

# 997 Functional Acknowledgment

## Functional Group=FA

This X12 Transaction Set 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.

### Not Defined:

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

### Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
0100	ST	Transaction Set Header	M	1		N1/0100	Must use
0200	AK1	Functional Group Response Header	M	1		N1/0200	Must use

<u>LOOP ID - AK2</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
0300	AK2	Transaction Set Response Header	O	1	999999	N1/0300L	Must use
0600	AK5	Transaction Set Response Trailer	M	1			Must use
0700	AK9	Functional Group Response Trailer	M	1			Must use
0800	SE	Transaction Set Trailer	M	1			Must use

### Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

### Notes:

- 1/0100 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.
- 1/0200 AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.  
The Functional Acknowledgment is generated at the point of translation, intended for the originator (not any intermediate parties).
- 1/0300 L AK2 is used to start the acknowledgment 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.
- 1/0300 AK2 is used to start the acknowledgment 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.

# 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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	<b>Authorization Information Qualifier</b> <b>Description:</b> Code identifying the type of information in the Authorization Information <b>Code Name</b> 00 No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2	Must use
ISA02	I02	<b>Authorization Information</b> <b>Description:</b> Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M	AN	10/10	Must use
ISA03	I03	<b>Security Information Qualifier</b> <b>Description:</b> Code identifying the type of information in the Security Information <b>Code Name</b> 00 No Security Information Present (No Meaningful Information in I04)	M	ID	2/2	Must use
ISA04	I04	<b>Security Information</b> <b>Description:</b> This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10	Must use
ISA05	I05	<b>Interchange ID Qualifier</b> <b>Description:</b> Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified <b>All valid standard codes are used.</b>	M	ID	2/2	Must use
ISA06	I06	<b>Interchange Sender ID</b> <b>Description:</b> Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15	Must use
ISA07	I05	<b>Interchange ID Qualifier</b> <b>Description:</b> Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified <b>All valid standard codes are used.</b>	M	ID	2/2	Must use
ISA08	I07	<b>Interchange Receiver ID</b> <b>Description:</b> Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them	M	AN	15/15	Must use
ISA09	I08	<b>Interchange Date</b> <b>Description:</b> Date of the interchange	M	DT	6/6	Must use

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA10	I09	<b>Interchange Time</b> <b>Description:</b> Time of the interchange	M	TM	4/4	Must use
ISA11	I65	<b>Repetition Separator</b> <b>Description:</b> Type is not applicable; the repetition separator is a delimiter and not a data element; this field provides the delimiter used to separate repeated occurrences of a simple data element or a composite data structure; this value must be different than the data element separator, component element separator, and the segment terminator <b>Code Name</b> ! Exclamation Point : Colon @ At ] Bracket ^ Carrot   Pipe	M		1/1	Must use
<p><b>The Home Depot Requirements:</b>  <i>This separator can be any non-alpha-numeric character that is also not used as an element separator, segment terminator or elsewhere in the data. If you need your Repetition Separator added to the list to complete testing, please call Home Depot's Electronic Partnership Development Team at 770-433-8211 x10036, option 2.</i></p>						
ISA12	I11	<b>Interchange Control Version Number</b> <b>Description:</b> Code specifying the version number of the interchange control segments <b>Code Name</b> 00406 Standards Approved for Publication by ASC X12 Procedures Review Board through October 2002	M	ID	5/5	Must use
ISA13	I12	<b>Interchange Control Number</b> <b>Description:</b> A control number assigned by the interchange sender	M	N0	9/9	Must use
ISA14	I13	<b>Acknowledgment Requested</b> <b>Description:</b> Code indicating sender's request for an interchange acknowledgment <b>Code Name</b> 0 No Interchange Acknowledgment Requested	M	ID	1/1	Must use
ISA15	I14	<b>Interchange Usage Indicator</b> <b>Description:</b> Code indicating whether data enclosed by this interchange envelope is test, production or information <b>All valid standard codes are used.</b>	M	ID	1/1	Must use
ISA16	I15	<b>Component Element Separator</b> <b>Description:</b> Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M		1/1	Must use

# GS Functional Group Header

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

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

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	<b>Functional Identifier Code</b> <b>Description:</b> Code identifying a group of application related transaction sets <b>Code Name</b>	M	ID	2/2	Must use
		FA Functional Acknowledgment (997)				
GS02	142	<b>Application Sender's Code</b> <b>Description:</b> Code identifying party sending transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS03	124	<b>Application Receiver's Code</b> <b>Description:</b> Code identifying party receiving transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS04	373	<b>Date</b> <b>Description:</b> Date expressed as CCYYMMDD where CC represents the first two digits of the calendar year	M	DT	8/8	Must use
GS05	337	<b>Time</b> <b>Description:</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M	TM	4/8	Must use
GS06	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	<b>Responsible Agency Code</b> <b>Description:</b> Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 <b>All valid standard codes are used.</b>	M	ID	1/2	Must use
GS08	480	<b>Version / Release / Industry Identifier Code</b> <b>Description:</b> Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed <b>Code Name</b>	M	AN	1/12	Must use

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<u>Code</u>	<u>Name</u>
	October 2002

**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: 0100	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b> <b>Description:</b> Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
		<b>Code Name</b> 997 Functional Acknowledgment				
ST02	329	<b>Transaction Set Control Number</b> <b>Description:</b> 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) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
2. The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition. When used, this implementation convention reference takes precedence over the implementation reference specified in the GS08.

# AK1 Functional Group Response Header

Pos: 0200	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

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

To start acknowledgment of a functional group

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK101	479	<b>Functional Identifier Code</b> <b>Description:</b> Code identifying a group of application related transaction sets <b>All valid standard codes are used.</b>	M	ID	2/2	Must use
AK102	28	<b>Group Control Number</b> <b>Description:</b> 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.
3. AK103 is the version release industry identifier code in the GS segment (GS08) in the functional group being acknowledged.

# Loop AK2

Pos: 0300	Repeat: 999999
Optional	
Loop: AK2	Elements: N/A

To start acknowledgment of a single transaction set

## Loop Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
0300	AK2	Transaction Set Response Header	O	1		Must use
0600	AK5	Transaction Set Response Trailer	M	1		Must use

# AK2 Transaction Set Response Header

Pos: 0300	Max: 1
Heading - Optional	
Loop: AK2	Elements: 2

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

To start acknowledgment of a single transaction set

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK201	143	<b>Transaction Set Identifier Code</b> <b>Description:</b> Code uniquely identifying a Transaction Set <b>All valid standard codes are used.</b>	M	ID	3/3	Must use
AK202	329	<b>Transaction Set Control Number</b> <b>Description:</b> 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.
3. AK203 is the implementation convention reference, if any, found in the ST segment (ST03) in the transaction set being acknowledged.

# AK5 Transaction Set Response Trailer

Pos: 0600	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 1

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

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK501	717	<b>Transaction Set Acknowledgment Code</b>	M	ID	1/1	Must use
		<b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the transaction set				
		<b>Code Name</b>				
		A		Accepted		
		E		Accepted But Errors Were Noted		
		R		Rejected		

# AK9 Functional Group Response Trailer

Pos: 0700	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

**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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK901	715	<b>Functional Group Acknowledge Code</b> <b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the functional group	M	ID	1/1	Must use
		<b>Code Name</b>				
		A Accepted				
		E Accepted, But Errors Were Noted.				
		P Partially Accepted, At Least One Transaction Set Was Rejected				
		R Rejected				
AK902	97	<b>Number of Transaction Sets Included</b> <b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	NO	1/6	Must use
AK903	123	<b>Number of Received Transaction Sets</b> <b>Description:</b> Number of Transaction Sets received	M	NO	1/6	Must use
AK904	2	<b>Number of Accepted Transaction Sets</b> <b>Description:</b> Number of accepted Transaction Sets in a Functional Group	M	NO	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: 0800	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	<b>Number of Included Segments</b> <b>Description:</b> Total number of segments included in a transaction set including ST and SE segments	M	NO	1/10	Must use
SE02	329	<b>Transaction Set Control Number</b> <b>Description:</b> 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

<b>Pos:</b>	<b>Max: 1</b>
<b>Not Defined - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 2</b>

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

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	<b>Number of Transaction Sets Included</b> <b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M	NO	1/6	Must use
GE02	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender	M	NO	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:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	<b>Number of Included Functional Groups</b> <b>Description:</b> A count of the number of functional groups included in an interchange	M	NO	1/5	Must use
IEA02	I12	<b>Interchange Control Number</b> <b>Description:</b> A control number assigned by the interchange sender	M	NO	9/9	Must use

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