

EDI - GENERAL INFORMATION

The purpose of this guide is to document the use of Electronic Data Interchange as implemented by DENSO for NASWEB. DENSO EDI transaction sets will adhere to ANSI X-12 Standards Version 4 Release 1.

The following are some general rules regarding the formatting and transmission of EDI files.....

- The EDI transmission will consist of fixed-length 80 character records.
- These records are created by concatenating the logical, variable-length EDI data segments and passing this data stream into 80-character records.
- Data segments can span records.
- No record shall be padded except for the last record, which may be padded with EBCDIC HEX 40 characters.

**FORMAT OF AN EDI
INTERCHANGE
CONTAINING AN
862
TRANSACTION SET**

SHIPPING SCHEDULE

SEGMENT SUMMARY

EDI 862 - Shipping Schedule

Segment	Segment Name	Description
ISA	Interchange Control Header	Start interchange and identify sender, receiver, and other key transmission data
GS	Functional Group Header	Identify a group of related transactions
ST	Transaction Set Header	Identifies the specific transaction set to follow (862)
BSS	Beginning Segment for Shipping Schedule	Identifies beginning of a Shipping Schedule transaction set.
N1	Name	Identifies Supplier/Manufacturer
N2		Additional Name Information
N3		Address Information
LIN	Item Identification	Specify basic item identification data (Part number, etc)
UIT	Unit Detail	Specify item unit detail
PKG		Marking, Packaging, Loading
P04		Item Physical Details
QTY		Item Quantity
REF	Reference Numbers	Specify identifying numbers
PER	Administrative Communications Contact	Identify a person to whom administrative communications should be directed.
FST	Forecast Schedule	Specifies forecasted dates and quantities
DTM	Date/Time Reference	Identifies specific delivery date for JIT segments
JIT	Just-In-Time Schedule	Identifies specific delivery time and quantities in terms of a 24-hour clock



REF	Reference Numbers	Specify Manifest numbers for JIT segments
CTT	Transaction Totals	Transmit totals for specific elements in transmission
SE	Transaction Set Trailer	Indicates end of transaction set and provide count of segments
GE	Functional Group Trailer	Indicates end of a functional group
IEA	Interchange Control Trailer	Indicates the end of an interchange of one or more functional groups



**EXAMPLE EDI TRANSMISSION
CONTAINING AN 862 TRANSACTION SET**

EDI 862 - Shipping Schedule

The following is an example of an EDI transmission created by DENSO. This example contains an **862** transaction set, and is the basis for the segment examples used in this document. Delimiters/terminators may vary. Every segment will be followed by a segment delimiter.

```
ISA*00*          *00*          *01*884981002      *ZZ*WEBEDI          *101014*091
4*U*00401*000012760*0*P*>~GS*SS*884981002*WEBEDI*20101014*0914*6467*X*004010~ST*
862*000006872~BSS*04*1*20101014*DL*20101014*20101014**1***A~N1*SI**92*GNC_N1~N1*
SU**92*XC-A52~N1*ST**92*GNC_N1~N2*ASMO GNC,INC.*1125 SUGG PKWY~N3*GREENVILLE, NC
 27834 USA~LIN**BP*AX162617-0010*PD*SHAFT ARMATURE 2W*KP*C*PO*0000020000~UIT*EA~
PO4*1*14400*BX~REF*DK*N1~REF*RV*1~PER*EX*CIGMA*TE*2408*****20115~FST*14400*C*D*2
0101014~DTM*002*20101014*1700~DTM*118*20101013*1700~JIT*14400*1700~REF*MF*010140
23~REF*RU*MN5-255~REF*PH*U~CTT*1~SE*22*000006872~GE*1*6467~IEA*1*000012760~
```

SEGMENT DETAIL

ISA -- Interchange Control Header Segment

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
ISA*	Segment Identifier	1-4			Interchange Control Header Segment ID	
00*	ISA01	5-7	2/2	ID	Use '00'	
	ISA02	8-18	10/10	AN	Authorization qualifier	
00	ISA03	19-21	2/2	ID	Use '00'	
	ISA04	22-32	10/10	AN	Security Information	
01*	ISA05	33-35	2/2	ID	Use '01'	
Denso Duns #	ISA06	36-51	15/15	ID	Sender's DUNS number	
ZZ	ISA07	52-54	2/2	ID	Use 'ZZ'	
WEBEDI*	ISA08	55-70	15/15	ID	WEBEDI	
YYMMDD* ¹	ISA09	71-77	6/6	DT	Creation Date of this Interchange	
HHMM*	ISA10	78-82	4/4	TM	Creation Time of this interchange	
U*	ISA11	83-84	1/1	ID	'U' = US	
00401*	ISA12	85-90	5/5	ID	Interchange control AIAG version number	
00000001*	ISA13	91-100	9/9	N0	Interchange control number	
0*	ISA14	101-102	1/1	ID	'0' = No acknowledgment	

¹ Version 4010 uses the 6-digit date only on the ISA segment.



P	ISA15	103-103	1/1	ID	'P' = production	P
*	ISA16	104-104	1/1	ID	Element delimitter	*
>	ISA17	105-105	1/1	ID	subelement delimitter	>
~	ISA18	106-106	1/1	ID	Segment delimitter	~

Segment Example.....

ISA*00* *00* *01*884981002 *ZZ*WEBEDI *101014*0914*U*00401*000012760*0*P*>~



SEGMENT DETAIL

GS -- Functional Group Header Segment

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
GS*	Segment Identifier	1-3			Functional Group Header Segment ID	
SS*	GS01	4-6	2/2	ID	Use 'SS' (Shipping Schedule)	
Denso Duns# *	GS02	7-16	2/12	ID	Sender's DUNS number	
WEBEDI*	GS03	17-26	2/12	ID	WebEDI	
YYYYMMDD*	GS04	27-33	6/6	DT	Creation Date of this Interchange	
HHMM*	GS05	34-38	4/4	TM	Creation Time of this interchange	
1*	GS06	39-40	1/9	N0	GS segment Sequence Number	
X*	GS07	41-42	1/2	ID	Use 'X' (ASC X12 Standard)	
004010	GS08	43-48	1/12	ID	AIAG version number	

Segment Example.....

GS*SS*884981002*WEBEDI*20101014*0914*6467*X*004010~



SEGMENT DETAIL

ST -- 862 Transaction Set Header

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
ST*	Segment Identifier	1-3			Transaction Set Header Segment ID	
862*	ST01	4-7	3/3	ID	Use '862' - Identifies this Transaction Set as a Shipping Schedule	
0001	ST02	8-11	4/9	AN	Transaction Set sequence number - this will start with 0001 and will be incremented for each additional transaction set (ST/SE envelope) included within this functional group (GS/GE envelope).	

Segment Example.....

ST*862*0001~



SEGMENT DETAIL

BSS -- Beginning Segment for Shipping Schedule

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
BSS*	Segment Identifier	1-4			Beginning Segment for Shipping Schedule Segment ID	
00*	BSS01	5-7	2/2	ID	'00' (Original) '04' (Change) '05' (Replace)	
1*	BSS02	8-9	1/30	AN	Reference number assigned by Denso identifying this transaction set.	
YYYYMMDD*	BSS03	10-16	8/8	DT	Creation date of this Shipping Schedule.	
DL*	BSS04	17-19	2/2	ID	Schedule Type - Denso uses DL (Delivery Based)	
YYYYMMDD*	BSS05	20-26	8/8	DT	Start Date to which this Shipping Schedule applies.	
YYYYMMDD*	BSS06	27-33	8/8	DT	End Date to which this Shipping Schedule applies.	
*	BSS07	34-34	1/30	AN	Optional Data Element, not currently used by Denso	
1*	BSS08	35-36	1/30	AN	Reference number assigned by Denso identifying this transaction set.	



*	BSS09	37-37	1/30	AN	Optional Data Element, not currently used by Denso	
*	BSS10	38-38	1/22	AN	Optional Data Element, not currently used by Denso	
A	BSS11	39-39	1/1	ID	Schedule Quantity Qualifier - DensoI uses 'A' (Actual Discreet Quantity)	

Segment Example.....

BSS*04*1*20101014*DL*20101014*20101014**1***A~



SEGMENT DETAIL

N1 -- Name

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type		Remarks
N1*	Segment Identifier	1-3			Name Segment ID	
	N101	4-6	2/2	ID	Identity Code	SI = Shipping Schedule Issuer SU = Supplier/Manufacturer ST = Ship to...
*	N102	7-7	1/35	AN	Optional Data Element, not currently used by Denso	
92*	N103	8-10	1/2	ID	Use '92' (ID code is assigned by Denso)	
xxxxxxxx	N104	11-19	2/17	AN	Identification code assigned by Denso. As qualified by N101, will either contain Denso's ID #	

Segment Example.....
 N1*SI**92*GNC_N1~
 N1*SU**92*XC-A52~
 N1*ST**92*GNC_N1~



SEGMENT DETAIL

N2 – Additional Name Information

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type		Remarks
N2*	Segment Identifier	1-3			Segment ID	
XXXXXXXXXXXXXXXXX *	N201	4-39	1/35	AN	Company Name	
XXXXXXXXXXXXXXXXX	N202	40-74	1/35	AN	Company Address 1	

Segment Example:

N2*ASMO GNC,INC.*1125 SUGG PKWY~



SEGMENT DETAIL

N3 – Address Information

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type		Remarks
N3*	Segment Identifier	1-3			Segment ID	Segment ID
XXXXXXXXXXXXXX *	N301	4-39	1/35	AN	Company Address 2	Company Address 2
XXXXXXXXXXXXXX	N302	40-74	1/35	AN	Company Address 3	Company Address 3

Segment Example:
N3*GREENVILLE, NC 27834 USA~

SEGMENT DETAIL

These Segments may be used in the future

N4 -- Geographic Location



SEGMENT DETAIL

LIN -- Item Identification

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
LIN*	Segment Identifier	1-4			Item Identification Segment ID	
*	LIN01	5-5	1/11	AN	Optional Data Element, not currently used by Denso	
BP*	LIN02	6-8	2/2	ID	Denso uses 'BP'	
xxxxxxxxxxx*	LIN03	9-24	1/30	AN	Product Part Number	
PD*	LIN04	25-27	2/2	ID	DENSO uses 'PD' (The next data element is the Part Number Description)	
xxxxxxxxxxxxxxxxxxxbbb	LIN05	28-57	1/30	AN	Part/Product number description	
KP*	LIN06	58-60	2/2	ID	Use "KP" (optional)	
xxxx*	LIN07	61-64	4/4	AN	Control No.(optional)	
PO*	LIN08	65-67	2/2	ID	Use "PO" (The next data element is the Purchase Order Number)	
xxxxxxxxxxx	LIN09	68-77	1/10	AN	Assigned P/O No.	

Segment Example.....

LIN**BP*AX162617-0010*PD*SHAFT ARMATURE 2W*KP*C*PO*0000020000~



SEGMENT DETAIL

UIT --Unit Detail

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
UIT*	Segment Identifier	1-4			Unit Detail Segment ID	
EA	UIT01	5-6	2/2	ID	Unit of measure	

Segment Example.....
UIT*EA~



SEGMENT DETAIL

PKG – Marking, Packaging, Loading

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
PKG*	Segment id				Segment ID	
F*	PKG01	5-5	1/1	ID	Item Description Type	
*	PKG02	6-6	1/1	AN	Optional/Not used	
*	PKG03	7-7	1/1	AN	Optional/Not used	
*	PKG04	8-8	1/1	AN	Optional/Not used	
XXXXXXXX	PKG05	9-88	80/80	AN	Tag Slip Remarks	

Segment Example:

PKG*F****Remarks1\$
PKG*F****Remarks2\$
PKG*F****Remarks3\$



SEGMENT DETAIL

P04 - Item Physical Details

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
P04*	Segment Identifier	1-4			Segment ID	
1*	P0401	5-6	1/6	N0	Always 1	
9999999*	PO402	7-15	1/8	R	Barcode Tag Lot Size	
XX	PO403	16-17	2/2	ID	'BX' for Box qty 'PL' for Pallet qty	

Segment Example: P04*1*14400*BX~



SEGMENT DETAIL

QTY - Item Quantity

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
QTY*	Segment Identifier	1-4			Segment ID	
XX*	QTY01	5-6	2/2	AN	Range minimum = 7E or range maximum = 7D	
999	QTY02	7-9	1/3	R	Stock range minimum or maximum	

Segment Example:

QTY*7E*.80\$

QTY*7D*1.10\$



SEGMENT DETAIL

REF - Reference Numbers

This REF segment is used in the LIN loop. This format of the REF segment is used to designate Dock Number or Warehouse Location.

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
REF*	Segment Identifier	1-4			Reference Numbers Segment Identifier	
	REF01	5-7	2/2	ID	Reference Number Qualifier	DK = next data element is Dock Number RL = next data element is the Reserve Assembly line feed location (IE, Warehouse Location) ZZ = user defined - next element is the flag stating that the part is an "A" part ("1" = "A" part) RV = Receiving Warehouse
xxxxxx	REF02	8-10	1/30	AN	Dock Number , Warehouse Location, or "A" part flag as qualified by REF01.	

Segment Example.....

REF*DK*N1~

REF*RV*1~



SEGMENT DETAIL

PER - Administrative Communications Contact

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
PER*	Segment Identifier	1-4			Administrative Communications Contact segment identifier	
EX*	PER01	5-7	2/2	ID	DENSO uses 'EX' (Expeditor)	
JOHNbDOE*	PER02	8-16	1/35	AN	Expeditor's Name	
TE*	PER03	17-19	2/2	ID	DENSO uses 'TE' (The next data element is the Expeditor's Phone Number)	
6169656489	PER04	20-29	1/80	AN	Expeditor's phone number	
*	PER05	30-30	1/1	AN		Optional/Not used
*	PER06	31-31	1/1	AN		Optional/Not used
*	PER07	32-32	1/1	AN		Optional/Not used
*	PER08	33-33	1/1	AN		Optional/Not used
12345	PER09	34-38	1/5	AN		Planner code

Segment Example.....

PER*EX*CIGMA*TE*2408*****20115~



SEGMENT DETAIL

FST -- Forecast Schedules (LIN/FST/JIT Loop)

This FST segment format is used in the LIN/FST/JIT loop. This format will always be used in conjunction with a JIT segment and is used when there is more than one shipment per day of a part..

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
FST*	Segment Identifier	1-4			Forecast Scedule Segment ID	
9999*	FST01	5-11	1/15	R	Actual Discreet Quantity	
C*	FST02	12-13	1/1	ID	Forecast qualifier. C = Firm	
D*	FST03	14-15	1/1	ID	Forecast Timing Qualifier - Denso uses 'D' for Discreet Date	
YYYYMMDD*	FST04	16-22	8/8	DT	Date of Delivery	

Segment Examples.....
FST*14400*C*D*20101014~



_SEGMENT DETAIL

DTM-Date/Time Reference

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
DTM*	Segment Identifier	1-4			Date/Time Reference Segment Identifier	
002*	DTM01	5-8	3/3	ID	Date/Time Qualifier	002 = Due Date/Time 118 = Ship Date/Time
YYYYMMDD	DTM02	9-16	8	DT	Date	
HHMM	DTM03	17-20	4/4	TM	Time	

Segment Example.....

DTM*002*20101014*1700~

DTM*118*20101013*1700~



SEGMENT DETAIL

JIT-Just-In-Time Schedule

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
JIT*	Segment Identifier	1-4			Just-In-Time Schedule Segment Identifier	
999*	JIT01	5-8	1/15	R	Quantity	
HHMM	JIT02	9-12	4/8	TM	Delivery Time	

Segment Example.....
JIT*14400*1700~



SEGMENT DETAIL

REF - Reference Numbers

This REF segment is used in the LIN/FST/JIT loop, and is mainly used to indicate Manifest Number.

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
REF*	Segment Identifier	1-4			Reference Numbers Segment Identifier	
MF*	REF01	5-7	2/2	ID	Reference Number Qualifier	'MF' = Manifest Number 'RU'=Route 'PH'=Urgent code 'KK'=Special Instructions
xxxxxxxxxx	REF02	8-17	1/30	AN	Manifest Number, Route, or Special Instructions	

Segment Example.....

REF*MF*01014023~

REF*RU*MN5-255~

REF*PH*U~



SEGMENT DETAIL

CTT- TRANSACTION TOTALS

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
CTT*	Segment Identifier	1-4			Transaction Totals Segment ID	
9999	CTT01	5-8	1/6	N0	Number of Line Items (count of LIN segments within this ST/SE envelope)	

Segment Examples.....

CTT*1~



SEGMENT DETAIL

SE - TRANSACTION SET TRAILER

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
SE*	Segment Identifier	1-3			Transaction Set Trailer Segment ID	
9999*	SE01	4-8	1/10	N0	Total number of segments included in this transaction set, including the ST and SE segments.	
0001*	SE02	9-13	4/9	AN	Transaction set control number - this will match the value in ST02.	

Segment Examples.....

SE*94*0001~



SEGMENT DETAIL

GE - Functional Group Trailer

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
GE*	Segment Identifier	1-3			Functional Group Trailer Segment Identifier	
1*	GE01	4-5	1/6	N0	Total number of ST segments in this functional group. (Will typically be '1')	
1	GE02	6-6	1/9	N0	Data interchange control number - Must match GS06 in this GS/GE envelope.	

Segment Examples.....

GE*1*1~



SEGMENT DETAIL

IEA - Interchange Control Trailer

Value/ Format	Data Element Name	Data Element Bytes Position (per example)	Data Element minimum/ maximum Field Length (per AIAG standards)	Data Type	Description/Comments	Remarks
IEA*	Segment Identifier	1-4			Interchange Control Trailer Segment Identifier	
1*	IEA01	5-6	1/5	N0	Total number of Functional Groups (GS Segments) included in this ISA/IEA envelope.	
999999999	IEA02	7-15	1/9	N0	Interchange Control Number - Must match ISA13.	

Segment Examples.....

IEA*1*00000001~