International Truck and Engine Corporation

TM

TRUCK MANUFACTURING

Production Sequence -- EDI-866

BUSINESS PROCESS GUIDE

Version 004010

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INTERNATIONAL EDI 866 Business Process Guide	Document Number: **PUR-2042**
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Written by: **Dan Walker/Charlene McGill /Tim Bentz**	*Reviewed/ Approved by:* **Charlene McGill** **Dan Walker**	
		This Document Applies to: **X Truck Engine Service Parts**

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1.   Transaction Definition

Type: Regenerative with each message

Frequency: Variable -- Parameter Controlled

EDI Transaction: ANSI-X12 / AIAG-866

Application:

The **Production Sequence -- EDI-866** Transaction Set (Version 004010) will be used to identify component requirements in actual production build sequence. This transaction will also communicate "Production Linking" requirements which identify multiple part numbers linked to specific assembly lines, sequence number and job number.

2.   Business Procedure Overview

The **Production Sequence -- EDI-866** will be used by INTERNATIONAL to identify component requirements in actual production build sequence for the Supplier/INTERNATIONAL business relationship.

ABR (Attribute Based Release) Components, which must be managed in a sequence environment, will be addressed in this document. ABR is a Module Assembly Process (expressed by a grouping of Feature Part Numbers) enabling INTERNATIONAL and our suppliers to build, ship, receive, invoice, and control inventory at a specific job number level without the assignment of a top-level identifier within the Bill of Material.

- A feature could be a tangible component, or it could represent installations or a reference to a parts list.
- Features are grouped into categories where each category has one or more features (attributes/options) associated with it.
- Combining one feature from each category will create a compatible valid configuration.
- An unique identifier - such as the job number - is required and transmitted to facilitate control of the configuration for a given product.
  - o This unique identifier must be maintained in the system to be referenced for the life of the vehicle.
- A Module Reference Number, that can be treated as a unique identifier, will also be transmitted to facilitate control of the configuration.

Modules or Kits, which will also be explained in this document, are considered a configuration of an assembly comprised of discrete parts and/or sub-assemblies to reduce complexity on the assembly line.

For suppliers that perform sub-assembly for INTERNATIONAL the EDI-866 Process Information with Assembly Ids and various assembly/process information will be used to communicate the assembly drawing numbers and settings associated with each Job Number. For Process Data specific examples and explanations, please refer to the Process Data 866 Business Process Guide.

2.1. *Frequency and Responsiveness*

The **Production Sequence -- EDI-866** will be transmitted to the supplier in nightly batch. The supplier is expected to retrieve the transaction set each business day and to react accordingly with regards to any changes reflected from the prior transaction set. The transaction set will be made available on a daily basis in the Nightly Batch Process.

2.2. *Availability*

INTERNATIONAL   will process the **Production Sequence -- EDI-866** transactions on demand and the transaction will be delivered in the nightly batch process. Acknowledgment response (EDI-997) is mandatory and will be processed as defined in the following chart:

INTERNATIONAL EDI Transaction Processing Window

	From	To
Monday - Friday	00:00	23:00
Saturday	00:00	17:30
Sunday	22:00	00:00

All Times are for the Central Time Zone.

Any EDI transactions submitted to INTERNATIONAL during a downtime will remain in INTERNATIONAL's mailbox until the process is resumed. Any transactions generated by INTERNATIONAL outside of the processing windows will be suspended and delivered at the next available window.

2.3. *Off Hours*

For Off Hours Support, INTERNATIONAL provides a voice mail system on the EDI Hot Line number and the supplier's Plant EDI Coordinator. Contact Names and Phone Numbers are available on International's website www.internationalsupplier.com. Suppliers should leave a voice-message indicating the problem and any related information available about the problem along with a contact and telephone number.

Any EDI transactions that are sent to INTERNATIONAL by the supplier will be retained in INTERNATIONAL's mailbox until INTERNATIONAL's system becomes available.   Any EDI transactions that INTERNATIONAL has to deliver to the supplier will be retained and distributed as soon as INTERNATIONAL's system becomes available.

Special Note: If, for any reason, 866 data is unavailable during the normal processing hours, it is imperative that Suppliers contact the applicable INTERNATIONAL EDI Coordinator. Contact Names and phone numbers are available on INTERNATIONAL's website, www.internationalsupplier.com.

2.4. INTERNATIONAL *Expectations of Supplier*

INTERNATIONAL expects the Supplier to retrieve each **Production Sequence -- EDI-866** in a timely manner. The supplier should process the transaction and forward it to all appropriate disciplines.

2.5. *Impact on* INTERNATIONAL*'s Supplier Performance Rating System*

Failure to acknowledge an accurate **Production Sequence -- EDI-866** in a timely manner (1 business day) with an EDI-997 will result in a penalty on the Supplier Performance Evaluation.

Example of EDI 866 AIAG Formatted Data - PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION

3.   EDI Transaction and Business Examples

Example of EDI 866 AIAG Formatted Data for PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENTS	DATA CONTENT	EXPLANATION
ST*866*0001 N/L	ANSI Transaction set 866 Transaction ID number 0002	ANSI transaction set 866, transaction ID Number 0001
BSS*05*R2617*19990627*DL*19990628*19990731*002ASM12345X1990627****A N/L	Replacement Document R2617 Dated 6/27/1999, Delivery Based Horizon from 6/28/1999 to 7/31/1999, Release Number 002ASM12345X1990627, Actual discrete quantities.	Replacement Document R2617, Dated 6/27/1999, Delivery Based Horizon from 6/28/1999 to 7/31/1999, Release Number 002ASM12345X1990627, Actual Discreet Quantities
UIT*PC N/L	Unit of Measure	Indicates that Unit of Measure is pieces.
N1*ST**92*002ASM N/L	Ship to Location	Indicates Ship-to location is Springfield Assembly Plant.
N1*SU**92*12345X1 N/L	Supplier/Manufacturer	The INTERNATIONAL Supplier Code 12345X1.
REF*DK*K999 N/L	Indicates Delivery Dock	Indicates the Delivery Dock is K999 at the Assembly Plant
DTM*002**0700*ES*D8*19990628 N/L	Delivery Date and Optional Time	Requested delivery date is 6/28/1999. Requested delivery time is 07:00 EST
QTY*01*1 N/L	Quantity type	Discrete Quantity of 1 (each of following products).
REF*LF*1 N/L	Indicates Assembly Line	Indicates this item used on Assembly Line #1.

Example of EDI 866 AIAG Formatted Data - PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION
LIN**JS*001*RS*5676*BP*123456C1* JN*608566*LA*5400*CG*326D_{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5676, INTERNATIONAL Part Number is 123456C1, Job Number 608566, Labor Group Number 5400 and Commodity Group 326D.
LIN**JS*002*RS*5677*BP*123457C1* JN*608567*LA*6352*CG*326D_{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 002, Lineset Number 5677, INTERNATIONAL Part Number is 123457C1, Job Number 608567, Labor Group 6352 and Commodity Group 326D.
DTM*002**1000*ES*D8*19990628 _{N/L}	Delivery Date and **Optional** Time	Delivery date requested on 6/28/1999. Delivery time is 10:00 EST
QTY*01*1 _{N/L}	Quantity Type	Ship Discrete Quantity of 1 (each of the following products)
REF*LF*2 _{N/L}	Indicates Assembly Line	Indicates this item used on Assembly Line Number 2.
LIN**JS*001*RS*6355*BP*125977C91 *JN*507399*LA*5400*CG*326D_{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 6355, INTERNATIONAL Part Number is 125977C91, Job Number 507399, Labor Group 5400 and Commodity Group 326D.
LIN**JS*002*RS*6356*BP*236391C91 *JN*507400*LA*6352*CG*326D_{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 002, Lineset Number 6356, INTERNATIONAL Part Number is 236391C91, Job Number 507400, Labor Group 6352 and Commodity Group 326D.
QTY*01*4_{N/L}	Quantity Override	Overrides quantity at DTM Level.
CTT*2 _{N/L}	Number of DTM Segments	Total Number of DTM Seqments is 2.
SE*19*0001 _{N/L}	Segments Transmitted	19 Segments Transmitted in Transaction 0001.

Example of EDI 866 AIAG Formatted Data - ABR PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION
ST*866*0001 N/L	ANSI Transaction set 866 Transaction ID number 0002	ANSI transaction set 866, transaction ID Number 0001
BSS*05*R2617*19990627*DL*19990628 *19990731*002ASM12345X1990627**** A N/L	Replacement Document R2617 Dated 6/27/1999, Delivery Based Horizon from 6/28/1999 to 7/31/1999, Release Number 002ASM12345X1990627, Actual discrete quantities.	Replacement Document R2617, Dated 6/27/1999, Delivery Based Horizon from 6/28/1999 to 7/31/1999, Release Number 002ASM12345X1990627, Actual Discreet Quantities
UIT*PC N/L	Unit of Measure	Indicates that Unit of Measure is pieces.
N1*ST**92*002ASM N/L	Ship to Location	Indicates Ship-to location is Springfield Assembly Plant.
N1*SU**92*12345X1 N/L	Supplier/Manufacturer	The INTERNATIONAL Supplier Code 12345X1.
REF*DK*K999 N/L	Indicates Delivery Dock	Indicates the Delivery Dock is K999 at the Assembly Plant
DTM*002**0700*ES*D8*19990628 N/L	Delivery Date and **Optional** Time	Requested delivery date is 6/28/1999. Requested delivery time is 07:00 EST
QTY*01*1 N/L	Quantity type	Discrete Quantity of 1 (each of following products) unless otherwise stipulated at the LIN level.
REF*LF*1 N/L	Indicates Assembly Line	Indicates this item used on Assembly Line #1.
LIN**JS*001*RS*5676***PU*6DBB1D8C***JN*608566 N/L	Line Sequence Number, Lineset Number, Module Reference Number (MRN), Job Number.	All discrete part numbers referencing Line Sequence Number 001, Lineset Number 5676, can be referenced by INTERNATIONAL MRN 6DBB1D8C, within Job Number 608566.
LIN**JS*001*RS*5676***BP*1234567F91***JN*608566*LA*5400*CG*326D N/L	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5676, INTERNATIONAL Part Number is 1234567F91, Job Number 608566, Labor Group 5400 and Commodity Group 326D.

Example of EDI 866 AIAG Formatted Data - ABR PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION
LIN**JS*001*RS*5676***BP*1234578F91***JN*608566*LA*5400 *CG*326D _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5676, INTERNATIONAL Part Number is 1234578F91, Job Number 608566, Labor Group 5400 and Commodity Group 326D.
LIN**JS*001*RS*5676***BP*1234579F91***JN*608566*LA*5400 *CG*326D _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5676, INTERNATIONAL Part Number is 1234579F91, Job Number 608566, Labor Group 5400 and Commodity Group 326D.
QTY*01*4 _{N/L}	Quantity Override	Overrides quantity at DTM Level.
DTM*002**1000*ES*D8*19990629 _{N/L}	Delivery Date and Optional Time	Delivery date requested on 6/29/1999. Delivery time is 10:00 EST
QTY*01*1 _{N/L}	Quantity type	Discrete Quantity of 1 (each of following products) unless otherwise stipulated at the LIN level.
REF*LF*1 _{N/L}	Indicates Assembly Line	Indicates this item used on Assembly Line #1.
LIN**JS*002*RS*5677***PU*8BC20C86***JN*608569 _{N/L}	Line Sequence Number, Lineset Number, Module Reference Number, Job Number.	All discrete part numbers referencing Line Sequence Number 002, Lineset Number 5677, can be referenced by INTERNATIONAL MRN 8BC20C86, within Job Number 608569.
LIN**JS*002*RS*5677***BP*1234590F91***JN*608569*LA*5400 *CG*326D _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 002, Lineset Number 5677, INTERNATIONAL Part Number is 1234580F91, Job Number 608569, Labor Group 5400 and Commodity Group 326D.
QTY*01*2 _{N/L}	Quantity Override	Overrides quantity at DTM Level.
LIN**JS*002*RS*5677***BP*1234501F91***JN*608569*LA*5400 *CG*326D _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 002, Lineset Number 5677, INTERNATIONAL Part Number is 1234501F91, Job Number 608569, Labor Group 5400 and Commodity Group 326D.

Example of EDI 866 AIAG Formatted Data - ABR PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION
LIN**JS*002*RS*5677***BP*1234602F91***JN*608569*LA*5400 *CG*326D _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 002, Lineset Number 5677, INTERNATIONAL Part Number is 1234602F91, Job Number 608569, Labor Group 5400 and Commodity Group 326D.
DTM*002**1000*ES*D8*19990628 _{N/L}	Delivery Date and Optional Time	Delivery date requested on 6/28/1999. Delivery time is 10:00 EST
QTY*01*1 _{N/L}	Quantity type	Discrete Quantity of 1 (each of following products) unless otherwise stipulated at the LIN level.
REF*LF*2 _{N/L}	Indicates Assembly Line	Indicates this item used on Assembly Line #2.
LIN**JS*001*RS*5755***PU*2FF21A2C***JN*608541 _{N/L}	Line Sequence Number, Lineset Number, Module Reference Number, Job Number.	All discrete part numbers referencing Line Sequence Number 002, Lineset Number 5755, can be referenced by INTERNATIONAL MRN 2FF21A2C, within Job Number 608541.
LIN**JS*001*RS*5755***BP*3545450F91***JN*608541*LA*6352 *CG*175A _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5755, INTERNATIONAL Part Number is 3545450F91, Job Number 608541, Labor Group 6352 and Commodity Group 175A.
LIN**JS*001*RS*5755***BP*3545701F91***JN*608541*LA*6352 *CG*175A _{N/L}	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5755, INTERNATIONAL Part Number is 3545701F91, Job Number 608541, Labor Group 6352 and Commodity Group 175A.
QTY*01*2 _{N/L}	Quantity Override	Overrides quantity at DTM Level.
CTT*3 _{N/L}	Number of DTM Segments	Total Number of DTM Seqments is 3.
SE*31*0001 _{N/L}	Segments Transmitted	31 Segments Transmitted in Transaction 0001.

ABR 866 PRODUCTION SEQUENCE DATA NOTES:

1) Attribute Part Numbers are typically suffixed by "F91", "F92", "F93" and so on.
2) Attribute Parts cannot stand alone as purchased finished commodities.
3) ABR Commodities are not defined by top-level part numbers, but are grouped as a configuration specific to a job number.
   a) The Module Reference Number is not maintained in INTERNATIONAL's Bill of Material.
   b) The Module Reference Number is a system-generated number, unique to the grouping of attributes that form a configuration specific to a Job Number.
      i) Any change to the attribute content of the specified job number will cause a new Module Reference Number to be generated.
      ii) Any change to the requirement quantity of a particular attribute, of a specified job number, will cause a new Module Reference Number to be generated.
      iii) It is possible that the Sequence Number and/or Lineset Number could change <u>without</u> changing the MRN or restating the configuration details.
      iv) The same MRN will be assigned to multiple jobs with identical configurations.   Do not create a one-to-one relationship between the Job Number and the MRN.
      v) Another way to to describe the MRN might be like a "Version Number".
4) Suppliers shipping ABR commodities must transmit "Job Level" 856 ASN's.
5) The Module Reference Number must be transmitted along with the specific Job Number and applicable quantities. Please refer to the 856 Business Process Guide for detailed explanations, available on INTERNATIONAL's website: www.internationalsupplier.com.
   a) INTERNATIONAL will explode the content of the Module Reference Number contained in the 856 data to ascertain the applicable attribute content specific to the job number.
   b) The attribute content will be applicably aggregated and the Receipt Record will be used to create the ERS Record forwarded to **INTERNATIONAL FINANCE** for the payment process.
6) Suppliers shipping ABR commodities to the Escobedo Assembly Plant will be expected to utilize the Module Reference Number in their Customs Invoices and/or applicable paperwork accompanying the load to facilitate border crossing processes.
   a) These Suppliers will be expected to transmit "Job Level" 856 ASN's.
   b) Suppliers must explode the content of the Module Reference Number to aggregate the attributes within their own applications to generate their Invoices.
7) The human readable verbiage "ABR Assembly" contained on the ABR Part Label, must be replaced with the Module Reference Number. Please refer to the D-13 Packaging Guide for additional information.

Example of EDI 866 AIAG Formatted Data - MODULE OR KIT PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION
ST*866*0001 N/L	ANSI Transaction set 866 Transaction ID number 0002	ANSI transaction set 866, transaction ID Number 0001
BSS*05*R2617*19990627*DL*19990628*19990731*002ASM12345X1990627****A N/L	Replacement Document R2617 Dated 6/27/1999, Delivery Based Horizon from 6/28/1999 to 7/31/1999, Release Number 002ASM12345X1990627, Actual discrete quantities.	Replacement Document R2617, Dated 6/27/1999, Delivery Based Horizon from 6/28/1999 to 7/31/1999, Release Number 002ASM12345X1990627, Actual Discreet Quantities
UIT*PC N/L	Unit of Measure	Indicates that Unit of Measure is pieces.
N1*ST**92*002ASM N/L	Ship to Location	Indicates Ship-to location is Springfield Assembly Plant.
N1*SU**92*12345X1 N/L	Supplier/Manufacturer	The INTERNATIONAL Supplier Code 12345X1.
REF*DK*K999 N/L	Indicates Delivery Dock	Indicates the Delivery Dock is K999 at the Assembly Plant
DTM*002**0700*ES*D8*19990628 N/L	Delivery Date and **Optional** Time	Requested delivery date is 6/28/1999. Requested delivery time is 07:00 EST
QTY*01*1 N/L	Quantity type	Discrete Quantity of 1 (each of following products) unless otherwise stipulated at the LIN level.
REF*LF*1 N/L	Indicates Assembly Line	Indicates this item used on Assembly Line #1.
LIN**JS*001*RS*5101***PU*914C7753***JN*508665 N/L	Line Sequence Number, Lineset Number, Module Reference Number (MRN), Job Number.	All discrete part numbers referencing Line Sequence Number 001, Lineset Number 5101, can be referenced by INTERNATIONAL MRN 914C7753, within Job Number 508665.
LIN**JS*001*RS*5101***BP*1234567C91***JN*508665*LA*5400*CG*326D N/L	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5101, INTERNATIONAL Part Number is 1234567F91, Job Number 508665, Labor Group 5400 and Commodity Group 326D.

Example of EDI 866 AIAG Formatted Data - MODULE OR KIT PRODUCTION SEQUENCE
See Implementation Guide for Complete Details

EDI DATA ELEMENT	DATA CONTENT	EXPLANATION
LIN**JS*001*RS*5101***BP*3521452C91** *JN*508665*LA*5400 *CG*326D N/L	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5101, INTERNATIONAL Part Number is 3521452C91, Job Number 508665, Labor Group 5400 and Commodity Group 326D.
LIN**JS*001*RS*5101***BP*3522422C1*** JN*508665*LA*5400 *CG*326D N/L	Line Sequence Number, Lineset Number, Buyers Part Number, Job Number, Labor Group and Commodity Group.	Line Sequence Number 001, Lineset Number 5101, INTERNATIONAL Part Number is 3522422C1, Job Number 508665, Labor Group 5400 and Commodity Group 326D.
QTY*01*4 N/L	Quantity Override	Overrides quantity at DTM Level.
CTT*1 N/L	Number of DTM Segments	Total Number of DTM Seqments is 1.
SE*16*0001 N/L	Segments Transmitted	16 Segments Transmitted in Transaction 0001.

MODULE OR KIT 866 PRODUCTION SEQUENCE NOTES:

1) The part content specific to a job number can be discrete part numbers, otherwise used as purchased finished.
2) When selected as a module, if the part content specific to a job number is greater than one, International will transmit a Module Reference Number.
3) Suppliers will be expected to treat the data as described in the ABR Production Sequence process, previously explained.

4.   Definition of Terms

Plant Code

002ASM	--	Springfield Assembly Plant
005	--	Cab Assembly Stamping
009	--	Conway Bus Plant
011	--	Blue Diamond Truck
014	--	Tulsa Bus Plant
020	--	Chatham Assembly Plant
062	--	Garland Assembly Plant
065	--	Escobedo Assembly Plant
078	--	PEC Facility
xxxxxx	--	Designated Remote Receiving Location

5.   INTERNATIONAL Specific Codes

There are no INTERNATIONAL specific codes for this transaction set.

6.   Conformance Testing Procedures

Upon readiness INTERNATIONAL will transmit an actual transaction set of the supplier's related schedule.