



Benteler  
**Electronic Data Interchange  
Specifications  
Transaction 997**



# BENTELER AUTOMOTIVE

## 997 Functional Acknowledgment

Functional Group ID=**FA**

### Introduction:

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.

<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max. Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
010	ST	Transaction Set Header	M	1		n1
020	AK1	Functional Group Response Header	M	1		n2
		LOOP ID - AK2			999999	
030	AK2	Transaction Set Response Header	M	1		n3
060	AK5	Transaction Set Response Trailer	M	1		
070	AK9	Functional Group Response Trailer	M	1		
080	SE	Transaction Set Trailer	M	1		

### Transaction Set Notes:

- 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.
- 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.
- 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.



**Segment:** **ISA** Interchange Control Header  
**Position:** 005  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start and identify an interchange of zero or more functional groups and interchange-related control segments  
**Example:** **ISA~00~ ~00~ ~01~112836044 ~ZZ~097362933 ~030131~1650~U~00400~00000011~0~P~>**

#### Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>	
ISA01	I01	<b>Authorization Information Qualifier</b> Use "00"	M	ID 2/2
ISA02	I02	<b>Authorization Information</b> Use Ten Spaces	M	AN 10/10
ISA03	I03	<b>Security Information Qualifier</b> Use "00"	M	ID 2/2
ISA04	I04	<b>Security Information</b> Use Ten Spaces	M	AN 10/10
ISA05	I05	<b>Interchange ID Qualifier</b> Use "01" or other applicable codes	M	ID 2/2
ISA06	I06	<b>Interchange Sender ID</b> DUNS Number. Left Justify, Space Fill	M	AN 15/15
ISA07	I05	<b>Interchange ID Qualifier</b> Use "01" or other applicable codes	M	ID 2/2
ISA08	I07	<b>Interchange Receiver ID</b> DUNS Number. Left Justify, Space Fill	M	AN 15/15
ISA09	I08	<b>Interchange Date</b> Date of Creation	M	DT 6/6
ISA10	I09	<b>Interchange Time</b> Time Of Creation	M	TM 4/4
ISA11	I10	<b>Interchange Control Standards Identifier</b> Use "U" for U.S.	M	ID 1/1
ISA12	I11	<b>Interchange Control Version Number</b> Use "00401"	M	ID 5/5
ISA13	I12	<b>Interchange Control Number</b> A control number assigned by the interchange sender	M	N0 9/9
ISA14	I13	<b>Acknowledgment Requested</b> Use "0" for no Ack. Req., Use "1" for Ack. Req	M	ID 1/1
ISA15	I14	<b>Usage Indicator</b> Use "T" For Test or "P" For Production Refer to 004010 Data Element Dictionary for acceptable code values.	M	ID 1/1
ISA16	I15	<b>Component Element Separator</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	AN 1/1



**Segment:** **GS** Functional Group Header  
**Position:** 007  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of a functional group and to provide control information  
**Syntax Notes:**  
**Semantic Notes:** 1 GS04 is the group date  
 3 GS06 in this header must be identical to the same data element in the associated functional group trailer  
**Example:** **GS~FA~112836044~097362933~20030131~1650~11~X~004010**

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>	
<u>Des.</u>	<u>Element</u>			
GS01	479	<b>Functional Identifier Code</b> Use "PS" for Planning Schedule	M	ID 2/2
GS02	142	<b>Application Sender's Code</b> Use Duns Number	M	AN 2/15
GS03	124	<b>Application Receiver's Code</b> Use Duns Number	M	AN 2/15
GS04	373	<b>Date</b> Creation Date	M	DT 8/8
GS05	337	<b>Time</b> Creation Time	M	TM 4/8
GS06	28	<b>Group Control Number</b> Start with 1 and increment by 1 for each subsequent GS Segment	M	N0 1/9
GS07	455	<b>Responsible Agency Code</b> Use "X"	M	ID 1/2
GS08	480	<b>Version / Release / Industry Identifier Code</b> Use "004010"	M	AN 6/6



**Segment:** **ST** Transaction Set Header  
**Position:** 010  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of a transaction set and to assign a control number  
**Comments:**  
**Example:** ST~997~0001

#### Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set Refer to 004010 Data Element Dictionary for acceptable code values	M ID 3/3
ST02	329	<b>Transaction Set Control Number</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



**Segment:** **AK1** Functional Group Response Header  
**Position:** 020  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start acknowledgment of a functional group  
**Syntax Notes:**  
**Semantic Notes:**

- 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.

**Example:** **AK1~SH~22**

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>AK101</b>	<b>479</b>	<b>Functional Identifier Code</b> Code identifying a group of application related transaction sets	<b>M</b> <b>ID 2/2</b>
<b>AK102</b>	<b>28</b>	<b>Group Control Number</b> Assigned number originated and maintained by the sender	<b>M</b> <b>NO 1/9</b>



**Segment:** **AK2** Transaction Set Response Header  
**Position:** 030  
**Loop:** AK2 Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start acknowledgment of a single Transaction Set  
**Syntax Notes:**  
**Semantic Notes:**

- 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.

**Example:** **AK2~856~000123557**

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>AK201</b>	<b>143</b>	<b>Functional Identifier Code</b> Code uniquely identifying a Transaction Set	<b>M</b> <b>ID 3/3</b>
<b>AK202</b>	<b>329</b>	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	<b>M</b> <b>AN 4/9</b>



**Segment:** **AK5** Transaction Set Response Trailer  
**Position:** 060  
**Loop:** AK2 Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start acknowledge acceptance or rejection and report errors in a transaction set  
**Syntax Notes:**  
**Semantic Notes:**  
**Example:** **AK5~A**

#### Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
AK501	717	<b>Transaction Set Acknowledgment Code</b> Code indicating accept or reject condition based on the syntax editing of the transaction set	<b>M</b> ID 1/4
AK502	718	<b>Transaction Set Syntax Error Code</b> Code indicating error found based on the syntax editing of a transaction set	<b>O</b> ID 1/3





**Segment:** **AK9** Functional Group Response Trailer

**Position:** 070

**Loop:**

**Level:**

**Usage:** Mandatory

**Max Use:** 1

**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

**Syntax Notes:**

**Semantic Notes:**

**Example:** AK9~A~1~1~1

**Data Element Summary**

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>	
AK901	715	<b>Functional Group Acknowledgment Code</b> Code indicating accept or reject condition based on the syntax editing of the functional group	<b>M</b>	<b>ID 1/1</b>
AK902	97	<b>Number of Transaction Sets Included</b> Total number of transaction sets included in the functional group or interchange (transmission" group terminated by the trailer containing this data element	<b>M</b>	<b>NO 1/6</b>
AK903	123	<b>Number of Received Transaction Sets</b> Number of Transaction Sets received	<b>M</b>	<b>NO 1/6</b>
AK904	2	<b>Number of Accepted Transaction Sets</b> Number of accepted Transaction Sets in a Functional Group	<b>M</b>	<b>NO 1/6</b>
AK905	716	<b>Functional Group Syntax Error Code</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer	<b>O</b>	<b>ID 1/3</b>



**Segment:** **SE** Transaction Set Trailer  
**Position:** 080  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 5  
**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)  
**Comments:** 1 SE is the last segment of each transaction set.  
**Example:** SE-6~0001

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u> SE01	<u>Element</u> 96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	<b>M</b> <b>NO 1/10</b>
SE02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	<b>M</b> <b>AN 4/9</b>



**Segment:** **GE** Functional Group Trailer  
**Position:** 030  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To indicate the end of a functional group and to provide control information  
**Syntax Notes:**  
**Semantic Notes:** 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.  
**Example:** GE~1~11

#### Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
GE01	97	<b>Number of Transaction Sets Included</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	<b>M</b> <b>NO 1/6</b>
GE02	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	<b>M</b> <b>NO 1/9</b>



**Segment:** **IEA** Interchange Control Trailer

**Position:** 040

**Loop:**

**Level:** Summary

**Usage:** Optional

**Max Use:** 1

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

**Syntax Notes:**

**Semantic Notes:**

**Example:** IEA~1~00000011

#### Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>	
IEA01	I16	<b>Number of Included Functional Groups</b>	<b>M</b>	<b>NO 1/5</b>
		A count of the number of functional groups included in an interchange		
IEA02	I12	<b>A control number assigned by the interchange sender</b>	<b>M</b>	<b>NO 9/9</b>



## Sample 830 EDI

### Benteler to Vendor

ISA~00~ ~00~ ~01~112836044 ~ZZ~097362933 ~030131~1650~U~00400~00000011~0~P~>  
GS~FA~112836044~097362933~20030131~1650~11~X~004010  
ST~997~0001  
AK1~SH~22  
AK2~856~000123557  
AK5~A  
AK9~A~1~1~1  
SE~6~0001  
GE~1~11  
IEA~1~000000011

### Vendor to Benteler

ISA\*00\* \*00\* \*01\*938307675 \*01\*112836044 \*030131\*1319\*U\*00400\*000596015\*0\*P\*>  
GS\*FA\*938307675\*112836044\*20030131\*1319\*596015\*X\*004010  
ST\*997\*000596015  
AK1\*SS\*522  
AK2\*862\*0001  
AK5\*A  
AK9\*A\*1\*1\*1  
SE\*6\*000596015  
GE\*1\*596015  
IEA\*1\*000596015