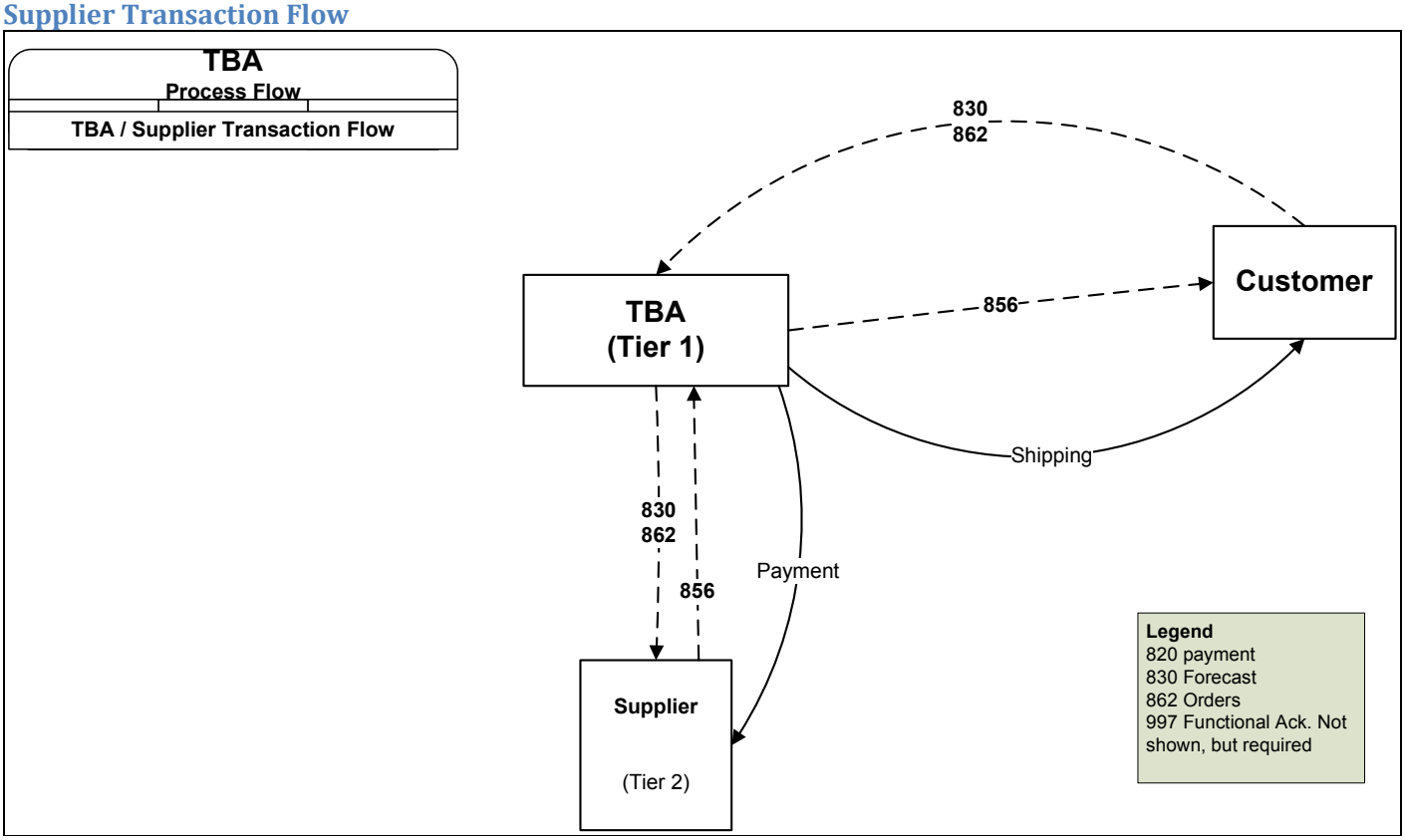
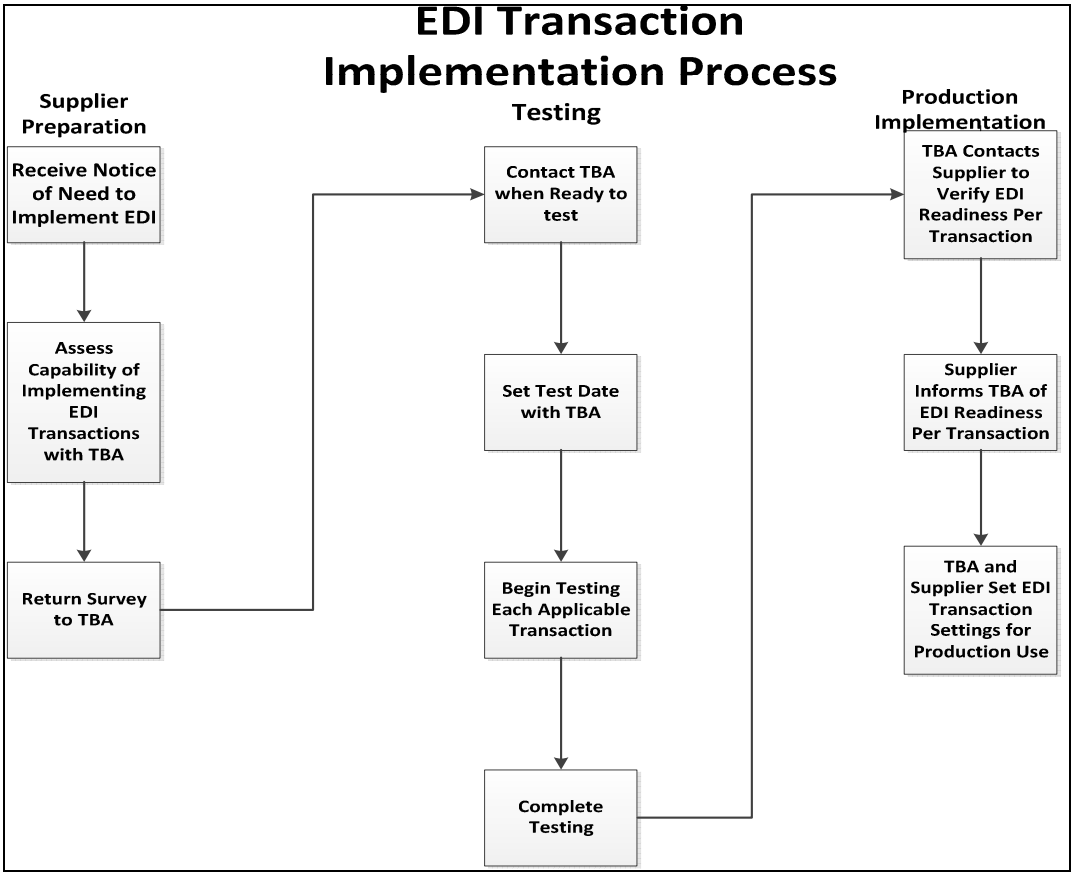


Figure 45 EDI Supplier flow

The EDI implementation process requires a strong commitment from Suppliers for proactive implementation of each transaction. TBA expects all Supplier's to utilize the resources available to them, including the EDI Implementation Manual and EDI contacts, to prepare for and complete all phases of the EDI implementation process by the milestone date requirements. The figure below provides a general flow of the implementation process.

Figure 56 EDI Transaction Implementation Process



EDI Implementation Milestones

The purpose of TBA's EDI implementation milestones is to ensure each supplier's timely progress towards reaching EDI implementation for production. Milestone timings are unique for each EDI implementation project and are decided depending on the amount of suppliers involved in the project, the required implementation timing for the transactions involved, and the amount of transactions being implemented. The milestones reflect key points in the implementation process and incorporate proper lead times between each milestone for supplier preparation activity. The EDI implementation milestones are:

- Supplier returns EDI survey to TBA
- Supplier sets test date (supplier calls TBA, if date is not specified on survey)
- Supplier begins testing
- Supplier completes testing
- Supplier implementation into production

Although TBA supports EDI for its Suppliers, certain functionality of iSupplier portal is retained to present a complete system and to support existing Suppliers who are unable to utilize EDI. At a minimum, iSupplier must be used for label printing, manifest printing, and, sometimes downloading of orders. The manual for iSupplier is added as an appendix in this manual.

EDI Transaction Testing Process

The testing process varies slightly according to the type of transaction routing:

- Outbound from TBA (830, 862 and 997)
- Inbound to TBA (856 and 997)

830 and 862 Outbound Transactions

Technical details for the 830 and 862 transactions are given in the next section. To test these transactions, the supplier must follow these steps:

1. Assess your company's ability to implement the 830 and 862 EDI transactions to TBA's standards immediately after receiving notice from TBA of your company's need to implement these transactions.

2. Contact TBA (See contact info in appendix) to establish communication and confirm understanding of the testing process and transaction guidelines.

3. Schedule a date with TBA to test the 830 and 862 transactions with the supplier. The scheduled test date should be determined by your ability to test successfully. TBA is ready to test all suppliers and transactions at any point after informing suppliers of the project.

4. TBA will send the EDI 830 and 862 transactions to the supplier on the supplier's scheduled test date. The supplier is required to acknowledge reception of the 830 and 862 transactions and call or email TBA within 24 hours.

5. Suppliers who do not inform TBA of their receipt of the 830 and 862 transactions within 24 hours must reschedule a new date with TBA.

6. Note that the Supplier is required to send a 997 functional acknowledgement to TBA which acknowledges receipt of the transaction file.

7. The supplier will either become certified or will be informed of why the test was not successful. Suppliers who must resolve technical problems are required to inform TBA of what countermeasures will be taken and commit to a completion date for the solution. This completion date will become the new date when suppliers will be expected to attempt a retest of the previously unsuccessful transaction. TBA will contact suppliers that successfully certify each transaction at a specified time to move the EDI transaction into a production mode.

856 and 997 Inbound Transactions

TBA will evaluate the 856 and 997 transactions for two basic requirements. One requirement is the supplier's ability to establish a connection and properly route each transaction to TBA. Another requirement is the supplier's ability to send the proper data in the correct format. Technical details for the transaction are provided in the next section.

To test the 856 and 997 transactions, the supplier must follow these steps:

1. Assess your company's ability to implement the 856 and 997 EDI transactions to TBA's standards after receiving notice from TBA of your company's need to implement these transactions.

2. Communicate with TBA to establish communication and confirm understanding of the testing process and transaction guidelines.

3. Schedule a date with TBA to test each transaction (if supplier did not specify a date on the survey). The scheduled test date should be determined by your ability to test successfully. TBA is ready to test all suppliers and transactions at any point after informing suppliers of the project.

4. Send the EDI transaction mapped in a test mode format to TBA on the scheduled test date for that transaction. The supplier is not supposed to wait for TBA to ask for a test on this date. Instead, TBA is prepared to receive and evaluate the test on that date. Suppliers that miss their test date must reschedule a new date with TBA.

5. TBA will contact the supplier with the results of the test. The supplier will either become certified or will be informed of why the test was not successful.

6. Suppliers who must resolve technical problems are required to inform TBA of what countermeasures will be taken and commit to a completion date for the problem. This completion date will be the new date when suppliers will be expected to test that transaction again.

7. TBA will contact suppliers that successfully certify each transaction at a specified time to move the EDI transaction into a production mode.

3.0 Transaction Technical Specifications

EDI Envelope segment definitions

The following information defines the format of the EDI transactions that comprise the total EDI envelope segments. The segments are described in detail per transaction type in this section on Technical Specifications.

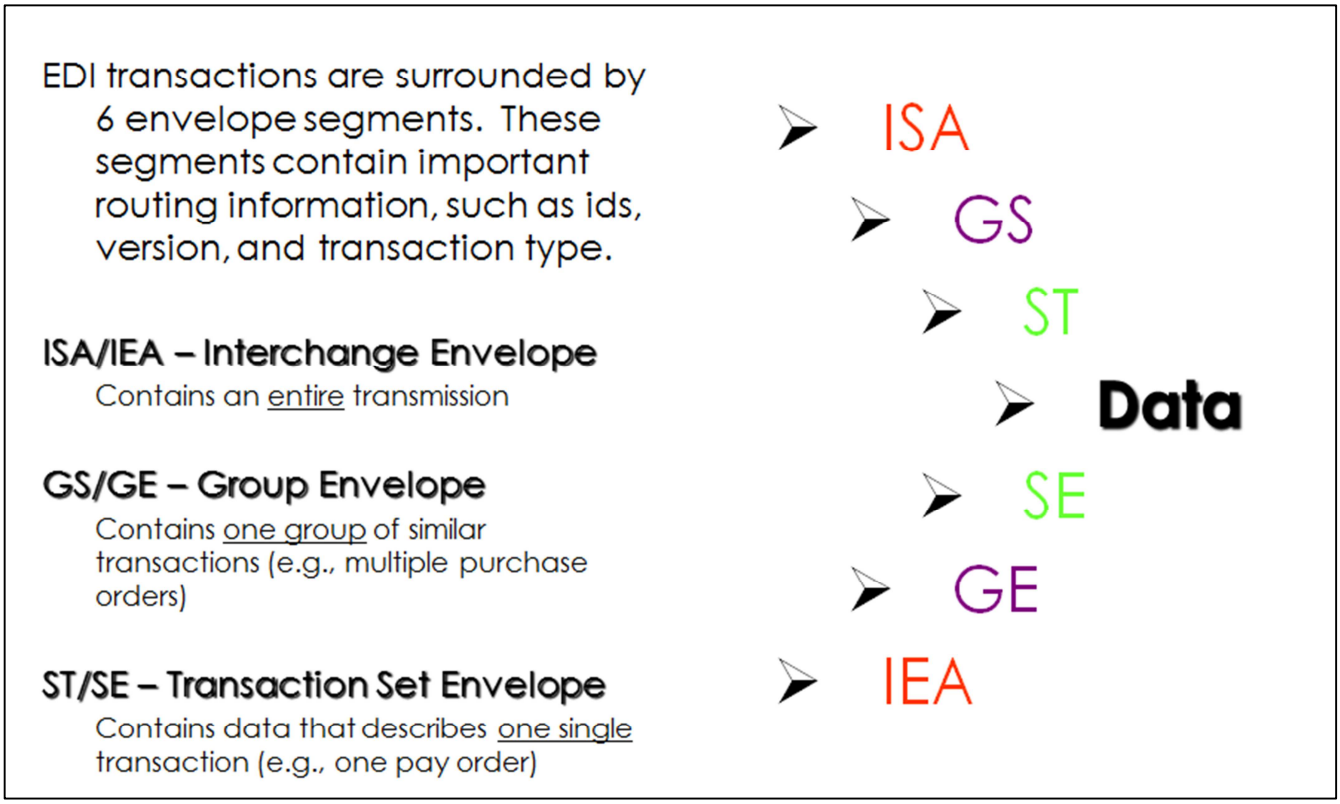


Figure ~~6~~7 EDI Envelope segment definitions

The following Transactions Technical Specifications consist of two sections:

(1) A Segment Summary of the transaction comes first. It includes segment information with the looping functionality of that transaction. There are two “Status” columns in this part, “Base Status” and “TBA Status”. The former is the basic status standardized in the ANSI X12, and the latter is the usage status required by TBA. If anything specified on the “TBA Status” column, that overrides the status of the “Base Status”.

The Req. Des. for the first segment in a loop is also used for that corresponding loop.
<<Example>> The example below shows that TBA requires this segment to be used overriding the X12 standard’s status of “Optional”.

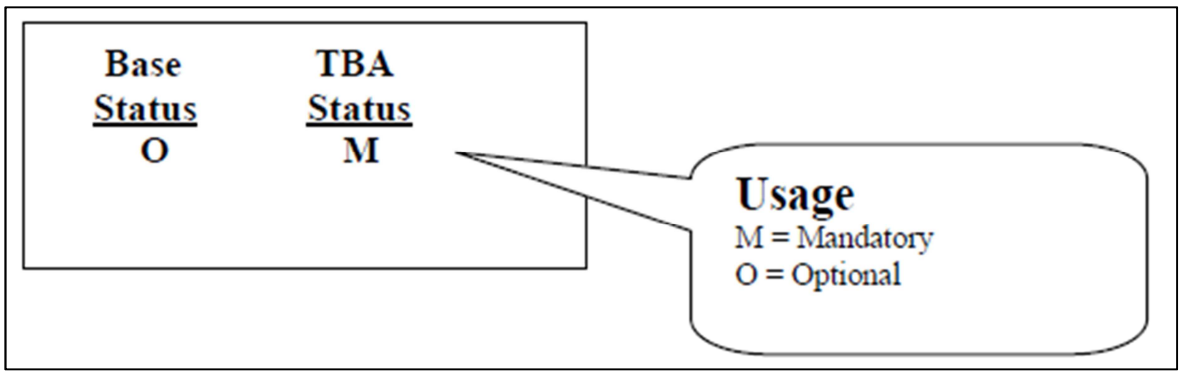


Figure 7~~8~~ Base Status and TBA Status

(2) Element detailed specification comes next. There are two “Attributes” columns in this part, “Base Attributes” and “TBA Attributes”. The former is the basic status standardized in the ANSI X12, and the latter is the usage status required by TBA. If anything is specified on the “TBA Attributes” column, that entry overrides the status of the “Base Attributes”.

<<Example>> The example shows that TBA requires this element to be used overriding the X12 standard’s status of “Optional”.
TBA also requires the maximum length for this field to be changed from 8 to 4.

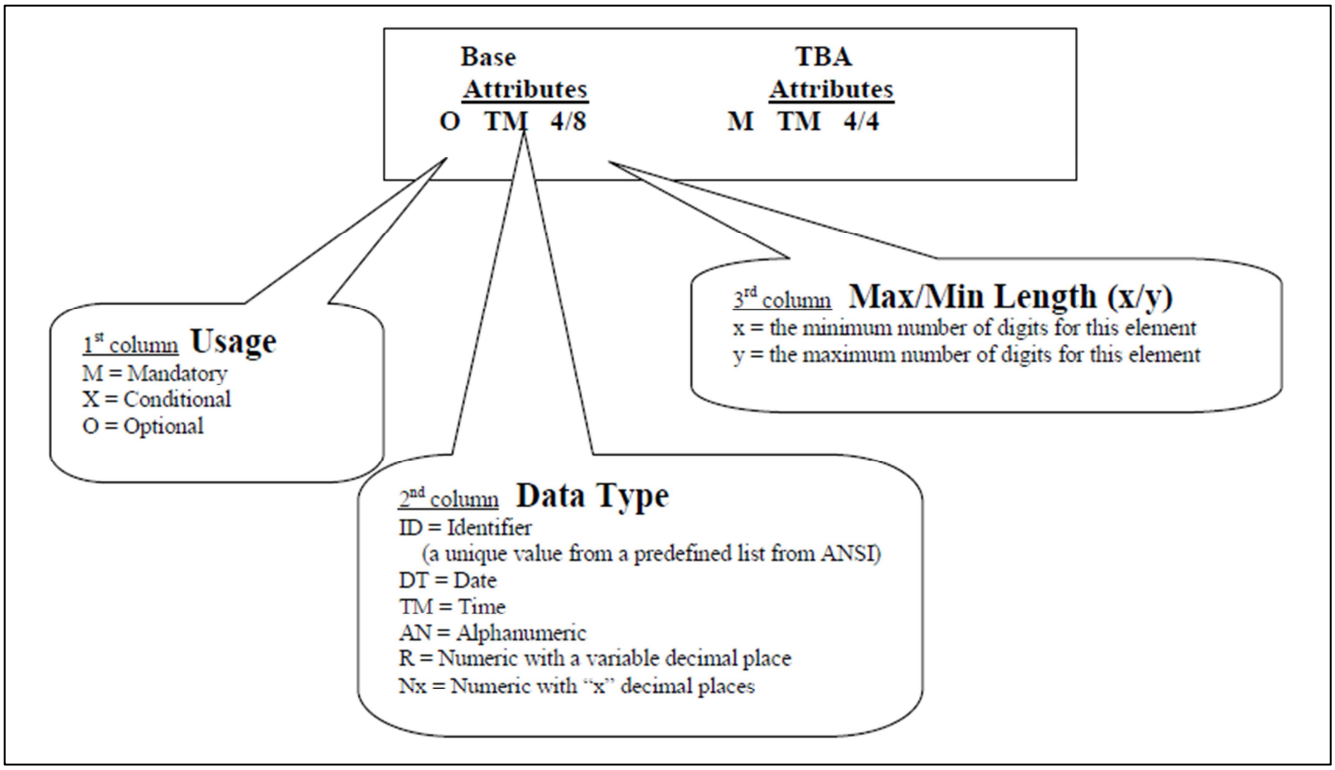


Figure 89 Base Attributes and TBA Attributes

830 Order Forecast

DATA REQUIREMENTS

MISCELLANEOUS	STANDARD: ANSI X12 - AIAG
EDI ACKNOWLEDGMENT	FUNCTIONAL ACKNOWLEDGMENT - TBA REQUIRES A FUNCTIONAL ACKNOWLEDGMENT FOR ALL EDI TRANSACTIONS RECEIVED BY THE TRADING PARTNER
DOCUMENTATION CHANGES	TBA WILL GIVE TRADING PARTNERS A MINIMUM OF FOUR WEEKS NOTICE BEFORE IMPLEMENTING FORMAT CHANGES.
SEPARATORS	HEX VALUES: SEGMENT : ~ / HEX 7E ELEMENT : * / HEX 2A SUB-ELEMENT : # / HEX 23
WRAPPED	ALL DATA WILL BE TRANSMITTED / RECEIVED IN AN 80 BYTE RECORD LENGTH.
DATA FREQUENCY	WEEKLY
VALUE ADDED NETWORK (VAN)	COMMERCE NETWORK DIVISION OF SBC 4600 LAKEHURST CT. P. O. BOX 7160 COLUMBUS, OH. 43017-0760

HOW TO BECOME CERTIFIED

SCOPE BEFORE A TRADING PARTNER CAN DO PRODUCTION EDI WITH TBA, THEY MUST BE CERTIFIED, THAT IS COMPATIBLE WITH TBA'S EDI ENVIRONMENT.

APPROACH EVERY TRADING PARTNER MUST SHOW COMPATIBILITY WITH TBA'S:

1. NETWORK
2. COMMUNICATION SOFTWARE
3. DATA FORMAT

CERTIFICATION IS FORMALLY COMPLETED WHEN TBA'S INFORMATION SYSTEMS SECTION HAS COMPLETED ALL NETWORK AND TRANSACTION TESTING.

TRANSACTION TESTING WILL NOT BE COMPLETE UNTIL EACH SUPPLIER COMPLETES PARALLEL TESTING WITH TBA INVOLVING RECEIVING THE PAPER MATERIAL RELEASE AND THE ORDER VIA EDI.

THE LENGTH OF THE PARALLEL TESTING WILL BE DETERMINED BY TBA.

Functional Group=PS

This Draft Standard for Trial Use contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
010	ST	Transaction Set Header	M	1			Must use
020	BFR	Beginning Segment for Planning Schedule	M	1			Must use
030	N1		M	1			Must use

Detail:

Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
Loop ID –LIN					**>1**		
010	LIN	Item Identification	M	1			Used
020	UIT	Unit Detail	O	1			Used
460	FST	Forecast Schedule	O	260			Used

Summary:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
010	CTT	Transaction Totals	O	1		N3/10	Used
020	SE	Transaction Set Trailer	M	1			Must use
	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 LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

ISA - Interchange Control Header

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 16**

User Option(Usage): Must use

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ISA01	I01	**Authorization Information** **Description:** Code to identify the type of information in the Authorization Information **Will Only Send Code 00**	M	ID	2/2	Must use
ISA02	I02	**Authorization Information** **Description:** 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)	M	AN	10/10	Must Use
ISA03	I03	**Security Information Qualifier** **Description:** Code to identify the type of information in the Security Information **Will only send code – 00**	M	ID	2/2	Must Use
ISA04	I04	**Security Information** **Description:** This is used for identifying the security information about the interchange sender or the data in the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Will Only Send Code 01**	M	ID	2/2	Must use
ISA06	I06	**Interchange Sender ID** **Description:** 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 **Refer To Note 1**	M	AN	15/15	Must use
ISA07	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Receivers Qualifier**	M	ID	2/2	Must Use
ISA08	I07	**Interchange ID Qualifier** **Description:** 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 **Receivers Code**	M	AN	15/15	Must use
ISA09	I08	**Interchange Date** **Description:** Date of the interchange **Current Date**	M	DT	6/6	Must Use

ISA10	I09	**Interchange Time** **Description:** Time of the Interchange **Current Time**	M	TM	4/4	Must Use
ISA11	I10	**Interchange Control Standards Identifier** **Description:** Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer **Will Only Send Code U**	M	ID	1/1	Must Use
ISA12	I11	**Interchange Control Version Number** **Description:** Code specifying the version number of the interchange control segments Will Only Send Code **00400**	M	ID	5/5	Must Use
ISA13	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender **Sender Control Number**	M	N0	9/9	Must Use
ISA14	I13	**Acknowledgment Requested** **Description:** Code sent by the sender to request an interchange acknowledgment (TA1) **Will Only Send 0 – "No"**	M	ID	1/1	Must Use
ISA15	I14	**Usage Indicator** **Description:** Code to indicate whether data enclosed by this interchange envelope is test, production or information **Will Only Send Codes T,P – "Test" or "Production"**	M	ID	1/1	Must Use
ISA16	I15	**Component Element Separator** **Description:** 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	M	ID	1/1	Must Use

Notes:

1. SENDERS DUN'S NUMBER

TBA DUNS numbers are listed in an Appendix

GS - Functional Group Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 8

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GS01	479	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets **Only use code PS – "Planning Schedule"**	M	ID	2/2	Must use
GS02	142	**Application Sender's Code** **Description:** Code identifying party sending transmission; codes agreed to by trading partners **Refer To Note on DUNS number in Appendix**	M	AN	2/15	Must use
GS03	124	**Application Receiver's Code** **Description:** Code identifying party receiving transmission; codes agreed to by trading partners **Will Send Receivers DUNS**	M	AN	2/15	Must use
GS04	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	**Time** **Description:** Time expressed in 24-hour clock time as follows: HHMM, where H = hours (00-23), M = minutes (00-59)	M	TM	4/4	Must use
GS06	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	**Responsible Agency Code** **Description:** Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **Will Only Send Code X**	M	ID	1/2	Must use
GS08	480	**Version / Release / Industry Identifier Code** **Description:** Code indicating the version, release, sub release, 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 sub release, 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 **Will Only Send Code 004010**	M	AN	1/12	Must use

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.

ST - Transaction Set Header

Pos: 010 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ST01	143	**Transaction Set Identifier Code** **Description:** Code uniquely identifying a Transaction Set **Will Only Send Code 830**	M	ID	3/3	Must use
ST02	329	**Transaction Set Control Number** **Description:** 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	Must use

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).

BFR - Beginning Segment for Planning_Schedule

Pos: 020 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 13**

User Option(Usage): Must use

To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
BFR01	353	**Transaction Set Purpose Code** **Description:** Code identifying purpose of transaction set	M	ID	2/2	Must use
		Will Only Send Code 00				
BFR02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Not Used
		Not Used				
BFR03	328	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	X	AN	1/30	Used
		Release Number				
BFR04	675	**Schedule Type Qualifier** **Description:** Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast	M	ID	2/2	Must use
		Will Only Send Code DL – "Delivery/Ship Date"				
BFR05	676	**Schedule Quantity Qualifier** **Description:** Code identifying the type of quantities used when defining a schedule or forecast	M	ID	1/1	Must use
		Will Only Send Code A – "Actual"				
BFR06	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
		Start Date				
BFR07	373	**Date** **Description:** Date expressed as CCYYMMDD	O	DT	8/8	Used
		End Date				
BFR08	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
		Date Generated				

Syntax:

1. R0203 - At least one of BFR02, BFR03 is required

Semantics:

1. BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
2. BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
3. BFR08 is the date forecast generated: The date the forecast data was generated.

Loop N1

Pos: 050 **Repeat: 200**
Optional
Loop: N1 **Elements: N/A**

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

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
050	N1	Name	O	1		Used

N1 - Name

Pos: 050 **Max: 1**
Heading - Optional
Loop: N1 **Elements: 6**

User Option(Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Will Only Send Code SU**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name **Will send Suppliers Name**	X	AN	1/60	Used
N103	66	**Identification Code Qualifier** **Description:** **Will Only Send "92"**	X	AN	1/2	Used
N104	67	**Identification Code** **Description:** Free-form name **Will Send Suppliers DUNS number**	X	AN	2/80	Used

Syntax:

1. R0203 - At least one of N102,N103 is required
2. P0304 - If either N103,N104 is present, then all are required

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

Loop LIN

Pos: 010 Repeat: >1
Mandatory
Loop: LIN Elements: N/A

To specify basic item identification data

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
010	LIN	Item Identification	M	1		Must use
020	UIT	Unit Detail	O	1		Used

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.

LIN - Item Identification

Pos: 010 **Max: 1**
Detail - Mandatory
Loop: LIN **Elements: 31**

User Option(Usage): Must use

To specify basic item identification data

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
LIN01	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
LIN02	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Code BP – "Buyers Part Number"**	M	ID	2/2	Must use
LIN03	234	**Product/Service ID** **Description:** Identifying number for a product or service **TBA Part Number**	M	AN	1/48	Must use
LIN04	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will not send**	X	ID	2/2	Used
LIN05	234	**Product/Service ID** **Description:** Identifying number for a product or service **Will not send**	X	AN	1/48	Used
LIN06	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Code KB – "Data Category Code"**	X	ID	2/2	Used
LIN07	234	**Product/Service ID** **Description:** Identifying number for a product or service **Data Category Code**	X	AN	1/48	Used
LIN08	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Code PD – "Product Description"**	X	ID	2/2	Used
LIN09	234	**Product/Service ID** **Description:** Identifying number for a product or service **Item description**	X	AN	1/48	Used

Semantics:

1. LIN01 is the line item identification

2. SEQUENCED ORDER (WEEKLY) - 13 WEEKS PRE-NOTICE
KANBAN ORDER (WEEKLY) - 13 WEEKS PRE-NOTICE
EKANBAN ORDER (WEEKLY) - 13 WEEKS PRE-NOTICE

UIT - Unit Detail

Pos: 020 **Max: 1**
Detail - Optional
Loop: LIN **Elements: 3**

User Option(Usage): Used

To specify item unit data

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
UIT01	C001	**Composite Unit of Measure** **Description:** To identify a composite unit of measure(See Figures Appendix for examples of use)	M	Comp		Must use

FST - Forecast Schedule

Pos: 460 **Max: 260**
Detail - Optional
Loop: SDP **Elements: 10**

User Option(Usage): Used

To specify the forecasted dates and quantities

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
FST01	380	**Quantity** **Description:** Numeric value of quantity **Total Pieces**	M	R	1/10	Must use
FST02	680	**Forecast Qualifier** **Description:** Code specifying the sender's confidence level of the forecast data or an action associated with a forecast **Will Only Send Code D – "Planning"**	M	ID	1/1	Must use
FST03	681	**Forecast Timing Qualifier** **Description:** Code specifying interval grouping of the forecast **Will Only Send Code W – "Weekly Bucket"**	M	ID	1/1	Must use
FST04	373	**Date** **Description:** Date expressed as CCYYMMDD **Refer To Note 3**	M	DT	8/8	Must use
FST05	373	**Date** **Description:** Date expressed as CCYYMMDD **Refer To Note 4**	O	DT	8/8	Used

Semantics:

1. If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.

Comments:

1. As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.
2. FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.

Notes:

1. The Only Codes That Will Be Sent Are:
   C - "FIRM"
   D - "PRE-NOTICE"
   F - "BUILD OUT"
2. The Only Codes That Will Be Sent Are:
   D - "DAILY"
   W - "WEEKLY"
   F - "BUILD OUT"
3. FST04 Date Value Descriptions:

If FST02 is	Then This Date Represents
"FIRM"	The Pickup Date
"PRE-NOTICE"	First Workday Of Week
"BUILD OUT"	First Workday Of Week
"TBA EXPORT PARTS"	Original Promise Date

4. FST05 Date Value Descriptions:

If FST02 is	Then This Date Represents
"FIRM"	Will Be Blank
"PRE-NOTICE"	Last Workday Of Week
"BUILD OUT"	Will Be Value 19910816
"TBA EXPORT PARTS"	Due Date

CTT - Transaction Totals

Pos: 010 **Max: 1**
Summary - Optional
Loop: N/A **Elements: 7**

User Option(Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	ID	Element Name	Req	Type	Min/Max	Usage
CTT01	354	**Number of Line Items** **Description:** Total number of line items in the transaction set Total Number Of LIN Segments	M	N0	1/6	Must use
CTT02	347	Hash Total Description: Description: Refer to Note 1 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.	O	R	1/10	Used

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

Notes:

1. Total Of Net Quantity On The FST Segments.

SE - Transaction Set Trailer

Pos: 020 **Max: 1**
Summary - Mandatory
Loop: N/A **Elements: 2**

User Option (Usage): Must use

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:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SE01	96	**Number of Included Segments** **Description:** Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	**Transaction Set Control Number** **Description:** 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	Must use

Comments:

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

GE - Functional Group Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GE01	97	**Number of Transaction Sets Included** **Description:** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use

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.

IEA - Interchange Control Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
IEA01	I16	**Number of Included Functional Groups** **Description:** A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender	M	N0	9/9	Must use

EXAMPLE OF A MATERIAL RELEASE (830)

WEEKLY DOCUMENT (FOR PARTS AND COMPONENTS)

The weekly document contains the following Order types for the Part number specified:

Kanban Orders	- 13 weeks Pre-notice
Schedule Order	- 13 weeks Pre-notice
Sequenced Orders	- 13 weeks Pre-notice
EKanban Orders	- 13 weeks Pre-notice

```
ISA*00*       *00*          *01*609619924      *ZZ*123456789      *130522*0606*U*00400*000000001*0*P*#
GS*PS*609619924*123456789*20130522*0606*1200*X*004010
ST*830*000000001
BFR*00**001*DL*A*20130424*20130728*20130521
N1*SU*SUPPLIER NAME*92*123456789
LIN**BP*PART NUMBER******PD*DESCRIPTION
UIT*PC
FST*1*D*F*20130429*20130505
FST*1*D*W*2013050**20130512
FST*1*D*W*20130513*20130519
FST*1*D*W*20130520*20130526
FST*1*D*W*20130527*20130602
FST*1*D*W*20130603*20130609
FST*1*D*W*20130610*20130616
FST*1*D*W*20130617*20130623
FST*1*D*W*20130624*20130630
FST*1*D*W*20130701*20130707
FST*1*D*W*20130708*20130714
FST*1*D*W*20130715*20130721
FST*1*D*W*20130722*20130728
CTT*1*13
SE*20*000000001
GE*1*1200
IEA*1*000000001
```

856 Advance Shipping Notice

Functional Group=SH

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, and 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.

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
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			Must use

Detail:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
LOOP ID – HL –					**200000**	C2/010L	
010	HL	Hierarchical Level – “Shipping”	M	1		C2/010	Must use
120	MEA	Measurements	O	40			Used
130	TD1	Carrier Details (Quantity and Weight)	O	20			Must use
140	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12			Must use
150	TD3	Carrier Details (Equipment)	O	12			Must use
160	TD4	Carrier Details (Special Handling)	O	12			Used
170	REF	Reference Identification	O	>1			Used
220	N1	Name (Material Issuer)	O	1			Must use
221	N1	Name (Supplier)	O	1			Must use
222	N1	Name (Order By)	O	1			Used
223	N1	Name (Ship To)	O	1			Must use
224	N1	Name (Ship From)	O	1			Used
250	REF	Reference Identification	O	1			Used
LOOP ID - HL					**200000**	C2/010L	
010	HL	Hierarchical Level – “Order”	M	1		C2/010	Must use
050	PRF	Purchase Order Reference	O	1			Must use
410	REF	Reference Identification	O	>1			Used
LOOP ID - HL					**200000**	C2/010L	
420	HL	Hierarchical Level – “Item”	M	1		C2/010	Must use
430	LIN	Item Identification	O	1			Must use
440	SN1	Item Detail (Shipment)	O	1			Must use
450	SLN	Subline Item Details	O	1			Must use
460	TD1	Carrier Details (Package)	O	1			Used
470	REF	Reference Identification	O	3			Used

Summary:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
010	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use
	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

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ISA01	I01	**Authorization Information** **Description:** Code to identify the type of information in the Authorization Information **Will Only Send Code 00**	M	ID	2/2	Must use
ISA02	I02	**Authorization Information** **Description:** 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)	M	AN	10/10	Must Use
ISA03	I03	**Security Information Qualifier** **Description:** Code to identify the type of information in the Security Information **Will only send code – 00**	M	ID	2/2	Must Use
ISA04	I04	**Security Information** **Description:** This is used for identifying the security information about the interchange sender or the data in the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Will Only Send Code 01**	M	ID	2/2	Must use
ISA06	I06	**Interchange Sender ID** **Description:** 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 **Refer To Note 1**	M	AN	15/15	Must use
ISA07	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Receivers Qualifier**	M	ID	2/2	Must Use
ISA08	I07	**Interchange ID Qualifier** **Description:** 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 **Receivers Code**	M	AN	15/15	Must use
ISA09	I08	**Interchange Date** **Description:** Date of the interchange **Current Date**	M	DT	6/6	Must Use

ISA10	I09	**Interchange Time** **Description:** Time of the Interchange **Current Time**	M	TM	4/4	Must Use
ISA11	I10	**Interchange Control Standards Identifier** **Description:** Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer **Will Only Send Code U**	M	ID	1/1	Must Use
ISA12	I11	**Interchange Control Version Number** **Description:** Code specifying the version number of the interchange control segments Will Only Send Code **00400**	M	ID	5/5	Must Use
ISA13	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender **Sender Control Number**	M	N0	9/9	Must Use
ISA14	I13	**Acknowledgment Requested** **Description:** Code sent by the sender to request an interchange acknowledgment (TA1) **Will Only Send 0 – "No"**	M	ID	1/1	Must Use
ISA15	I14	**Usage Indicator** **Description:** Code to indicate whether data enclosed by this interchange envelope is test, production or information **Will Only Send Codes T,P – "Test" or "Production"**	M	ID	1/1	Must Use
ISA16	I15	**Component Element Separator** **Description:** 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	M	ID	1/1	Must Use

Notes:

1. Sender's DUNS Number

   TBA DUNS numbers are listed in an Appendix

GS - Functional Group Header

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 8**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**ID**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GS01	479	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets **Only Send Code SH - Ship Notice/Manifest**	M	ID	2/2	Must use
GS02	142	**Application Sender's Code** **Description:** Code identifying party sending transmission; codes agreed to by trading partners **Will Only Send Senders DUNS (See Note 1)**	M	AN	2/15	Must use
GS03	124	**Application Receiver's Code** **Description:** Code identifying party receiving transmission; codes agreed to by trading partners **Will Send Receivers DUNS**	M	AN	2/15	Must use
GS04	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	**Time** **Description:** 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	Must use
GS06	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender **Responsible Agency Code**	M	N0	1/9	Must use
GS07	455	**Responsible Agency Code** **Description:** Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **Will Only Send Code X**	M	ID	1/2	Must use
GS08		**Version / Release / Industry Identifier Code** **Description:** Code indicating the version, release, sub release, 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 sub release, 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 **Will Only Send Code 004010**	M	AN	1/12	Must use

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.

Notes:

DUNS numbers are listed in an Appendix

ST - Transaction Set Header

Pos: 010 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ST01	143	**Transaction Set Identifier Code** **Description:** Code uniquely identifying a Transaction Set **Only send code 856**	M	ID	3/3	Must use
ST02	329	**Transaction Set Control Number** **Description:** 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	Must use

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).

BSN - Beginning Segment for ShipNotice

User Option(Usage): Must use

Pos: 020 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 7**

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

Element Summary:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
BSN01	353	**Transaction Set Purpose Code** **Description:** Code identifying purpose of transaction set Only use codes 00 (Original) or 04 (Change)	M	ID	2/2	Must use
BSN02	396	**Shipment Identification** **Description: Supplier Ship ID** A unique control number assigned by the original shipper to identify a specific shipment	M	AN	2/30	Must use
BSN03	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
BSN04	337	**Time** **Description:** 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	Must use

Syntax:

1. C0706 - If BSN07 is present, then all of BSN06 are 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. TBA is requesting that the shipment number be limited to 16 positions

DTM - Date/Time Reference

Pos: 040	Max: 10
Heading - Optional	
Loop: N/A	Elements: 6

User Option(Usage): Must use

To specify pertinent dates and times

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
DTM01	374	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time Only use code 011 (Shipment Date Qualifier)	M	ID	3/3	Must use
DTM02	373	**Date** **Description:** Date expressed as CCYYMMDD	X	DT	8/8	Used
DTM03	337	**Time** **Description:** 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)	X	TM	4/8	Used
DTM04	623	**Time Code** **Description:** Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Refer to Note 1	O	ID	2/2	Used
DTM05	1250	**Date Time Period Format Qualifier** **Description:** Code indicating the date format, time format, or date and time format Do not send	X	ID	2/3	Used
DTM06	1251	**Date Time Period** **Description:** Expression of a date, a time, or range of dates, times or dates and times Do not send	X	AN	1/35	Used

Syntax:

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

Notes:

1 Time Code:

ET = Eastern Time Code	PT = Pacific Time Code
ED = Eastern Daylight Time	PD = Pacific Daylight Time
ES = Eastern Standard Time	PS = Pacific Standard Time

2 TBA is expecting for all Ship times to be in eastern standard or eastern daylight time (based on what time of year it is)

Loop HL – Shipping

Pos: 010 **Repeat: 200000**

Mandatory

Loop: HL **Elements: N/A**

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

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
010	HL	Hierarchical Level	M	1		Must use
120	MEA	Measurements	O	40		Used
121	MEA	Measurements	O	40		Used
130	TD1	Carrier Details (Quantity and Weight)	O	20		Must use
140	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		Must use
150	TD3	Carrier Details (Equipment)	O	12		Must use
160	TD4	Carrier Details (Special Handling)	O	12		Used
220	N1	Name (Material Issuer)	O	1		Must use
221	N1	Name (Supplier Manufacture)	O	1		Must use
222	N1	Name (Ordered By)	O	1		Used
223	N1	Name (Ship To)	O	1		Must use
224	N1	Name (Ship From)	O	1		Used
250	REF	Reference Identification (Dock Number)	O	>1		Used

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 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. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

HL - Hierarchical Level – Shipping

Pos: 010 **Max: 1**
Detail - Mandatory
Loop: HL **Elements: 4**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
HL01	628	**Hierarchical ID Number** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	N	1/12	Must use
HL02	734	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O	N	1/12	Used
HL03	735	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **Only use code S**	M	ID	1/2	Must use
HL04	736	**Hierarchical Child Code** **Description:** Code indicating if there are hierarchical child data segments subordinate to the level being described **Only use code 1**	O	ID	1/1	Used

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 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. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

MEA - Measurements

Pos: 120 **Max: 40**
Detail - Optional
Loop: HL **Elements: 10**

User Option(Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
MEA01	737	**Measurement Reference ID Code** **Description:** Code identifying the broad category to which a measurement applies **Only use PD – "Physical Dimensions"**	O	ID	2/2	Used
MEA02	738	**Measurement Qualifier** **Description:** Code identifying a specific product or process characteristic to which a measurement applies **Only use codes G or N – Refer to note 1.**	O	ID	1/3	Used
MEA03	739	**Measurement Value** **Description:** The value of the measurement	X	R	1/20	Used
MEA04	C001	**Composite Unit of Measure** **Description:** To identify a composite unit of measure(See Figures Appendix for examples of use)	OT	Comp		Used
	355	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **Only use code LB – "Pounds".**	M	ID	2/2	Must use

Semantics:

1. MEA04 defines the unit of measure for MEA03.

Notes:

1. If sent, use code G – "Gross" – first, then use code N – "Net".

TD1 - Carrier Details (Quantity and Weight)

User Option(Usage): Must use

Pos: 130 **Max: 20**
Detail - Mandatory
Loop: HL **Elements: 10**

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
TD101	103	**Packaging Code** **Description:** 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 Notes 1,2**	M	AN	5/5	Used
TD102	80	**Lading Quantity** **Description:** Number of units (pieces) of the lading commodity	X	N0	1/7	Used

Syntax:

1. C0102 - If TD101 is present, then all of TD102 are required

Notes:

1. TBA is expecting multiple TD1's if necessary (i.e. 3 Pallets, 2 Boxes, etc.)
2. Valid values are:

BOX90 - Box
CNT90 - Container
CTN90 - Carton
PLT90 - Pallet

TD5 - Carrier Details (Routing Sequence/Transit Time)

Pos: 140 **Max: 12**
Detail - Mandatory
Loop: HL **Elements: 4**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
TD501	133	**Routing Sequence Code** **Description:** Code describing the relationship of a carrier to a specific shipment movement **Only use code B – "Any Mode"**	O	ID	1/1	Used
TD502	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Only use codes 2 or 25**	X	ID	1/2	Used
TD503	67	**Identification Code** **Description:** Code identifying a party or other code **Refer to Note 1**	X	AN	2/80	Used
TD504	91	**Transportation Method/Type Code** **Description:** Code specifying the method or type of transportation for the shipment	X	ID	1/2	Used

Refer to Note 2

Syntax:

1. R0204050612 - At least one of TD502 or TD504 is required
2. C0203 - If TD502 is present, then all of TD503 are required

Notes:

1. If TD502 is 2 (SCAC Code), then some examples of TD503 will be:

   RYDD (RYDER)
   LCXQ (LCC)
   VASC (VASCOR)

   If TD502 is 25 (Carriers Supplier Code), then TD503 will be:
   70000 (RYDER)
   71000 (LCC)
   65150 (VASCOR)

2. Valid codes are:
   L – Contract Carrier
   E – Expedited Truck / suppliers expense
   CE – Customer Pickup / customer's expense
   M – Motor (common carrier)
   SR – Supplier Truck

TD3 - Carrier Details (Equipment)

Pos: 150 **Max: 12**
Detail – Mandatory
Loop: HL **Elements: 3**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
TD301	40	**Equipment Description Code** **Description:** Code identifying type of equipment used for shipment **Only use code TL – "Trailer".**	X	ID	2/2	Used
TD302	206	**Equipment Initial** **Description:** Prefix or alphabetic part of an equipment unit's identifying number Not USED	O	AN	1/4	Not Used
TD303	207	**Equipment Number** **Description:** Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred) **Trailer number.**	X	AN	1/10	Used

TD4 - Carrier Details (Special Handling)

Pos: 160 **Max: 12**
Detail – Mandatory
Loop: HL **Elements: 3**

User Option(Usage): Used

To specify transportation special handling requirements, or hazardous materials information, or both.

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
TD401	152	**Special Handling Code** **Description:** Code specifying special transportation **Only use code CH – "Carrier".**	X	ID	2/2	Used
TD402	208	**Hazardous Material Code Qualifier** **Description:** Code which qualifies the Hazardous Material Class Code (209) **Only use code D – "Hazardous Materials ID, DOT".**	X	ID	1/1	Used
TD403	209	**Hazardous Material Class Code** **Description:** Code specifying the kind of hazard for a material	X	AN	2/4	Used

Syntax:

1 R010204 - At least one of TD401, TD402 or TD404 is required.
2 C0203 - If TD402 is present, then TD403 is required.

REF - Reference Identification

Pos: 170 **Max: >1**
Detail - Optional
Loop: HL **Elements: 2**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Only use code BM – "Bill of Lading Number"**	M	ID	2/2	Must use
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02, REF03 is required

Semantics:

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

N1 - Name

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

User Option (Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Only use code MI – "Material Issuer"**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name **Material Issuer Name**	X	AN	1/60	Not Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Only use code 1or 92 –** 1 - DUNS Number, Dun & Bradstreet 92 - Assigned by Buyer or Buyer's Agent	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code **Material Issuer Code**	X	AN	2/80	Used

Syntax:

1. R0203 - N103 is required
2. P0304 - If either N103,N104 is present, then all are required

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

N1 - Name

Pos: 221 **Max: 1**
Detail - Optional
Loop: N1 **Elements: 4**

User Option (Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Only use code SU – "Supplier"**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name Not Used	X	AN	1/60	Not Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Only use code 1 –** D-U-N-S Number, Dun & Bradstreet	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code **Will be Supplier number**	X	AN	2/80	Used

Syntax:

3. R0203 - N103 is required
4. P0304 - If either N103,N104 is present, then all are required

Comments:

3. 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.
4. N105 and N106 further define the type of entity in N101.

N1 - Name

Pos: 222 **Max: 1**
Detail - Optional
Loop: N1 **Elements: 4**

User Option (Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Only use code OB – "Ordered By"**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name Not Used	X	AN	1/60	Not Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Only use code 1 –** 1 - DUNS Number, Dun & Bradstreet 92 - Assigned by Buyer or Buyer's Agent	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code **Will be Order By Code**	X	AN	2/80	Used

Syntax:

5. R0203 - N103 is required
6. P0304 - If either N103,N104 is present, then all are required

Comments:

5. 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.
6. N105 and N106 further define the type of entity in N101.

N1 - Name

Pos: 223 **Max: 1**
Detail - Optional
Loop: N1 **Elements: 4**

User Option (Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Only use code ST – "Ship To"**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name Not Used	X	AN	1/60	Not Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Only use code 1 –** 1 - DUNS Number, Dun & Bradstreet 92 - Assigned by Buyer or Buyer's Agent	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code **Will be Ship To Code**	X	AN	2/80	Used

Syntax:

7. R0203 - N103 is required
8. P0304 - If either N103,N104 is present, then all are required

Comments:

7. 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.
8. N105 and N106 further define the type of entity in N101.

N1 - Name

Pos: 224 **Max: 1**
Detail - Optional
Loop: N1 **Elements: 4**

User Option (Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Only use code SF – "Ship From"**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name Not Used	X	AN	1/60	Not Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Only use code 92 –** 92 - Assigned by Buyer or Buyer's Agent	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code **Will be Vendor Number**	X	AN	2/80	Used

Syntax:

1. R0203 - N103 is required
2. P0304 - If either N103,N104 is present, then all are required

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

REF - Reference Identification

Pos: 250 **Max: >1**
Detail - Optional
Loop: HL **Elements: 4**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Send only DK for Dock**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Invoice number must be unique per Purchase Order	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02, REF03 is required

Semantics:

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

Loop HL – Order

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

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

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
390	HL	Hierarchical Level	M	1		Must use
400	PRF	Purchase Order Reference	O	1		Used
410	REF	Reference Identification	O	>1		Used

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 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. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

HL - Hierarchical Level - Order

Pos: 390 **Max: 1**
Detail - Mandatory
Loop: HL **Elements: 4**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
HL01	628	**Hierarchical ID Number** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	N	1/12	Must use
HL02	734	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	M	N	1/12	Used
HL03	735	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **Only use codes O**	M	ID	1/2	Must use
HL04	736	**Hierarchical Child Code** **Description:** Code indicating if there are hierarchical child data segments subordinate to the level being described **Only use code 1**	M	ID	1/1	Used

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 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. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

PRF - Purchase Order Reference

Pos: 050 **Max: 1**
Detail – Mandatory
Loop: HL **Elements: 1**

User Option (Usage): Must use

To provide reference to a specific purchase order

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
PRF01	324	**Purchase Order Number** **Description:** Identifying number for Purchase Order assigned by the orderer/purchaser **Refer to Note 1 for Parts and Component Suppliers** **Refer to Note 2 – ~~3~~4 for Broadcast Suppliers** **Refer to Note ~~4~~5 for Direct Suppliers**	M	AN	1/22	Must use

Notes:

1. Format of PRF01 is MMMMMMMM-RRRRRRRR , where
   MMMMMMMM is the 8 position manifest, and
   RRRRRRRR is the 8 position receiving number Manifest must be listed first and must be separated from the receiving number by a hyphen.

2. Broadcast (sequence) suppliers 8 position manifest number should begin with a '7'. Broadcast suppliers are responsible for generating the manifest number since they will not receive an 862 that would contain the TBA generated manifest and receiving number.
   Example: 70202031

3. The application advice (824) will be the same for broadcast suppliers as it is for parts and component suppliers
4. **All Direct Suppliers transactions to begin with the letter 'D'.**
   The next 7 positions will be YYMMDD shipment number (alpha 1psition) - supplier code.

   Example: D020224B-26523

   Direct supply, year 2002, FEB 24, 2nd shipment – 5 digit supplier code

REF - Reference Identification

Pos: 410 **Max: >1**
Detail - Optional
Loop: HL **Elements: 4**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Send only MH for Manufacturing Order Number**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Supplier's Invoice number must be unique per Purchase Order	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02, REF03 is required

Semantics:

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

Loop HL - ITEM

Pos: 010 **Repeat: 200000**

Mandatory

Loop: HL **Elements: N/A**

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

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
420	HL	Hierarchical Level	M	1		Must use
430	LIN	Item Identification	O	1		Used
440	SN1	Item Detail (Shipment)	O	1		Used
450	SLN	Subline Item Details	O	1		Used
460	TD1	Carrier Details (Package)	O	1		Used
470	REF	Model Year	O	1		Used
471	REF	Customer's Part Number	O	1		Used
472	REF	Order Number	O	1		Used

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 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. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

HL - Hierarchical Level - Item

Pos: 420 **Max: 1**
Detail - Mandatory
Loop: HL **Elements: 4**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
HL01	628	**Hierarchical ID Number** **Description:** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M	N	1/12	Must use
HL02	734	**Hierarchical Parent ID Number** **Description:** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	M	N	1/12	Used
HL03	735	**Hierarchical Level Code** **Description:** Code defining the characteristic of a level in a hierarchical structure **Only use code I**	M	ID	1/2	Must use
HL04	736	**Hierarchical Child Code** **Description:** Code indicating if there are hierarchical child data segments subordinate to the level being described **Only use code 0**	M	ID	1/1	Used

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 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. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

LIN - Item Identification

Pos: 430 **Max: 1**
Detail – Mandatory
Loop: HL **Elements: 5**

User Option(Usage): Must use

To specify basic item identification data

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
LIN01	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
LIN02	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Only use code BP – "Buyers Part Number"**	M	ID	2/2	Must use
LIN03	234	**Product/Service ID** **Description:** Identifying number for a product or service **TBA's Part Number** **(No Spaces or dashes. 12 digit, 10 digit part number, 2 digit color code)**	M	AN	1/12	Must use
LIN04	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Only use Code RC – "Kanban Number"**	X	ID	2/2	Used
LIN05	234	**Product/Service ID** **Description:** Identifying number for a product or service	X	AN	1/30	Used

Syntax:

1. P0405 - If either LIN04, LIN05 is present, then all are required

Semantics:

1. LIN01 is the line item identification
2. The LIN04 (RC) is not to be sent if there is not data for LIN05

SN1 - Item Detail (Shipment)

Pos: 440 **Max: 1**
Detail – Mandatory
Loop: HL **Elements: 3**

User Option(Usage): Must use

To specify line-item detail relative to shipment

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SN101	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set **Not USED**	O	AN	1/20	**Not Used**
SN102	382	**Number of Units Shipped** **Description:** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M	R	1/10	Must use
SN103	355	**Unit or Basis for Measurement Code** **Description:** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken **Refer to Note 1**	M	ID	2/2	Must use

Semantics:

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

Comments:

1. SN103 defines the unit of measurement for SN102.

Notes:

1. Valid codes are:
   PC - Piece
   EA - Each
   GA - Gallon

SLN – Subline Item Details

Pos: 450 **Max: 1**
Detail – Mandatory
Loop: HL **Elements: 3**

User Option(Usage): Must use

To specify product subline detail item data

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SLN01	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Not Used
SLN03	662	**Relationship Code** **Description:** Code indicating the relationship between entities **Will Only Send Qualifier I – "Included"**	M	ID	1/1	Must Use
SLN06	212	**Unit Price** **Description:** Price per unit of product, service, commodity, etc. **Unit price of the item specified in LIN03.**	X	R	1/17	Must Use
SLN07	639	**Basis of Unit Price Code** **Description:** Code identifying the type of unit price for an item **Will Only Send Qualifier QE – "Quoted price for Each"**	C	ID	2/2	Used

Semantics:

1. LN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.

SYNTAX:

1. P0405 - If either SLN04 or SLN05 is present, then the other is required.
2. C0706 - If SLN07 is present, then SLN06 is required.

Comments:

1 See the Data Element Dictionary for a complete list of IDs.
2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.

TD1 - Carrier Details (Quantity and Weight)

User Option(Usage): Used

Pos: 460 **Max: 20**
Detail - Mandatory
Loop: HL **Elements: 10**

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
TD102	80	**Packaging Code** **Description:** Number of units (pieces) of the lading commodity **Refer to Notes 1,2**	X	N0	1/7	Used
TD105	80	**Lading Quantity** **Description:** Description of an item as required for rating Packaging Type Code specified in 830 (TD105).	O	AN	1/50	Used

REF - Reference Identification

Pos: 470 **Max: 1**
Detail - Optional
Loop: HL **Elements: 2**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Send only MY for Model Year**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **In CCYY format.**	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02, REF03 is required

Semantics:

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

REF - Reference Identification

Pos: 471 **Max: 1**
Detail - Optional
Loop: HL **Elements: 2**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Send only L9 for Customer's Part Number**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **Number assigned by ultimate customer to identify relevant article.**	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02, REF03 is required

Semantics:

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

REF - Reference Identification

Pos: 472 **Max: 1**
Detail - Optional
Loop: HL **Elements: 2**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Send only ON for Order Number**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **Number of the Purchase Order relevant for the article defined in the preceding LIN.**	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02, REF03 is required

Semantics:

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

CTT - Transaction Totals

Pos: 010 **Max: 1**
Summary – Mandatory
Loop: N/A **Elements: 1**

User Option(Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
CTT01	354	**Number of Line Items** **Description:** Total number of line items in the transaction set **Number of HL Segments**	O	ID	1/20	Not Used
CTT02	347	**Hash Total** **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. **The sum of the value of units shipped (SN102) for each SN1 segment.**	M	ID	2/2	Must Use

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE - Transaction Set Trailer

Pos: 020 **Max: 1**
Summary - Mandatory
Loop: N/A **Elements: 2**

User Option (Usage): Must use

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:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SE01	96	**Number of Included Segments** **Description:** Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	**Transaction Set Control Number** **Description:** 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	Must use

Comments:

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

GE - Functional Group Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GE01	97	**Number of Transaction Sets Included** **Description:** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use

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.

IEA - Interchange Control Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
IEA01	I16	**Number of Included Functional Groups** **Description:** A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender	M	N0	9/9	Must use

EXAMPLE OF AN 856:

ASN-X12 FORMAT		INTERPRETATION
ST*856*0030~		Transaction Set 856 (Shipping Notice) Control # 0030
BSN*00*12345*19960131*0905~		Status = Original Shipment # = 12345 Creation Date = 01/31/1996 Time = 0905
DTM*011*19960131*1436*ET~		Ship Date = 01/31/1996 Ship Time = 2:36 p.m. Time Code = Eastern
SHIPMENT		
HL*1**S*1~		Hierarchical ID = 1 Hierarchical Level = Shipment
MEA*PD*G*200*LB~	**optional**	Physical Dimensions
TD1*PLT90*5~		Package = pallet Number of pallets = 5
TD5*B*25*70000*L~ OR TD5*B*2*RYDD*L~		Carrier code= (Ryder - 70000, LCC - 71000, Vascor - 65150) L=Contract Carrier
TD3*TL**1234567~		Trailer number = 1234567
TD4*CH*D*9999~	**optional**	'CH' = Carrier Hazard material ID, DOT = 9999
REF*BM*0195569234~	**optional**	Bill of Lading Number
N1*MI*TMMNK*1*781098897~	**Mandatory**	TBA Customer
N1*SU*NHK Seating*1*186598454~	**Mandatory**	Supplier
N1*ST*TMMNK*1*781098897~	**Mandatory**	Ship To
ORDER		
HL*2*1*O*1~		Hierarchical ID = 2 Hierarchical Parent = 1 (shipment) Hierarchical Level = Order
PRF*########-YYYYYYYY~		Customer order no. (manifest no.-receiving no.) = 12345678-12345678
REF*MH*0195569234~	**optional**	Invoice number must be unique per PO
N1*SU**92*90000~	**optional**	TBA supplier code
ITEM		
HL*3*2*I*0~		Hierarchical ID = 3 Hierarchical Parent = 2 (order) Hierarchical Level = Item
LIN**BP*123456789012*RC*N121~		Customer part number= 123456789012
SN1**210*PC~		210 Pieces shipped
HL*4*2*I*0~		Hierarchical ID = 4 Hierarchical Parent = 2 (order) Hierarchical Level = Item
LIN**BP*123456789010*RC*N100~		Customer part number= 123456789010
SN1**50*PC~		50 Pieces shipped

856 Sample Data

```
ISA*00* *00* *01*111111111 *01*000000000 *020716*1440*U*00400*000000041*1*P*^$
GS*SH*111111111*000000000*20020716*1440*45*X*004010$
ST*856*0050$
BSN*00*SHIP02931092*20060620*1400$
DTM*011*20060620*1400*ES$
HL*1**S*1$
MEA*G*1500*LB$
MEA*N*1250*LB$
TD1*CTN90*50$
TD5*B*2*RYDD*CE$
TD3*TL**EQ48495$
REF*BM*3920394930203$
N1*MI**92*TBA01$
N1*SU*AA SUPLIER*92*AASUP$
N1*ST*TMMK*92*TMMK$
HL*2*1*O*1$
PRF*60042330$
REF*MH*I54321$
HL*3*2*I*0$
LIN*1*BP*55711-08020-001*RC*F002*TW*180L$
SN1**35*PC$
SLN*01*I*25.25*QE$
HL*4*2*I*0$
LIN*2*BP*55711-08020-002*RC*F003*TW*180L $
SN1**35*PC$
SLN*01*I*25.25*QE$
HL*5*2*I*0$
LIN*3*BP*55711-08020-003*RC*F004*TW*180L $
SN1**35*PC$
SLN*01*I*25.25*QE$
HL*6*1*O*1$
PRF*60042331$
REF*MH*I54321$
HL*7*6*I*0$
LIN*1*BP*55711-08020-004*RC*F005*TW*180L $
SN1**35*PC$
SLN*01*I*25.25*QE$
HL*8*6*I*0$
LIN*2*BP*55711-08020-005*RC*F006*TW*180L $
SN1**35*PC$
SLN*01*I*25.25*QE$
HL*9*6*I*0$
LIN*3*BP*55711-08020-006*RC*F007*TW*180L $
SN1**35*PC$
SLN*01*I*25.25*QE$
CTT*9*210$
SE*45*0050$
GE*1*45$
IEA*1*000000041$
```

862 Shipping Schedule

Functional Group=SS

This Draft Standard for Trial Use contains the format and establishes the data contents of the Shipping Schedule Transaction Set (862) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used by a customer to convey precise shipping schedule requirements to a supplier, and is intended to supplement the planning schedule transaction set (830). The shipping schedule transaction set will supersede certain shipping and delivery information transmitted in a previous planning schedule transaction, but it does not replace the 830 transaction set. The shipping schedule transaction set shall not be used to authorize labor, materials or other resources. The use of this transaction set will facilitate the practice of Just-In-Time (JIT) manufacturing by providing the customer with a mechanism to issue precise shipping schedule requirements on a more frequent basis than with the issuance of a planning schedule transaction, e.g., daily shipping schedules versus weekly planning schedules. The shipping schedule transaction also provides the ability for a customer location to issue shipping requirements independent of other customer locations when planning schedule transactions are issued by a consolidated scheduling organization.

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
010	ST	Transaction Set Header	M	1			Must use
020	BSS	Beginning Segment for Shipping Schedule/Production Sequence	M	1			Must use
LOOP ID - N1					**200**		
050	N1	Name	O	1			Used

Detail:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
LOOP ID - LIN					**10000**		
010	LIN	Item Identification	M	1			Must use
020	UIT	Unit Detail	M	1			Must use
040	PO4	Item Physical Details	O	>1			Used
050	REF	Reference Identification	O	12			Used
LOOP ID - SHP					**10**		
140	SHP	Shipped/Received Information	O	1			Used
150	REF	Reference Identification	O	12			Used

Summary:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
010	CTT	Transaction Totals	O	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Must use
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

ISA - Interchange Control Header

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 16**

User Option(Usage): Must use

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ISA01	I01	**Authorization Information Qualifier** **Description:** Code to identify the type of information in the Authorization Information **Will Only Send Code 00**	M	ID	2/2	Must use
ISA02	I02	**Authorization Information** **Description:** 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)	M	AN	10/10	Must use
ISA03	I03	**Security Information Qualifier** **Description:** Code to identify the type of information in the Security Information **Will only send code - 00**	M	ID	2/2	Must use
ISA04	I04	**Security Information** **Description:** 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)	M	AN	10/10	Must use
ISA05	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Will Only Send Code 01**	M	ID	2/2	Must use
ISA06	I06	**Interchange Sender ID** **Description:** 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 **Will Only Send DUNS**	M	AN	15/15	Must use
ISA07	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Will Send Suppliers Qualifier**	M	ID	2/2	Must use
ISA08	I07	**Interchange Receiver ID** **Description:** 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 **Will Send Suppliers Receiver ID**	M	AN	15/15	Must use
ISA09	I08	**Interchange Date** **Description:** Date of the interchange	M	DT	6/6	Must use
ISA10	I09	**Interchange Time** **Description:** Time of the interchange	M	TM	4/4	Must use

ISA10	I09	**Interchange Time** **Description:** Time of the Interchange **Current Time**	M	TM	4/4	Must Use
ISA11	I10	**Interchange Control Standards Identifier** **Description:** Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer **Will Only Send Code U**	M	ID	1/1	Must Use
ISA12	I11	**Interchange Control Version Number** **Description:** Code specifying the version number of the interchange control segments Will Only Send Code **00400**	M	ID	5/5	Must Use
ISA13	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender **Sender Control Number**	M	N0	9/9	Must Use
ISA14	I13	**Acknowledgment Requested** **Description:** Code sent by the sender to request an interchange acknowledgment (TA1) **Will Only Send 0 – "No"**	M	ID	1/1	Must Use
ISA15	I14	**Usage Indicator** **Description:** Code to indicate whether data enclosed by this interchange envelope is test, production or information **Will Only Send Codes T,P – "Test" or "Production"**	M	ID	1/1	Must Use
ISA16	I15	**Component Element Separator** **Description:** 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	M	ID	1/1	Must Use

Notes:

1. Sender's DUNS Number

TBA DUNS number are listed in an Appendix

GS - Functional Group Header

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 8**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**ID**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GS01	479	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets **Only use code SS – "Shipping Schedule"**	M	ID	2/2	Must use
GS02	142	**Application Sender's Code** **Description:** Code identifying party sending transmission; codes agreed to by trading partners Will Only Send Senders DUNS (See Note 1)	M	AN	2/15	Must use
GS03	124	**Application Receiver's Code** **Description:** Code identifying party receiving transmission; codes agreed to by trading partners **Will Send Receivers DUNS**	M	AN	2/15	Must use
GS04	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	**Time** **Description:** 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	Must use
GS06	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender **Responsible Agency Code**	M	N0	1/9	Must use
GS07	455	**Responsible Agency Code** **Description:** Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **Will Only Send Code X**	M	ID	1/2	Must use
GS08	480	**Version / Release / Industry Identifier Code** **Description:** Code indicating the version, release, sub release, 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 sub release, 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 **Will Only Send Code 004010**	M	AN	1/12	Must use

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.

Notes:

DUNS Numbers are listed in an Appendix

ST - Transaction Set Header

Pos: 010 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ST01	143	**Transaction Set Identifier Code** **Description:** Code uniquely identifying a Transaction Set **All valid standard codes are used.**	M	ID	3/3	Must use
ST02	329	**Transaction Set Control Number** **Description:** 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	Must use

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).

BSS - Beginning Segment for Shipping Schedule/Production Sequence

User Option(Usage): Must use

Pos: 020 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 11**

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
BSS01	353	**Transaction Set Purpose Code** **Description:** Code identifying purpose of transaction set **Will Only Send Code 00**	M	ID	2/2	Must use
BSS02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **Will Only Send Value TBA Firm Release**	M	AN	1/30	Must use
BSS03	373	**Date** **Description:** Date expressed as CCYYMMDD **Begin Date**	M	DT	8/8	Must use
BSS04	675	**Schedule Type Qualifier** **Description:** Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast **Will Only Send Code DL**	M	ID	2/2	Must use
BSS05	373	**Date** **Description:** Date expressed as CCYYMMDD **End Date**	M	DT	8/8	Must use
BSS06	373	**Date** **Description:** Date expressed as CCYYMMDD **Generated Date**	M	DT	8/8	Must use
BSS07	328	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction **Will Only Send Value 0**	X	AN	1/30	Used
BSS08	127	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction **Not used**	X	AN	1/30	Not Used
BSS09	367	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction **Will Only Send Contract Number**	X	AN	1/30	Used

BSS10	324	**Release Number** **Description:** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction **Will Only Send Purchase Order Number**	X	AN	1/22		Used

Semantics:

1. Use BSS02 to indicate a document number.
2. Use BSS03 to indicate the date of this document.
3. Use BSS05 to indicate the schedule horizon start date (the date when the schedule begins). (Ship Date)
4. Use BSS06 to indicate the schedule horizon end date (the date when the schedule ends).
5. Use BSS07 to indicate the Release Number, always 0.
6. Use BSS09 to indicate the Contract Number.
7. Use BSS10 to indicate the Purchase Order Number.

Loop N1

Pos: 050 **Repeat: 200**
Optional
Loop: N1 **Elements: N/A**

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

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
050	N1	Name	O	1		Used

N1 - Name

Pos: 050 **Max: 1**
Heading - Optional
Loop: N1 **Elements: 6**

User Option(Usage): Must Use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Will Only Send Code MI**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name **Will Send Material Issuer Description**	X	AN	1/60	Used
N103	66	**ID Code Qualifier** **Description:** Free-form name **Will Only Send Code 92**	X	ID	1/2	Used
N104	67	**ID Code** **Description:** Free-form name **Will Only Send DUNS #**	X	AN	2/80	Used

Syntax:

1. R0203 - At least one of N102,N103 is required
2. P0304 - If either N103,N104 is present, then all are 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.

Notes:

1. Valid DUNS values are listed in the DUNS number table in an Appendix

2. This Element Is To Be Printed On The AIAG Label

N1 - Name

Pos: 050 **Max: 1**
Heading - Optional
Loop: N1 **Elements: 6**

User Option(Usage): Must Use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
N101	98	**Entity Identifier Code** **Description:** Code identifying an organizational entity, a physical location, property or an individual **Will Only Send Code SU**	M	ID	2/3	Must use
N102	93	**Name** **Description:** Free-form name **Suppliers Name; Refer To Note 1**	X	AN	1/60	Used
N103	66	**Identification Code Qualifier** **Description:** Code designating the system/method of code structure used for Identification Code (67) **Will Only Send Code 92**	X	ID	1/2	Used
N104	67	**Identification Code** **Description:** Code identifying a party or other code **Supplier Code Allotted by TBA; Refer To Note 1**	X	AN	2/80	Used

Syntax:

1. R0203 - At least one of N102,N103 is required
2. P0304 - If either N103,N104 is present, then all are required

Comments:

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

Notes:

1. This Element is To Be Printed On The AIAG Label

Loop LIN

Pos: 010 Repeat: 10000
Mandatory
Loop: LIN Elements: N/A

To specify basic item identification data

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
010	LIN	Item Identification	M	1		Must use
020	UIT	Unit Detail	M	1		Must use
030	PO4	Item Physical Details	O	>1		Used
040	REF	Reference Identification	O	12		Used
050	PER	Administrative Communications Contact	O	1		Used
		Loop SHP	O	10	10	Used
060	SHP	Shipped / Received Information	O	10	10	Used
070	REF	Reference Identification	O	12		Used

LIN - Item Identification

Pos: 010 **Max: 1**
Detail - Mandatory
Loop: LIN **Elements: 31**

User Option(Usage): Must use

To specify basic item identification data

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
LIN01	350	**Assigned Identification** **Description:** Alphanumeric characters assigned for differentiation within a transaction set	O	ID	1/20	Not Used
LIN02	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Qualifier BP – "Buyers Part Number"**	M	ID	2/2	Must Use
LIN03	234	**Product/Service ID** **Description:** Identifying number for a product or service **Will Only Send Value for Buyers Part Number**	M	AN	1/48	Must Use
LIN04	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Qualifier EC – "Engineering Change Level"**	C	ID	2/2	Used
LIN05	234	**Product/Service ID** **Description:** Identifying number for a product or service **Will Only Send Value for Engineering Change Level**	C	AN	1/48	Used
LIN06	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Qualifier KB – "Data Category Code"**	C	ID	2/2	Used
LIN07	234	**Product/Service ID** **Description:** Identifying number for a product or service **Will Only Send Value for Data Category Code**	C	AN	1/48	Used
LIN08	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Qualifier PD – "Part Number Description"**	C	ID	2/2	Used
LIN09	234	**Product/Service ID** **Description:** Identifying number for a product or service **Will Only Send Value for Part Number Description**	C	AN	1/48	Used

LIN10	235	**Product/Service ID Qualifier** **Description:** Code identifying the type/source of the descriptive number used in Product/Service ID (234) **Will Only Send Qualifier PL – "Purchaser's Order Line Number"**	C	ID	2/2	Used
LIN11	234	**Product/Service ID** **Description:** Identifying number for a product or service **Will Only Send Value for Purchaser's Order Line Number**	C	AN	1/48	Used

Syntax:

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.

Notes:

1. This Element Is To Be Printed On The AIAG Label
2. The Part Number Does Not Have Any Imbedded Dashes Or Spaces
3. "NO SHIP" Is Valid In The LIN03 When There Is A Zero Quantity

UIT - Unit Detail

Pos: 020 **Max: 1**
Detail - Mandatory
Loop: LIN **Elements: 3**

User Option(Usage): Must use

To specify item unit data

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
UIT01	355	**Composite Unit of Measure** **Description:** To identify a composite unit of measure	M	Comp		Must use

PO4 - Item Physical Details

Pos: 040 **Max: >1**
Detail - Optional
Loop: LIN **Elements: 18**

User Option(Usage): Used

To specify the physical qualities, packaging, weights, and dimensions relating to the item

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
PO401	356	**Pack** **Description:** The number of inner containers, or number of eaches if there are no inner containers, per outer container **This Element Is To Be Printed On The A**	O	N0	1/6	Used

REF - Reference Identification

Pos: 050 **Max: 12**
Detail - Optional
Loop: LIN **Elements: 4**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Will Only Send Code DK**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **TBA Dock Code; Refer To Notes 1**	X	AN	1/30	Used

Notes:

1. This Element Is To Be Printed On The AIAG Label

Loop SHP

Pos: 140 **Repeat: 10**
Optional
Loop: SHP Elements: N/A

To specify shipment and/or receipt information

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
140	SHP	Shipped/Received Information	O	1		Used
150	REF	Reference Identification	O	12		Used

SHP - Shipped/Received Information

User Option(Usage): Used

Pos: 140 Max: 1
Detail - Optional
Loop: SHP Elements: 7

To specify shipment and/or receipt information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SHP01	673	**Quantity Qualifier** **Description:** Code specifying the type of quantity **Will Only Send Code 38 (Original Quantity)**	O	ID	2/2	Used
SHP02	380	**Quantity** **Description:** Numeric value of quantity	X	R	1/15	Used
SHP03	374	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **Will Only Send Code 010 (Requested Ship)**	X	ID	3/3	Used
SHP04	373	**Date** **Description:** Date expressed as CCYYMMDD **Refer To Notes 1,2**	X	DT	8/8	Used

Notes:

1. This Element Is To Be Printed On The AIAG Label
2. For FIRM Orders, Reflects The Pickup Date/Time
3. A Zero Quantity Is Valid For The SHP02 Element

REF - Reference Identification

Pos: 150 **Max: 12**
Detail - Optional
Loop: SHP **Elements: 4**

User Option(Usage): Used

To specify identifying information

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
REF01	128	**Reference Identification Qualifier** **Description:** Code qualifying the Reference Identification **Will Only Send Code MK**	M	ID	2/3	Must use
REF02	127	**Reference Identification** **Description:** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier **Refer To Note 1**	X	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02,REF03 is required

Notes:

1. Format Is XXXXXXXX-YYYYYYYY where
   XXXXXXXX is the Manifest Number, then A Dash, followed by
   YYYYYYYY which is the Receiving Number

2. This Element Is To Be Printed On The AIAG Label

3. “NO SHIP” Is Valid In The REF02 Element When SHP02 Contains Zero Quantity

SHP - Shipped/Received Information

User Option(Usage): Used

Pos: 140 Max: 1
Detail - Optional
Loop: SHP Elements: 7

To specify shipment and/or receipt information

Element Summary:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SHP01	673	**Quantity Qualifier** **Description:** Code specifying the type of quantity **Will Only Send Code 01 (Discrete Quantity)**	O	ID	2/2	Used
SHP02	380	**Quantity** **Description:** Numeric value of quantity	X	R	1/15	Used
SHP03	374	**Date/Time Qualifier** **Description:** Code specifying type of date or time, or both date and time **Will Only Send Code 050 (Received)**	X	ID	3/3	Used
SHP04	373	**Date** **Description:** Date expressed as CCYYMMDD **Refer To Notes 1,2**	X	DT	8/8	Used

Notes:

1. This Element Is To Be Printed On The AIAG Label
2. For FIRM Orders, Reflects The Pickup Date/Time
3. A Zero Quantity Is Valid For The SHP02 Element

CTT - Transaction Totals

Pos: 010 **Max: 1**
Summary - Optional
Loop: N/A **Elements: 7**

User Option(Usage): Used

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
CTT02	347	**Number of Line Items** **Description:** Total number of line items in the transaction set **Total Number of LIN Segments**	M	N0	1/6	Must use

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

SE - Transaction Set Trailer

Pos: 020 **Max: 1**
Summary - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SE01	96	**Number of Included Segments** **Description:** Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	**Transaction Set Control Number** **Description:** 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	Must use

Comments:

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

GE - Functional Group Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GE01	97	**Number of Transaction Sets Included** **Description:** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use

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.

IEA - Interchange Control Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
IEA01	I16	**Number of Included Functional Groups** **Description:** A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender	M	N0	9/9	Must use

EXAMPLE OF A SHIPPING SCHEDULE (862) DOCUMENT

```
ISA*00*TBA *01*609619924 *01*609619924 *ZZ*123456789-
        00013*000824*0606*U*00400*000000001*0*P*#
GS*SS*609619924*123456789*20000824*0606*1*X*004010
ST*862*000000001
BSS*00*ORIGINAL*20000901*DL*20001201*20000824*001
N1*MI*TBAK
N1*SU* YOUR COMPANY NAME*92*00013
LIN**BP*514410301000*RC*N103*ZZ*D-EKANBAN ORDER UIT*PC
PO4*15
REF*DK*N1
SHP*38*36*010*20000901*0230
REF*MK*50287182-5047736**DO#1#ZZ#2000082801#ZZ#3
CTT*1*36
SE*115*000000001
GE*1*1
IEA*1*000000001
```

Functional Group=FA

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
	ISA	Interchange Control Header	M	1			Must use
	GS	Functional Group Header	M	1			Must use

Heading:

X12 ANSI REQUIREMENTS Ver. 4010							TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Notes**	**Usage**
010	ST	Transaction Set Header	M	1		N1/010	Must use
020	AK1	Functional Group Response Header	M	1		N1/020	Must use
LOOP ID - AK2					**999999**	N1/030L	
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
LOOP ID - AK3					**999999**	C1/040L	
040	AK3	Data Segment Note	O	1		C1/040	Used
050	AK4	Data Element Note	O	99			Used
060	AK5	Transaction Set Response Trailer	M	1			Must use
070	AK9	Functional Group Response Trailer	M	1			Must use
080	SE	Transaction Set Trailer	M	1			Must use
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

Notes:

1/010 These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

1/020 AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

1/030L AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

1/030 AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.
Must send back the same sender and receiver IDs sent to the supplier.

Comments:

1/040L The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

1/040 The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

TOYOTA BOSHOKU AMERICA

ISA Interchange Control Header

Pos:	Max: 1
Not Defined - Mandatory	
Loop: N/A	Elements: 16

User Option(Usage): Must use

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ISA01	I01	**Authorization Information** **Description:** Code to identify the type of information in the Authorization Information **Will Only Send Code 00**	M	ID	2/2	Must use
ISA02	I02	**Authorization Information** **Description:** 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)	M	AN	10/10	Must Use
ISA03	I03	**Security Information Qualifier** **Description:** Code to identify the type of information in the Security Information **Will only send code – 00**	M	ID	2/2	Must Use
ISA04	I04	**Security Information** **Description:** This is used for identifying the security information about the interchange sender or the data in the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Will Only Send Code 01**	M	ID	2/2	Must use
ISA06	I06	**Interchange Sender ID** **Description:** 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 **Refer To Note 1**	M	AN	15/15	Must use
ISA07	I05	**Interchange ID Qualifier** **Description:** Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified **Receivers Qualifier**	M	ID	2/2	Must Use
ISA08	I07	**Interchange ID Qualifier** **Description:** 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 **Receivers Code**	M	AN	15/15	Must use
ISA09	I08	**Interchange Date** **Description:** Date of the interchange **Current Date**	M	DT	6/6	Must Use

ISA10	I09	**Interchange Time** **Description:** Time of the Interchange **Current Time**	M	TM	4/4	Must Use
ISA11	I10	**Interchange Control Standards Identifier** **Description:** Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer **Will Only Send Code U**	M	ID	1/1	Must Use
ISA12	I11	**Interchange Control Version Number** **Description:** Code specifying the version number of the interchange control segments Will Only Send Code **00400**	M	ID	5/5	Must Use
ISA13	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender **Sender Control Number**	M	N0	9/9	Must Use
ISA14	I13	**Acknowledgment Requested** **Description:** Code sent by the sender to request an interchange acknowledgment (TA1) **Will Only Send 0 – "No"**	M	ID	1/1	Must Use
ISA15	I14	**Usage Indicator** **Description:** Code to indicate whether data enclosed by this interchange envelope is test, production or information **Will Only Send Codes T,P – "Test" or "Production"**	M	ID	1/1	Must Use
ISA16	I15	**Component Element Separator** **Description:** 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	M	ID	1/1	Must Use

Notes:

1. SENDERS DUN'S NUMBER

TBA DUNS numbers are listed in an Appendix

GS Functional Group Header

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 8**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**ID**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GS01	479	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets **Only 'FA' will be used – Functional Acknowledgment**	M	ID	2/2	Must use
GS02	142	**Application Sender's Code** **Description:** Code identifying party sending transmission; codes agreed to by trading partners **Will Only Send Senders DUNS (See Note 1)**	M	AN	2/15	Must use
GS03	124	**Application Receiver's Code** **Description:** Code identifying party receiving transmission; codes agreed to by trading partners **Will Send Receivers DUNS**	M	AN	2/15	Must use
GS04	373	**Date** **Description:** Date expressed as CCYYMMDD	M	DT	8/8	Must use
GS05	337	**Time** **Description:** 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	Must use
GS06	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender **Responsible Agency Code**	M	N0	1/9	Must use
GS07	455	**Responsible Agency Code** **Description:** Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 **Will Only Send Code X**	M	ID	1/2	Must use
GS08		**Version / Release / Industry Identifier Code** **Description:** Code indicating the version, release, sub release, 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 sub release, 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 **Will Only Send Code 004010**	M	AN	1/12	Must use

Notes:

1. GS04 is the group date.
2. GS05 is the group time. 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:

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.

ST Transaction Set Header

Pos: 010 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
ST01	143	**Transaction Set Identifier Code** **Description:** Code uniquely identifying a Transaction Set **Will Only Send Code 997**	M	ID	3/3	Must use
ST02	329	**Transaction Set Control Number** **Description:** 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	Must use

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).

AK1 Functional Group Response Header

Pos: 020 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

To start acknowledgment of a functional group

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
AK101	479	**Functional Identifier Code** **Description:** Code identifying a group of application related transaction sets **Refer To Note 1**	M	ID	2/2	Must use
AK102	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use

Semantics:

1. AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.
2. AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.

Notes:

1.Will Only Send Following Codes: SH – Ship Notice/Manifest (856)

Loop AK2

Pos: 030 **Repeat: 999999**
Optional
Loop: AK2 Elements: N/A

To start acknowledgment of a single transaction set

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
030	AK2	Transaction Set Response Header	O	1		Used
040		Loop AK3	O	999999	999999	Used
060	AK5	Transaction Set Response Trailer	M	1		Must use

Semantics:

1. AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
2. AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

AK2 Transaction Set Response Header

User Option(Usage): Used

Pos: 030 **Max: 1**
Heading - Optional
Loop: AK2 **Elements: 2**

To start acknowledgment of a single transaction set

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
AK201	143	**Transaction Set Identifier Code** **Description:** Code uniquely identifying a Transaction Set **Refer To Note 1**	M	ID	3/3	Must use
AK202	329	**Transaction Set Control Number** **Description:** 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	Must use

Semantics:

1. AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
2. AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

Notes:

1. Will Only Send Following Codes:
   856 – Ship Notice/Manifest
   Should only receive:
   830– Purchase Order Transaction
   862– Shipping Schedule

Loop AK3

Pos: 040 **Repeat: 999999**

Optional

Loop: AK3 Elements: N/A

To report errors in a data segment and identify the location of the data segment

Loop Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Pos	**Id**	**Segment Name**	**Req**	**Max Use**	**Repeat**	**Usage**
040	AK3	Data Segment Note	O	1		Used
050	AK4	Data Element Note	O	99		Used

AK3 Data Segment Note

Pos: 040 **Max: 1**
Heading - Optional
Loop: AK3 **Elements: 4**

User Option(Usage): Used

To report errors in a data segment and identify the location of the data segment

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
AK301	721	**Segment ID Code** **Description:** Code defining the segment ID of the data segment in error (See Appendix A - Number 77)	M	ID	2/3	Must use
AK302	719	**Segment Position in Transaction Set** **Description:** The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1	M	N0	1/6	Must use
AK303	447	**Loop Identifier Code** **Description:** The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE	O	AN	1/6	Used

AK4 Data Element Note

Pos: 050 **Max: 99**
Heading - Optional
Loop: AK3 **Elements: 4**

User Option(Usage): Used

Element Summary:

		X12 ANSI REQUIREMENTS Ver. 4010				TBA REQ.
Ref	**ID**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
AK401	C030	**Position in Segment** **Description:** Code indicating the relative position of a simple data element, or the relative position of a composite data structure combined with the relative position of the component data element within the composite data structure, in error; the count starts with 1 for the simple data element or composite data structure immediately following the segment ID	M	Comp		Must use
	722	**Element Position in segment** **Description:** This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID	M	N0	1/2	Must use
	1528	**Component Data Element Position in Composite** **Description:** To identify the component data element position within the composite that is in error	O	N0	1/2	Used
AK402	725	**Data Element Reference Number** **Description:** Reference number used to locate the data element in the Data Element Dictionary	O	N0	1/4	Used
AK403	723	**Data Element Syntax Error Code** **Description:** Code indicating the error found after syntax edits of a data element **All valid standard codes are used.**	M	ID	1/3	Must use
AK404	724	**Copy of Bad Data Element** **Description:** This is a copy of the data element in error	O	AN	1/99	Used

Semantics:

1. In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.

AK5 Transaction Set Response Trailer

User Option(Usage): Must use

Pos: 060 **Max: 1**
Heading - Mandatory
Loop: AK2 **Elements: 6**

To acknowledge acceptance or rejection and report errors in a transaction set

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
AK501	717	**Transaction Set Acknowledgment Code** **Description:** Code indicating accept or reject condition based on the syntax editing of the transaction set **All valid standard codes are used.**	M	ID	1/1	Must use
AK502	718	**Transaction Set Syntax Error Code** **Description:** Code indicating error found based on the syntax editing of a transaction set **All valid standard codes are used.**	O	ID	1/3	Used

AK9 Functional Group Response Trailer

Pos: 070 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 9**

User Option(Usage): Must use

To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
AK901	715	**Functional Group Acknowledge Code** **Description:** Code indicating accept or reject condition based on the syntax editing of the functional group **All valid standard codes are used.**	M	ID	1/1	Must use
AK902	97	**Number of Transaction Sets Included** **Description:** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
AK903	123	**Number of Received Transaction Sets** **Description:** Number of Transaction Sets received	M	N0	1/6	Must use
AK904	2	**Number of Accepted Transaction Sets** **Description:** Number of accepted Transaction Sets in a Functional Group	M	N0	1/6	Must use

Comments:

1. If AK901 contains the value "A" or "E", then the transmitted functional group is accepted.

SE Transaction Set Trailer

Pos: 080 **Max: 1**
Heading - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
SE01	96	**Number of Included Segments** **Description:** Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	329	**Transaction Set Control Number** **Description:** 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	Must use

Comments:

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

GE Functional Group Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
GE01	97	**Number of Transaction Sets Included** **Description:** Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	N0	1/6	Must use
GE02	28	**Group Control Number** **Description:** Assigned number originated and maintained by the sender	M	N0	1/9	Must use

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.

IEA Interchange Control Trailer

Pos: **Max: 1**
Not Defined - Mandatory
Loop: N/A **Elements: 2**

User Option(Usage): Must use

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

Element Summary:

X12 ANSI REQUIREMENTS Ver. 4010						TBA REQ.
Ref	**Id**	**Element Name**	**Req**	**Type**	**Min/Max**	**Usage**
IEA01	I16	**Number of Included Functional Groups** **Description:** A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	**Interchange Control Number** **Description:** A control number assigned by the interchange sender	M	N0	9/9	Must use

EXAMPLE OF AN OUTBOUND FUNCTIONAL ACKNOWLEDGMENT - 997

(FROM TBA TO A SUPPLIER)

```
ISA*00* TBA    *01*161955830 *01*609619924      *ZZ*123456789-12345*930313*1350*U*
      00400*000000001*0*P*#
GS*FA*609619924*123456789*19930313*1350*1*X*004010
ST*997*0001
AK1*IN*12
AK2*856*000000001
AK3*DTM*7*IT1
AK4*2*373*7*010493
AK3*DTM*7*IT1
AK4*2*373*7*010499
AK3*DTM*7*IT1
AK4*2*373*7*010553
AK3*DTM*7*IT1
AK4*2*373*7*010643
AK3*DTM*7*IT1
AK4*2*373*7*010493
AK3*DTM*7*IT1
AK4*2*373*7*010499
AK3*DTM*7*IT1
AK4*2*373*7*010553
AK3*DTM*7*IT1
AK4*2*373*7*010643
AK3*IT1*5*IT1
AK4*7*234*?*010743
AK3*IT1*5*IT1
AK4*7*234*?*010743
A3*IT1*5*IT1
AK4*7*234*?*010743
AK3*IT1*5*IT1
AK4*7*234*?*010743
AK5*R*5
AK9*R*1*1*0
SE*30*0001
GE*1*1
IEA*1*000000001
```

4.0 Implementing the EDI Transactions Into Production

Key Concerns

Implementing an EDI transaction with TBA requires several steps to take place. The final step, moving the EDI transaction into a production mode, is certainly a critical step in the implementation process. TBA's confidence in our supplier's ability to correctly utilize EDI in their business processes stems from your company's successful completion of the certification process with TBA.

EDI does, however, present several challenges to suppliers and TBA. Often suppliers must acquire new software, train employees, and even reengineer processes to incorporate EDI into their company. Stemming from change is a tendency for mistakes and a period of time for adaptation to the change. Although TBA does recognize the challenges EDI presents, our suppliers are still expected to be ready to use EDI. Our supplier's ability to successfully use EDI at a transaction's production timing is vital to TBA for several reasons.

1. TBA only supports the EDI transactions standard x12 for Suppliers. TBA has engineered the business processes involving the EDI transaction to be driven by each EDI transaction. EDI transactions are integrated into both of our production and accounting systems to ensure accuracy and efficiency within each system.

2. The efficiency of TBA's business processes requires accurate information throughout each process. EDI is incorporated into TBA's business processes also as a business efficiency strategy. EDI is meant to improve TBA's just-in-time business processes and accounting's invoice matching procedures. Therefore, suppliers must correctly generate a transaction (856, 997) and have the capability to correctly process a transaction when received (830 and 862). Those suppliers that cause TBA to use unplanned resources to handle transactions are recognized by TBA and then undergo countermeasures to ensure vitality for the affected business process.

Implementing the 830 and 862 into Production Use

The 830 and 862 transactions are generated and sent by TBA, and then received and processed by the supplier. In order to successfully use the 830 and 862 for TBA, the supplier must demonstrate these two general capabilities when the 830 and 862 are in production use.

* Be capable of receiving production 830's and 862's from TBA
* Be capable of processing the data in the 830 and 862

TBA recognizes that suppliers may not have the current capability to integrate the 830, and 862 into their business processes in order to accomplish the two capabilities listed above through an automated system. A supplier's level of ability to process 830 and 862 information does not determine the extent to which a supplier is expected to perform the above capabilities. In the event that TBA's order data cannot be processed in an automated system, the supplier should be prepared to process the information manually and create the AIAG label correctly in a temporary manual process. **The supplier must demonstrate all 830 and 862 capabilities at the time of production use start-up.**

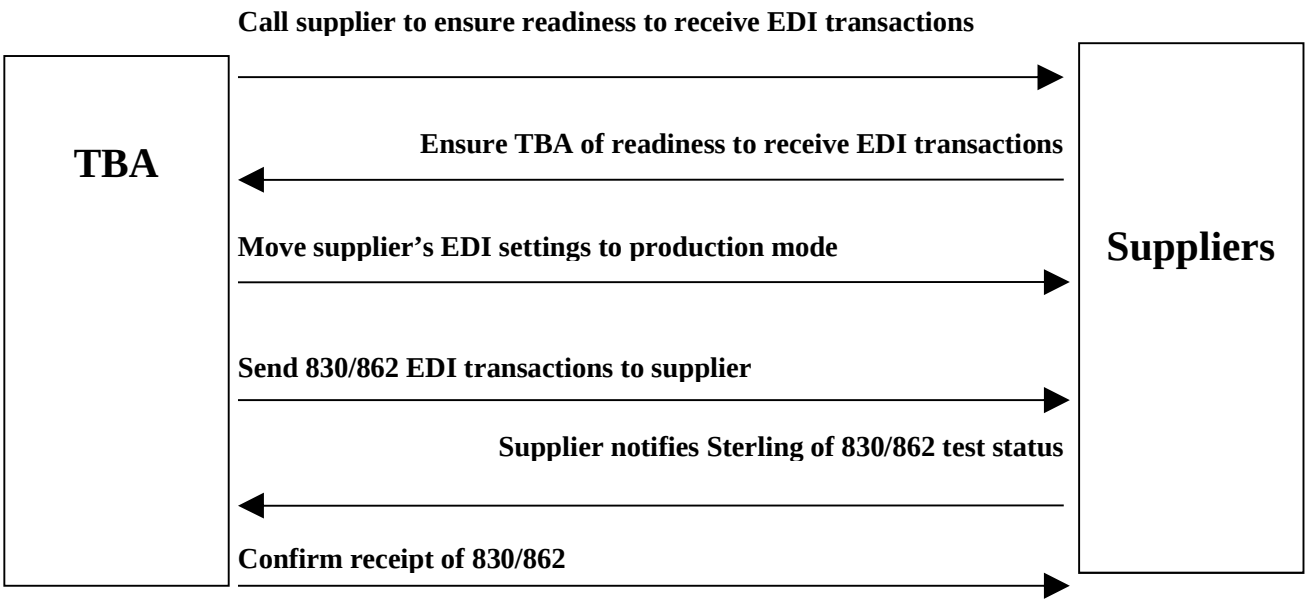


Figure 9~~10~~ Implementing the 830 and 862 into Production Use

Moving the 856 and 997 Into Production Use

The 856 and 997 EDI transactions are generated and sent by the supplier, and then received and processed by TBA. In order to successfully use the 856 and 997 transactions with TBA, the supplier must demonstrate these three general capabilities when the 856 and 997 are in production use.

* Be capable of acquiring the correct information for each transaction
* Be capable of processing each transaction's information requirements into an EDI transaction
* Be capable of producing and sending each transaction at the proper timing

TBA recognizes that suppliers may not have the current capability to process the information required for the 856 and 997 transactions to accomplish the three capabilities above through an automated system. A supplier's level of ability to process 856 and 997 transactions does not determine the extent to which a supplier is expected to perform the above capabilities.

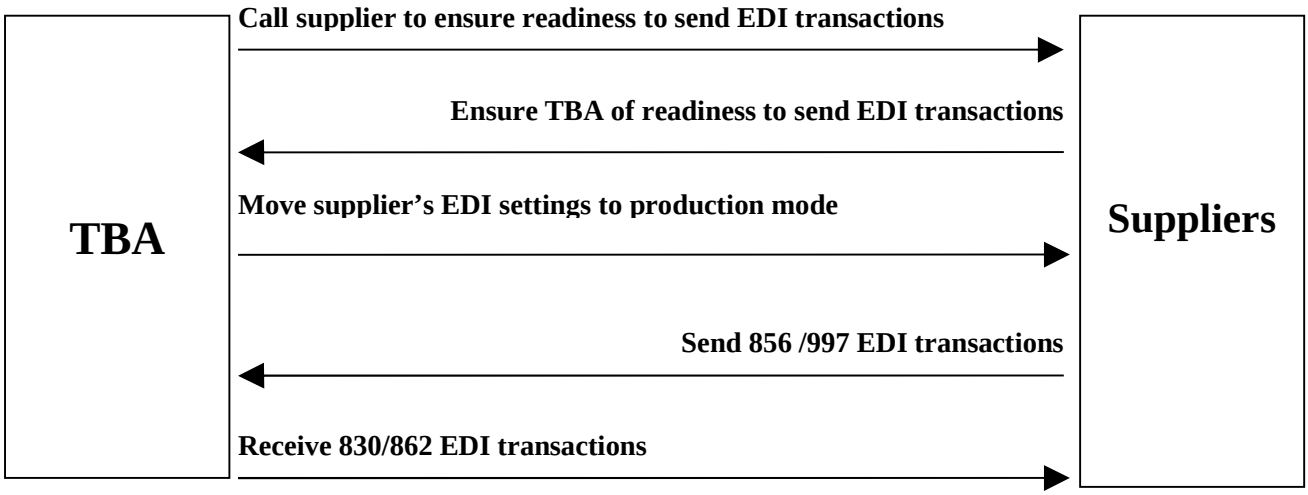


Figure 10~~11~~ Moving the 856 and 997 Transaction into Production

Appendices

EDI Program Contact

	EDI Implementation Issue Contacts	
		IT Help Desk
	Phone	1-844-HELP-TBA
	Email	TBA.EDI@TBAmerica.com

TBA DUNS Numbers

Plant location	Trading Partner ID (DUNS)	ISA TP ID	ISA TP Qualifier	GS TP ID
TBIN ATS / IL	877899695	877899695	01	877899695
TBKY Bardstown / KY	796567667	796567667	01	796567667
Bartlett /KY	52922697	52922697	01	52922697
TBMX Chavez / Mexico	812749414	812749414	01	812749414
TBCA Elmira / Canada	201047177	201047177	01	201047177
TBKY Harrodsburg / KY	063844752	063844752	01	063844752
TBKY Lebanon / KY	870692730	870692730	01	870692730
TBKY Nicholasville / KY	825946353	825946353	01	825946353
TBMX Ramos / Mexico	813082831	813082831	01	813082831
TB Kawashima / AL	8034210033	8034210033	01	8034210033
TBA Corporate / KY	609619924	609619924	01	609619924
TBIN TBIN / IN	021107060	021107060	01	021107060
TBMS TBMS Mantachie /MS	849646075	849646075	01	849646075
TBAL / AL Vance, Alabama	260855700	260855700	01	260855700
TBMX Torreon 1 / Mexico	812596419	812596419	01	812596419
TBMX Torreon 2 / Mexico	816518252	816518252	01	816518252
TBCA Woodstock / Canada	243171472	243171472	01	243171472

Note: A separate DUNS number is required for each Supplier physical location that does business with TBA.

TOYOTA BOSHOKU AMERICA

Supplier Information/Survey

Please fill out the following sheet. Thank you. Date :

Item		Information
Your Company Name		
Who is your EDI Coordinator?	Name and Title	
	Phone #	
	FAX #	
	Email Address	
When will your company be ready for EDI testing?		
What is/are the location(s) that you will be shipping from? (Separate DUNS numbers for each location)		
What is the location that you will be billing from?		
What network does your company use?		
What is your company's EDI Code and Qualifier? One DUNS number for each physical location		Qualifier
		ID (DUNS Number)

iSupplier Training Manual

iSupplie_User_Manual
_Rev_7_JUN102013.dc