



997 HC Functional Acknowledgment

Healthcare EDI Consignment

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997 HC Functional Acknowledgment - Canada

Functional Group=FA

Purpose: 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.

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
LOOP ID - AK2					≥1	N1/0300L	
0300	AK2	Transaction Set Response Header	O	1		N1/0300	Used
LOOP ID - AK3					≥1	C1/0400L	
0400	AK3	Data Segment Note	O	1		C1/0400	Used
0500	AK4	Data Element Note	O	99			Used
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

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.
There is only one Functional Acknowledgment Transaction Set per acknowledged functional group. Only one acknowledgement can be sent for each functional group. The acknowledgment can be either a single Transaction Set 997 or a single Transaction Set 999 as mutually agreed upon by the trading partners. Different Functional Groups may have different acknowledgements, e.g. some Functional Groups, within the same interchange, may be acknowledged with the 997 and others with the 999.
- 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 Acknowledgement is generated at the point of translation, intended for the originator (not any intermediate parties).
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.
- 1/0300L 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.

Comments:

- 1/0400L 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 or proper subsets of 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).
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ST Transaction Set Header

Pos: 0100	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

Code List Summary (Total Codes: 320, Included: 1)

Code Name

997 Functional Acknowledgment

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

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 List Summary (Total Codes: 262, Included: 5)

Code Name

IN	Invoice Information (810)
PD	Product Activity Data (852)
PO	Purchase Order (850)
PR	Purchase Order Acknowledgment (855)
SH	Ship Notice/Manifest (856)

AK102	28	Group Control Number	M	N0	1/9	Must use
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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.
3. AK103 is the version release industry identifier code in the GS segment (GS08) in the functional group being acknowledged.

Loop Transaction Set Response Header

Pos: 0300	Repeat: >1
Optional	
Loop: AK2	Elements: N/A

User Option (Usage): Used

Purpose: 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		Used
0400		Loop AK3	O		>1	Used
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): 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 List Summary (Total Codes: 320, Included: 5)

<u>Code</u>	<u>Name</u>
810	Invoice
850	Purchase Order
852	Product Activity Data
855	Purchase Order Acknowledgment
856	Ship Notice/Manifest

AK202	329	Transaction Set Control Number	M	AN	4/9	Must use
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Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Semantics:

- AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
- AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.
- AK203 is the implementation convention reference, if any, found in the ST segment (ST03) in the transaction set being acknowledged.

Loop Data Segment Note

Pos: 0400	Repeat: >1
Optional	
Loop: AK3	Elements: N/A

User Option (Usage): Used

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

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>
0400	AK3	Data Segment Note	O	1		Used
0500	AK4	Data Element Note	O	99		Used

AK3 Data Segment Note

Pos: 0400	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	1/10	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	1/4	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				
		Code List Summary (Total Codes: 8, Included: 8)				
		Code	Name			
		1	Unrecognized segment ID			
		2	Unexpected segment			
		3	Mandatory segment missing			
		4	Loop Occurs Over Maximum Times			
		5	Segment Exceeds Maximum Use			
		6	Segment Not in Defined Transaction Set			
		7	Segment Not in Proper Sequence			
		8	Segment Has Data Element Errors			

AK4 Data Element Note

Pos: 0500	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 the simple data element or composite data structure in error within a segment, count beginning with 1 for the position immediately following the segment ID; additionally indicating the relative position of a repeating structure in error, count beginning with 1 for the position immediately following the preceding element separator; additionally indicating the relative position of a component of a composite data structure in error, count beginning with 1 for the position following the preceding element or repetition separator				
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				
AK401-03	1686	Repeating Data Element Position	O	N0	1/4	Used
		Description: To identify the specific repetition of a data element 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				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
Code List Summary (Total Codes: 12, Included: 12)						
Code Name						
	1	Mandatory data element missing				
	2	Conditional required data element missing.				
	3	Too many data elements.				
		Description: <i>More data elements existed than defined for the segment</i>				
	4	Data element too short.				
	5	Data element too long.				
	6	Invalid character in data element.				
	7	Invalid code value.				
	8	Invalid Date				
	9	Invalid Time				
	10	Exclusion Condition Violated				
	12	Too Many Repetitions				
		Description: <i>More repetitions existed than defined for the segment</i>				
	13	Too Many Components				
		Description: <i>More components existed than defined for the element</i>				
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: 0600	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 6

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

Description: Code indicating accept or reject condition based on the syntax editing of the transaction set

Code List Summary (Total Codes: 6, Included: 3)

Code Name

A	Accepted
E	Accepted But Errors Were Noted
R	Rejected

AK502	718	Transaction Set Syntax Error Code	O	ID	1/3	Used
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Description: Code indicating error found based on the syntax editing of a transaction set

Code List Summary (Total Codes: 23, Included: 9)

Code Name

1	Transaction Set Not Supported
2	Transaction Set Trailer Missing
3	Transaction Set Control Number in Header and Trailer Do Not Match
4	Number of Included Segments Does Not Match Actual Count
5	One or More Segments in Error
6	Missing or Invalid Transaction Set Identifier
7	Missing or Invalid Transaction Set Control Number
18	Transaction Set not in Functional Group
23	Transaction Set Control Number Not Unique within the Functional Group

AK503	718	Transaction Set Syntax Error Code	O	ID	1/3	Used
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Description: Code indicating error found based on the syntax editing of a transaction set

Code List Summary (Total Codes: 23, Included: 9)

Code Name

1	Transaction Set Not Supported
2	Transaction Set Trailer Missing
3	Transaction Set Control Number in Header and Trailer Do Not Match
4	Number of Included Segments Does Not Match Actual Count
5	One or More Segments in Error
6	Missing or Invalid Transaction Set Identifier

Code Name

- 7 Missing or Invalid Transaction Set Control Number
- 18 Transaction Set not in Functional Group
- 23 Transaction Set Control Number Not Unique within the Functional Group

AK504 718 **Transaction Set Syntax Error Code** O ID 1/3 Used

Description: Code indicating error found based on the syntax editing of a transaction set

Code List Summary (Total Codes: 23, Included: 9)

Code Name

- 1 Transaction Set Not Supported
- 2 Transaction Set Trailer Missing
- 3 Transaction Set Control Number in Header and Trailer Do Not Match
- 4 Number of Included Segments Does Not Match Actual Count
- 5 One or More Segments in Error
- 6 Missing or Invalid Transaction Set Identifier
- 7 Missing or Invalid Transaction Set Control Number
- 18 Transaction Set not in Functional Group
- 23 Transaction Set Control Number Not Unique within the Functional Group

AK505 718 **Transaction Set Syntax Error Code** O ID 1/3 Used

Description: Code indicating error found based on the syntax editing of a transaction set

Code List Summary (Total Codes: 23, Included: 9)

Code Name

- 1 Transaction Set Not Supported
- 2 Transaction Set Trailer Missing
- 3 Transaction Set Control Number in Header and Trailer Do Not Match
- 4 Number of Included Segments Does Not Match Actual Count
- 5 One or More Segments in Error
- 6 Missing or Invalid Transaction Set Identifier
- 7 Missing or Invalid Transaction Set Control Number
- 18 Transaction Set not in Functional Group
- 23 Transaction Set Control Number Not Unique within the Functional Group

AK506 718 **Transaction Set Syntax Error Code** O ID 1/3 Used

Description: Code indicating error found based on the syntax editing of a transaction set

Code List Summary (Total Codes: 23, Included: 9)

Code Name

- 1 Transaction Set Not Supported
- 2 Transaction Set Trailer Missing
- 3 Transaction Set Control Number in Header and Trailer Do Not Match
- 4 Number of Included Segments Does Not Match Actual Count
- 5 One or More Segments in Error

Code Name

6	Missing or Invalid Transaction Set Identifier
7	Missing or Invalid Transaction Set Control Number
18	Transaction Set not in Functional Group
23	Transaction Set Control Number Not Unique within the Functional Group

AK9 Functional Group Response Trailer

Pos: 0700	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 5

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																
<p>Description: Code indicating accept or reject condition based on the syntax editing of the functional group</p> <p>Code List Summary (Total Codes: 7, Included: 4)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Accepted</td> </tr> <tr> <td>E</td> <td>Accepted, But Errors Were Noted.</td> </tr> <tr> <td>P</td> <td>Partially Accepted, At Least One Transaction Set Was Rejected</td> </tr> <tr> <td>R</td> <td>Rejected</td> </tr> </tbody> </table>							<u>Code</u>	<u>Name</u>	A	Accepted	E	Accepted, But Errors Were Noted.	P	Partially Accepted, At Least One Transaction Set Was Rejected	R	Rejected						
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A	Accepted																					
E	Accepted, But Errors Were Noted.																					
P	Partially Accepted, At Least One Transaction Set Was Rejected																					
R	Rejected																					
AK902	97	Number of Transaction Sets Included	M	N0	1/6	Must use																
<p>Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element</p>																						
AK903	123	Number of Received Transaction Sets	M	N0	1/6	Must use																
<p>Description: Number of Transaction Sets received</p>																						
AK904	2	Number of Accepted Transaction Sets	M	N0	1/6	Must use																
<p>Description: Number of accepted Transaction Sets in a Functional Group</p>																						
AK905	716	Functional Group Syntax Error Code	O	ID	1/3	Used																
<p>Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer</p> <p>Code List Summary (Total Codes: 25, Included: 12)</p> <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Functional Group Not Supported</td> </tr> <tr> <td>2</td> <td>Functional Group Version Not Supported</td> </tr> <tr> <td>3</td> <td>Functional Group Trailer Missing</td> </tr> <tr> <td>4</td> <td>Group Control Number in the Functional Group Header and Trailer Do Not Agree</td> </tr> <tr> <td>5</td> <td>Number of Included Transaction Sets Does Not Match Actual Count</td> </tr> <tr> <td>6</td> <td>Group Control Number Violates Syntax</td> </tr> <tr> <td>7</td> <td>Invalid Application Sender's Code</td> </tr> </tbody> </table>							<u>Code</u>	<u>Name</u>	1	Functional Group Not Supported	2	Functional Group Version Not Supported	3	Functional Group Trailer Missing	4	Group Control Number in the Functional Group Header and Trailer Do Not Agree	5	Number of Included Transaction Sets Does Not Match Actual Count	6	Group Control Number Violates Syntax	7	Invalid Application Sender's Code
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<u>Code</u>	<u>Name</u>
8	Invalid Application Receiver's Code
9	Invalid Responsible Agency Code
19	Functional Group Control Number not Unique within Interchange
30	Invalid Group Date
31	Invalid Group Time

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

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.