

997 Functional Acknowledgment

Lowe's EDI 997 Functional Acknowledgment

Version: 4010

Author:	Lowe's Companies Inc.
Modified:	10/8/2008
Notes:	This 997 Implementation Guide is shared across all vendor types, excluding Procurement documents.

997 Functional Acknowledgment

Functional Group=FA

Purpose: 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.

Not Defined:

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

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1		N1/010	Must use
020	AK1	Functional Group Response Header	M	1		N1/020	Must use

<u>LOOP ID - AK2</u>			<u>999999</u>	<u>N1/030L</u>		
030	AK2	Transaction Set Response Header	O	1	N1/030	Used
<u>LOOP ID - AK3</u>			<u>999999</u>	<u>C1/040L</u>		
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

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:

- 1/010 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.

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).

ISA Interchange Control Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Must use
Description: Code to identify the type of information in the Authorization Information						
Code Name						
00 No Authorization Information Present (No Meaningful Information in I02)						
ISA02	I02	Authorization Information	M	AN	10/10	Must use
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)						
ISA03	I03	Security Information Qualifier	M	ID	2/2	Must use
Description: Code to identify the type of information in the Security Information						
Code Name						
00 No Security Information Present (No Meaningful Information in I04)						
ISA04	I04	Security Information	M	AN	10/10	Must use
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)						
ISA05	I05	Interchange ID Qualifier	M	ID	2/2	Must use
Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified						
All valid standard codes are used.						
ISA06	I06	Interchange Sender ID	M	AN	15/15	Must use
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						
ISA07	I05	Interchange ID Qualifier	M	ID	2/2	Must use
Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified						
All valid standard codes are used.						
ISA08	I07	Interchange Receiver ID	M	AN	15/15	Must use
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						
ISA09	I08	Interchange Date	M	DT	6/6	Must use
Description: Date of the interchange						
ISA10	I09	Interchange Time	M	TM	4/4	Must use
Description: Time of the interchange						
ISA11	I10	Interchange Control Standards Identifier	M	ID	1/1	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>
		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.				
ISA12	I11	Interchange Control Version Number	M	ID	5/5	Must use
		Description: Code specifying the version number of the interchange control segments All valid standard codes are used.				
ISA13	I12	Interchange Control Number	M	N0	9/9	Must use
		Description: A control number assigned by the interchange sender				
ISA14	I13	Acknowledgment Requested	M	ID	1/1	Must use
		Description: Code sent by the sender to request an interchange acknowledgment (TA1)				
		Code Name				
		0 No Acknowledgment Requested				
ISA15	I14	Usage Indicator	M	ID	1/1	Must use
		Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.				
ISA16	I15	Component Element Separator	M		1/1	Must use
		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				

GS Functional Group Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	Functional Identifier Code	M	ID	2/2	Must use
Description: Code identifying a group of application related transaction sets						
Code Name						
FA Functional Acknowledgment (997)						
GS02	142	Application Sender's Code	M	AN	2/15	Must use
Description: Code identifying party sending transmission; codes agreed to by trading partners						
GS03	124	Application Receiver's Code	M	AN	2/15	Must use
Description: Code identifying party receiving transmission; codes agreed to by trading partners						
GS04	373	Date	M	DT	8/8	Must use
Description: Date expressed as CCYYMMDD						
GS05	337	Time	M	TM	4/8	Must use
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)						
GS06	28	Group Control Number	M	N0	1/9	Must use
Description: Assigned number originated and maintained by the sender						
GS07	455	Responsible Agency Code	M	ID	1/2	Must use
Description: Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480						
Code Name						
X Accredited Standards Committee X12						
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must use
Description: 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						
Code Name						
004010 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997						

Semantics:

1. GS04 is the group date.
2. GS05 is the group time.
3. The data interchange control number GS06 in this header must be identical to the same data element in the associated

functional group trailer, GE02.

Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

ST Transaction Set Header

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

User Option (Usage): Must use

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

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set
All valid standard codes are used.

ST02	329	Transaction Set Control Number	M	AN	4/9	Must use
------	-----	--------------------------------	---	----	-----	----------

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

AK1 Functional Group Response Header

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

User Option (Usage): Must use

Purpose: 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	Functional Identifier Code	M	ID	2/2	Must use

Description: Code identifying a group of application related transaction sets

Code Name

- AG Application Advice (824)
- AN Return Merchandise Authorization and Notification (180)
- AW Warehouse Inventory Adjustment Advice (947)
- BE Benefit Enrollment and Maintenance (834)
- CT Application Control Totals (831)
- GE General Request, Response or Confirmation (814)
- GF Response to a Load Tender (990)
- IB Inventory Inquiry/Advice (846)
- IM Motor Carrier Freight Details and Invoice (210, 980)
- IN Invoice Information (810,819)
- OW Warehouse Shipping Order (940)
- PC Purchase Order Change Request - Buyer Initiated (860)
- PD Product Activity Data (852)
- PO Purchase Order (850)
- PR Purchase Order Acknowledgement (855)
- QG Product Information (878, 879, 888, 889, 893, 896)
- QM Transportation Carrier Shipment Status Message (214)
- QO Ocean Shipment Status Information (313, 315)
- RA Payment Order/Remittance Advice (820)
- RE Warehouse Stock Receipt Advice (944)
- RS Order Status Information (869, 870)
- SC Price/Sales Catalog (832)
- SH Ship Notice/Manifest (856)
- SM Motor Carrier Load Tender (204)
- SS Shipping Schedule (862)

AK102	28	Group Control Number	M	N0	1/9	Must use
-------	----	-----------------------------	---	----	-----	----------

Description: Assigned number originated and maintained by the sender

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.

AK2 Transaction Set Response Header

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

User Option (Usage): Used

Purpose: 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	Transaction Set Identifier Code	M	ID	3/3	Must use

Description: Code uniquely identifying a Transaction Set

Code Name

- 180 Return Merchandise Authorization and Notification
- 204 Motor Carrier Load Tender
- 210 Motor Carrier Freight Details and Invoice
- 214 Transportation Carrier Shipment Status Message
- 315 Status Details (Ocean)
- 820 Payment Order/Remittance Advice
- 824 Application Advice
- 831 Application Control Totals
- 832 Price/Sales Catalog
- 834 Benefit Enrollment and Maintenance
- 846 Inventory Inquiry/Advice
- 850 Purchase Order
- 852 Product Activity Data
- 855 Purchase Order Acknowledgment
- 856 Ship Notice/Manifest
- 860 Purchase Order Change Request - Buyer Initiated
- 861 Receiving Advice/Acceptance Certificate
- 862 Shipping Schedule
- 864 Text Message
- 870 Order Status Report
- 888 Item Maintenance
- 940 Warehouse Shipping Order
- 944 Warehouse Stock Transfer Receipt Advice
- 945 Warehouse Shipping Advice
- 947 Warehouse Inventory Adjustment Advice
- 990 Response To a Load Tender

AK202	329	Transaction Set Control Number	M	AN	4/9	Must use
-------	-----	---------------------------------------	---	----	-----	----------

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

1. 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.

AK3 Data Segment Note

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

User Option (Usage): Used

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

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>
AK301	721	Segment ID Code	M	ID	2/3	Must use
Description: Code defining the segment ID of the data segment in error (See Appendix A - Number 77)						
AK302	719	Segment Position in Transaction Set	M	N0	1/6	Must use
Description: The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1						
AK303	447	Loop Identifier Code	O	AN	1/6	Used
Description: The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE						
AK304	720	Segment Syntax Error Code	O	ID	1/3	Used
Description: Code indicating error found based on the syntax editing of a segment						
All valid standard codes are used.						

AK4 Data Element Note

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

User Option (Usage): Used

Purpose: To report errors in a data element or composite data structure and identify the location of the data element

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>
AK401	C030	Position in Segment	M	Comp		Must use
		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				
AK401-01	722	Element Position in Segment	M	N0	1/2	Must use
		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				
AK401-02	1528	Component Data Element Position in Composite	O	N0	1/2	Used
		Description: To identify the component data element position within the composite that is in error				
AK402	725	Data Element Reference Number	O	N0	1/4	Used
		Description: Reference number used to locate the data element in the Data Element Dictionary				
AK403	723	Data Element Syntax Error Code	M	ID	1/3	Must use
		Description: Code indicating the error found after syntax edits of a data element All valid standard codes are used.				
AK404	724	Copy of Bad Data Element	O	AN	1/99	Used
		Description: This is a copy of the data element in error				

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

Pos: 060	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 2

User Option (Usage): Must use

Purpose: 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	Transaction Set Acknowledgment Code	M	ID	1/1	Must use
<p>Description: Code indicating accept or reject condition based on the syntax editing of the transaction set All valid standard codes are used.</p>						
AK502	718	Transaction Set Syntax Error Code	O	ID	1/3	Used
<p>Description: Code indicating error found based on the syntax editing of a transaction set All valid standard codes are used.</p>						

AK9 Functional Group Response Trailer

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

User Option (Usage): Must use

Purpose: 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	Functional Group Acknowledge Code	M	ID	1/1	Must use
		Description: Code indicating accept or reject condition based on the syntax editing of the functional group				
		All valid standard codes are used.				
AK902	97	Number of Transaction Sets Included	M	N0	1/6	Must use
		Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				
AK903	123	Number of Received Transaction Sets	M	N0	1/6	Must use
		Description: Number of Transaction Sets received				
AK904	2	Number of Accepted Transaction Sets	M	N0	1/6	Must use
		Description: Number of accepted Transaction Sets in a Functional Group				

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

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	Number of Included Segments	M	N0	1/10	Must use

Description: Total number of segments included in a transaction set including ST and SE segments

SE02	329	Transaction Set Control Number	M	AN	4/9	Must use
------	-----	---------------------------------------	---	----	-----	----------

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Comments:

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

GE Functional Group Trailer

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

User Option (Usage): Must use

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

Element Summary:

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

Semantics:

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

IEA Interchange Control Trailer

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

User Option (Usage): Must use

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

Element Summary:

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