

ELECTROMOTIVE DIESELS (EMD)

IMPLEMENTATION GUIDELINES

FOR ANSI X-12 TRANSACTION SET 830

PLANNING SCHEDULE WITH RELEASE CAPABILITY

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GENERAL INFORMATION

The following document contains the criteria that Electromotive Diesels is using in the ANSI X - 12 Transaction Set 830. These implementation guidelines are consistent with the ANSI X - 12 standards and support Electromotive Diesels' business procedures.

The transaction header area contains name and address information, Schedule Agreement number, contact name and phone / fax number, etc. The detail area is made up of essential information such as EMD part number, order quantity, and delivery date.

Each EDI release contains not only new or updated release detail, but includes a list of all outstanding releases. Data excluded from the EDI transaction, such as price and long description, is part of the Electromotive Diesels Schedule Agreement contract.

SEGMENT SEQUENCE FOR HEADING AREA

<u>SEG ID</u>	<u>TITLE</u>	<u>USAGE</u>	<u>MAX USE</u>	<u>LOOP/ REPEAT</u>
ST	TRANSACTION SET HEADER	M	1	-
BFR	BEGINNING SEGMENT FOR PLANNING SCHEDULE	M	1	-
NTE	NOTE/SPECIAL INSTRUCTION	F	100	-
PER	ADMINISTRATIVE COMMUNICATIONS CONTACT	O	3	-
NI	NAME	O	1	200
N2	ADDITIONAL NAME INFO.	O	2	-
N3	ADDRESS INFORMATION	O	2	-
N4	GEOGRAPHIC LOCATION	O	1	-

SEGMENT: ST - TRANSACTION SET HEADER

EMD USAGE: MANDATORY

LEVEL: HEADING

MAX USAGE/LOOPS: 1/NONE

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

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
ST01	143	Transaction Set ID Code	M ID 03/03	Must contain '830'.
ST02	329	Trans Set Control Number	M AN 04/09	A unique number that cannot be repeated within the calendar year.

SEGMENT: BFR - BEGINNING SEGMENT FOR PLANNING SCHEDULE

EMD USAGE: MANDATORY

LEVEL: HEADING

MAX USAGE/LOOPS: 1/NONE

PURPOSE: To indicated the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
BFR01	353	Transaction Set Purpose Code	M ID 02/02	00
BFR02	127	Reference Number	C AN 01/30	Not Used
BFR03	328	Release Number	C AN 01/30	-
BFR04	675	Forecast Type Qualifier	M ID 02/02	DL
BFR05	676	Forecast Quantity Qualifier	M ID 01/01	A
BFR06	373	Date	M DT 06/06	-
BFR07	373	Date	M DT 06/06	-
BFR08	373	Date	M DT 06/06	-
BFR09	373	Date	C DT 06/06	Not Used
BFR10	367	Contract Number	O AN 01/30	-

SPECIAL NOTES:

BFR01 - Only original (00) releases are sent.
 BFR03 and BFR10 contain the EMD Schedule Agreement number.
 BFR06 contains the start date of the Schedule Agreement.
 BFR07 contains the end date of the Schedule Agreement.
 BFR08 contains the date the 830 was created.

SEGMENT: NTE - NOTE/SPECIAL INSTRUCTION

EMD USAGE: OPTIONAL- Its use is restricted to the heading area only.

LEVEL: HEADING

MAX USAGE/LOOPS: 1/NONE

PURPOSE: To transmit information in a free-form format, if necessary, for comment or special instruction.

<u>ELEM</u> <u>ID</u>	<u>ELEM</u> <u>NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
NTE01	363	Note Reference Code	O ID 03/03	GEN
NTE02	003	Free Form Message	M AN 01/60	-

SPECIAL NOTES: None

SEGMENT: PER - ADMINISTRATIVE COMMUNICATIONS
CONTACT

EMD USAGE: OPTIONAL

LEVEL: HEADING

MAX USAGE/LOOPS: 3/NONE

PURPOSE: To identify a person or office to whom administrative communications should be directed.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
PER01	366	Contact Function Code	M ID 02/02	EX
PER02	093	Name	O AN 01/35	-
PER03	365	Communications Nbr Qual	O ID 02/02	TE, FX
PER04	364	Communications Nbr	C AN 07/21	-
PER05	326	Request Reference Nbr	O AN 01/45	Not Used

SPECIAL NOTES:

Both TE and FX contact function codes will be sent when available.

SEGMENT: N1 - NAME

EMD USAGE: OPTIONAL

LEVEL: HEADING

MAX USAGE/LOOPS: 1/200

PURPOSE: To identify a party by type of organization, name, and code.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
N101	098	Entity ID Code	M ID 02/02	CA, MI, SU, ST
N102	093	Name	C AN 01/35	-
N103	066	ID Code Qual	C ID O1/02	1, 92
N104	067	ID Code	C ID 02/17	-

SPECIAL NOTES:

Under normal circumstances, all three Entity ID Codes (MI, SU, ST) will be sent.

SEGMENT: N2 - ADDITIONAL NAME INFORMATION

EMD USAGE: OPTIONAL

LEVEL: HEADING

MAX USAGE/LOOPS: 2/NONE

PURPOSE: To specify additional names of those longer than 35 characters in length.

<u>ELEM</u> <u>ID</u>	<u>ELEM</u> <u>NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
N201	093	Name	M AN 01/35	-
N202	093	Name	O AN 01/35	-

SPECIAL NOTES: None

SEGMENT: N3 - ADDRESS INFORMATION

EMD USAGE: OPTIONAL

LEVEL: HEADING

MAX USAGE/LOOPS: 2/NONE

PURPOSE: To specify the location of the named party.

<u>ID</u>	<u>NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
N301	166	Address	M AN 01/35	-
N302	166	Address	O AN 01/35	-

SPECIAL NOTES: None

SEGMENT: N4 - GEOGRAPHIC LOCATION

EMD USAGE: OPTIONAL

LEVEL: HEADING

MAX USAGE/LOOPS: 1/NONE

PURPOSE: To specify the geographic place of the named party.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
N401	019	City Name	C AN 02/19	-
N402	156	State/Province	C ID 02/02	-
N403	116	Postal Code	O ID 05/09	-
N404	026	Country Code	O ID 02/02	-
N405	309	Location Qual	O ID 01/02	CC
N406	310	Location Identifier	C AN 01/25	-

SPECIAL NOTES:

N405 is only populated (with "CC") when N101 = "MI" and N406 = "CANADA".

SEGMENT SEQUENCE FOR DETAIL AREA

<u>SEG ID</u>	<u>TITLE</u>	<u>USAGE</u>	<u>MAX USE</u>	<u>LOOP/ REPEAT</u>
LIN	ITEM IDENTIFICATION DETAIL	M	1	325
UIT	UNIT DETAIL	M	1	-
PID	PRODUCT/ITEM DESCRIPTION	O	1000	-
SDP	SHIP/DELIVERY PATTERN	M	1	1
FST	FORECAST SCHEDULE	M	500	-
SHF	SHIPPED / RECEIVED INFORMATION	O	99	-

SEGMENT: LIN - ITEM IDENTIFICATION DETAIL

EMD USAGE: MANDATORY

LEVEL: DETAIL

MAX USAGE/LOOPS: 1/325

PURPOSE: To specify basic item identification data.

<u>ELEM</u> <u>ID</u>	<u>ELEM</u> <u>NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
LIN01 Used	350	Assigned Identification	O AN 01/06	Not
LIN02	235	Product/Service ID Qual	M ID 02/02	BP
LIN03	234	Product/Service ID	M AN 01/30	-
LIN04	235	Product/Service ID Qual	O ID 02/02	PD
LIN05	234	Product/Service ID	C AN 01/30	-
LIN06	235	Product/Service ID Qual	O ID 02/02	EC
LIN07	234	Product/Service ID	C AN 01/30	-
LIN08	235	Product/Service ID Qual	O ID 02/02	ZZ
LIN09	234	Product/Service ID	C AN 01/30	-

SPECIAL NOTES:

LIN03 – Buyer / Customer’s material number or part number description

LIN05 – Product’s short description

LIN07 – The ‘EC’ Engineering Change Level applies to the EMD part number. When there is no Engineering Change number, this field will be populated with “--”.

LIN09 – EMD storage location

SEGMENT: UIT - UNIT DETAIL

EMD USAGE: MANDATORY

LEVEL: DETAIL

MAX USAGE/LOOPS: 1/None

PURPOSE: To specify item unit data.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
UIT01	355	Unit of Measure Code	M ID 02/02	-
UIT02	212	Unit Price	C R 01/14	Not Used
UIT03	639	Basis Unit Price Code	O ID 02/02	Not Used

SPECIAL NOTES: None

SEGMENT: PID - PRODUCT/ITEM DESCRIPTION

EMD USAGE: OPTIONAL

LEVEL: DETAIL

MAX USAGE/LOOPS: 1000/None

PURPOSE: To describe a product or process in coded or free-form format.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
PID01	349	Item Description Type	M ID 01/01	F
PID02	750	Product Char Code	O ID 02/03	Not Used
PID03	348	Item Descr Qual	O ID 02/02	Not Used
PID04	751	Product Descr Code	C ID 01/12	Not Used
PID05	352	Description	C AN 01/80	-
PID06	752	Surf/Layer Pos Code	O ID 02/02	Not Used

SPECIAL NOTES: None

SEGMENT: SDP - SHIP/DELIVERY PATTERN
EMD USAGE: MANDATORY
LEVEL: DETAIL
MAX USAGE/LOOPS: 1/1
PURPOSE: To identify specific ship/delivery requirements.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
SDP01	678	Ship/Dely Pttrn Code	M ID 01/02	A
SDP02	679	Ship/Dely Pttrn TM Code	M ID 01/01	F
SDP03	678	Ship/Dely Pttrn Code	O ID 01/02	Not Used
SDP04	679	Ship/Dely Pttrn TM Code	O ID 01/01	Not Used
SDP05	678	Ship/Dely Pttrn Code	O ID 01/02	Not Used
SDP06	679	Ship/Dely Pttrn TM Code	O ID 01/01	Not Used
SDP07	678	Ship/Dely Pttrn Code	O ID 01/02	Not Used
SDP08	679	Ship/Dely Pttrn TM Code	O ID 01/01	Not Used

SPECIAL NOTES: None

SEGMENT: FST - FORECAST SCHEDULE

EMD USAGE: MANDATORY

LEVEL: DETAIL

MAX USAGE/LOOPS: 500/NONE

PURPOSE: To specify the forecasted dates and quantities.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
FST01	380	Quantity	M R 01/10	-
FST02	680	Forecast Qual	M ID 01/01	C, Z, D
FST03	681	Forecast Timing Qual	M ID 01/01	D, W, M
FST04	373	Date	M DT 06/06	Delivery Date
FST05	373	Date	O DT 06/06	Not Used
FST06	374	Date/Time Qual	O ID 03/03	Not Used
FST07	337	Time	C TM 04/04	Not Used
FST08	128	Reference Number Qual	C ID 02/02	Not Used
FST09	127	Reference Number	C AN 01/30	Not Used

SPECIAL NOTES:

FST02 – C = Firm, Z = Tradeoff, D = Horizon/Planning

FST03 – D = Discreet, W = Weekly, M = Monthly

SEGMENT: SHP - SHIPPED / RECEIVED INFORMATION
EMD USAGE: OPTIONAL
LEVEL: DETAIL
MAX USAGE/LOOPS: 99/NONE
PURPOSE: To specify shipment and/or receipt information
.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
SHP01	673	Quantity Qualifier	O ID 02/02	01, 02
SHP02	380	Quantity	C R 01/10	-
SHP03	374	Date/Time Qual	O ID 03/03	050
SHP04	373	Date	C DT 06/06	-
SHP05		Time	O TM 04/04	Not Used
SHP06	373	Date	C DT 06/06	-
SHP07		Time	O TM 04/04	Not Used

SPECIAL NOTES:

The below mapping represents the last quantity delivered, with the corresponding date.

SHP01 = 01
SHP02 = Qty
SHP03 = 050
SHP04 = Date

The below mapping represents the cumulative quantity received. The SHP04/SHP06 are the start and end validity dates for the Scheduling Agreement.

SHP01 = 02
SHP02 = Qty
SHP03 = 050
SHP04 = Start Date
SHP06 = End Date

<u>Code</u>	<u>Name</u>
01	Discrete Quantity
02	Cumulative Quantity

SEGMENT SEQUENCE FOR SUMMARY AREA

<u>SEG ID</u>	<u>TITLE</u>	<u>USAGE</u>	<u>MAX USE</u>	<u>LOOP/ REPEAT</u>
CTT	TRANSACTION TOTALS	M	1	-
SE	TRANSACTION SET TRAILER	M	1	-

SEGMENT: CTT - TRANSACTION TOTALS

EMD USAGE: MANDATORY

LEVEL: SUMMARY

MAX USAGE/LOOPS: 1/NONE

PURPOSE: To transmit a hash total for a specific element in the the transaction set.

<u>ELEM ID</u>	<u>ELEM NBR</u> <u>COMMENTS</u>	<u>NAME</u>	<u>FEATURES</u>
CTT01	354	Number of Line Items	M N0 01/06 Total Number of LIN Seg.
CTT02	347	Hash Total	O R 01/10 Quantities
CTT03	081	Weight	O R 01/08 Not Used
CTT04	355	Unit of Measure Code	C ID 02/02 Not Used
CTT05	183	Volume	O R 01/08 Not Used
CTT06	355	Unit of Measure Code	C ID 02/02 Not Used
CTT07	352	Description	O AN 01/80 Not Used

SPECIAL NOTES: None

SEGMENT: SE - TRANSACTION SET TRAILER

EMD USAGE: MANDATORY

LEVEL: SUMMARY

MAX USAGE/LOOPS: 1/NONE

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

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
SE01	096	Number of Incl Segments	M N0 01/06	-
SE02	329	Tran Set Control Number	M AN 04/09	Must be the same # in ST02 of Transaction Set Header (ST).

INTERCHANGE CONTROL STRUCTURE

SEGMENT: ISA - INTERCHANGE CONTROL HEADER
PURPOSE: To define the start of an interchange of one or more functional groups and interchange- related control segments.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
ISA01	I01	Authorize Info Qual	M ID 02/02	00
ISA02	I02	Authorize Information	M AN 10/10	(Spaces)
ISA03	I03	Security Info Qual	M ID 02/02	00
ISA04	I04	Security Information	M AN 10/10	(Spaces)
ISA05	I05	Interchange ID Qual	M ID 02/02	ZZ
ISA06	I06	Interchange Sender ID	M ID 15/15	62002
ISA07	I05	Interchange ID Qual	M ID 02/02	(Receiver's)
ISA08	I07	Interchange Receiver ID	M ID 15/15	(Receiver's)
ISA09	I08	Interchange Date	M DT 06/06	-
ISA10	I09	Interchange Time	M TM 04/04	-
ISA11	I10	Interchange Standard ID	M ID 01/01	U
ISA12	I11	Interchange Version ID	M ID 05/05	00200
ISA13	I12	Interchange Control Nbr	M N0 09/09	-
ISA14	I13	Acknowledgment Request	M ID 01/01	O
ISA15	I14	Test Indicator	M ID 01/01	P
ISA16	I15	Sub- element Separator	M AN 01/01	~

SEGMENT: IEA - INTERCHANGE CONTROL TRAILER

PURPOSE: To define the end of an interchange of one or more functional groups and interchange- related control segments.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
IEA01	I16	Number of Incl Groups	M N0 01/05	-
IEA02	I12	Interchange Control Nbr	M N0 09/09	-

CONTROL SEGMENTS

SEGMENT: GS - FUNCTIONAL GROUP HEADER

PURPOSE: To indicate the beginning of a functional group and to provide control identification.

<u>ELEM ID</u>	<u>ELEM NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
GS01	479	Functional ID Code	M ID 02/02	PS
GS02	142	Application Sender's ID	M ID 02/12	62002
GS03	124	Application Receiver's ID	M ID 02/12	(Receiver's)
GS04	029	Group Date	M DT 06/06	-
GS05	030	Group Time	M TM 04/04	-
GS06	028	Group Control Nbr	M N0 01/09	-
GS07	455	Responsible Agency Code	M ID 01/02	X
GS08	480	Ver/Rel/Ind ID Code	M ID 01/12	02003

SEGMENT: GE- FUNCTIONAL GROUP TRAILER
PURPOSE: To indicate the end of a functional group and to provide control information.

<u>ELEM</u> <u>ID</u>	<u>ELEM</u> <u>NBR</u>	<u>NAME</u>	<u>FEATURES</u>	<u>COMMENTS</u>
GE01	097	Number of Included Sets	M NO 01/06	-
GE02	028	Group Control Number	M NO 01/09	-

COMMUNICATION CRITERIA

TRADING PARTNER IDENTIFICATION

62002	Electromotive Diesels
???	Supplier Identifier

FIELD SEPARATORS

* (asterisk – Hex 2A)	Element Separator
~ (tilde – Hex 7E)	Sub-Element Separator
(vertical bar – Hex 7C)	Segment Separator

EDS*ELIT Location Codes

CSV	Electromotive Diesels
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DATA ELEMENT DICTIONARY

- 066 ID CODE QUALIFIER**
92 Assigned By Buyer
- 098 ENTITY ID CODE**
CA Carrier
MI Planning Schedule/Material Release Issuer
SU Supplier/ Manufacturer
ST Ship To
- 235 PRODUCT/SERVICE ID QUALIFIER**
BP Buyer's Part Number
EC Engineering Change Level (Buyer's Part Number)
PD Part Number Description
VP Vendor's (Seller's) Part Number
- 309 LOCATION QUALIFIER**
CC Country
- 349 ITEM DESCRIPTION TYPE**
F Free Form
- 353 TRANSACTION SET PURPOSE CODE**
00 Original
- 365 COMMUNICATIONS NUMBER QUALIFIER**
TE Telephone
FX Facsimile
- 366 CONTACT FUNCTION CODE**
EX Expediter
- 455 RESPONSIBLE AGENCY CODE**
X ASC X-12
- 479 FUNCTIONAL IDENTIFIER CODE**
PS Planning Schedule with Release Capability
- 675 FORECAST TYPE QUALIFIER**
DL Delivery Based
- 676 FORECAST QUANTITY QUALIFIER**
A Actual Discrete Quantities
- 678 SHIP/DELIVERY PATTERN CODE**
A Monday through Friday
- 679 SHIP/DELIVERY PATTERN TIME CODE**
F As Directed (by ship date)
- 680 FORECAST QUALIFIER**
C Firm
D Planning

Z Tradeoff

681 FORECAST TIMING QUALIFIER

D Discrete

M Monthly

W Weekly

DATA ELEMENT DICTIONARY

ISA01 AUTHORIZATION INFORMATION QUALIFIER

00 No Authorization Information Present (No meaningful information in I02)

ISA03 SECURITY INFORMATION QUALIFIER

00 No Security Information Present (No meaningful information in I04)

ISA05 INTERCHANGE ID QUALIFIER

01 Duns Number
ZZ Mutually Defined