



**PRODUCTION LINE-SEQUENCE**

Volvo's Implementation Guidelines  
**866 PRODUCTION SEQUENCE**  
Version 201410-13; Revision 03

# 866 Production Sequence

Functional Group ID=**SQ**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Production Sequence Transaction Set (866) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for the receiver of goods to request the order in which shipments of goods arrive at one or more locations, or to specify the order in which the goods are to be unloaded from the conveyance method, or both. This specifies the sequence in which the goods are to enter the materials handling process, or are to be consumed in the production process, or both. This transaction set shall not be used to authorize labor, materials, or other resources. This transaction set shall not be used to revise any product characteristic specification.

## Notes:

**This transaction set is utilized by both the Mack and Volvo brand truck groups to communicate line-sequenced part information. These transactions are transmitted on a daily basis by plant and build date.**

	<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>
M	010	ST	Transaction Set Header	M	1		
M	020	BSS	Beginning Segment for Shipping Schedule/Production Sequence	M	1		
			LOOP ID - N1			>1	
M	040	N1	Name	M	1		
			LOOP ID - DTM			100	
M	110	DTM	Date/Time Reference	M	1		
			LOOP ID - LIN			>1	
M	150	LIN	Item Identification	M	1		
	170	QTY	Quantity	O	1		
M	195	CTT	Transaction Totals	M	1		n1
M	200	SE	Transaction Set Trailer	M	1		

## Transaction Set Notes

1. The number of line items (CTT01) is the accumulation of the number of DTM segments. If used, hash total (CTT02) is the sum of the value of quantity (QTY02) for each QTY segment.

**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  
**Syntax Notes:**  
**Semantic Notes:** 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).

**Comments:**

**Notes:**

**EXAMPLE :**  
**ST\*866\*1234562@**

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set	M ID 3/3
			<u>866</u> Production Sequence	
M	ST02	329	Transaction Set Control Number 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:** **BSS** Beginning Segment for Shipping Schedule/Production Sequence  
**Position:** 020  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To transmit identifying numbers, dates, and other basic data relating to the transaction set  
**Syntax Notes:** 1 At least one of BSS07 or BSS08 is required.  
**Semantic Notes:** 1 Use BSS02 to indicate a document number.  
 2 Use BSS03 to indicate the date of this document.  
 3 Use BSS05 to indicate the schedule horizon start date (the date when the schedule begins).  
 4 Use BSS06 to indicate the schedule horizon end date (the date when the schedule ends).  
 5 BSS08 is the identifying number for a forecast assigned by the orderer/purchaser.

**Comments:**

**Notes:** **BSS\*05\*123456\*20100107\*DL\*20100108\*20100127@**

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	BSS01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set <b>05</b> <b>Replace</b>	M ID 2/2
M	BSS02	127	<b>Reference Identification</b> OEM assigned identification number RJ/Zero filled <b>PARMA</b> (PARTner MAster identification)	M N 6/6
M	BSS03	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8
M	BSS04	675	<b>Schedule Type Qualifier</b> Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast <b>JS</b> <b>Buyer Production Sequence Schedule</b>	M ID 2/2
M	BSS05	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8
M	BSS06	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8

**Segment:** **N1** Name  
**Position:** 040  
**Loop:** N1 Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:**  
 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.  
**Semantic Notes:**  
**Comments:**  
 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.  
 2 N105 and N106 further define the type of entity in N101.  
**Notes:**

**EXAMPLE :**  
**N1\*ST\*\*92\*4287@**  
**N1\*SF\*\*92\*23346@**

**Data Element Summary**

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
M	N101	98	<b>Entity Identifier Code</b>	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SF Ship From	
			ST Ship To	
	N102	93	<b>Name</b>	X AN 1/60
			Free-form name	
	N103	66	<b>Identification Code Qualifier</b>	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			92 Assigned by Buyer or Buyer's Agent	
	N104	67	<b>Identification Code</b>	X AN 2/80
			Code identifying a party or other code	
			<b>"SF" VOLVO OR MACK ASSIGNED SUPPLIER CODE.</b>	
			<b>"ST" VOLVO OR MACK ASSIGNED PLANT CODE.</b>	

**Segment:** **DTM** Date/Time Reference  
**Position:** 110  
**Loop:** DTM Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.  
 2 If DTM04 is present, then DTM03 is required.  
 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:**

**EXAMPLE :**

```
DTM*002*20090310@
LIN**LS*001*JS*H090310001*CF*007679*ON*053113***BP*20992162@
QTY*01*10@
LIN**LS*002*JS*H090310002*CF*005038*ON*052761***BP*20992162@
QTY*01*10@
DTM*002*20090311@
LIN**LS*001*JS*H090311001*CF*007919*ON*053328***BP*20357238@
QTY*01*8@
LIN**LS*002*JS*H090311002*CF*007919*ON*053328***BP*20992162@
QTY*01*2@
DTM*002*20090312@
LIN**LS*001*JS*H090312001*CF*010260*ON*053556***BP*20446232@
QTY*01*8@
LIN**LS*002*JS*H090312002*CF*051267*ON*056880***BP*23488871@
QTY*01*3@
```

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	DTM01	Date/Time Qualifier	M ID 3/3
		Code specifying type of date or time, or both date and time	
		002 Delivery Requested	
	DTM02	Date	X DT 8/8
		Date expressed as CCYYMMDD	

**NOTE: This element is repeated for each date change in line-sequence order.**

**Segment:** **LIN** Item Identification  
**Position:** 150  
**Loop:** LIN Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify basic item identification data  
**Syntax Notes:** 1 If either LIN04 or LIN05 is present, then the other is required.  
 2 If either LIN06 or LIN07 is present, then the other is required.  
 3 If either LIN08 or LIN09 is present, then the other is required.  
 4 If either LIN10 or LIN11 is present, then the other is required.  
 5 If either LIN12 or LIN13 is present, then the other is required.  
 6 If either LIN14 or LIN15 is present, then the other is required.  
 7 If either LIN16 or LIN17 is present, then the other is required.  
 8 If either LIN18 or LIN19 is present, then the other is required.  
 9 If either LIN20 or LIN21 is present, then the other is required.  
 10 If either LIN22 or LIN23 is present, then the other is required.  
 11 If either LIN24 or LIN25 is present, then the other is required.  
 12 If either LIN26 or LIN27 is present, then the other is required.  
**Semantic Notes:** 1 LIN01 is the line item identification  
**Comments:** 1 See the Data Dictionary for a complete list of IDs.  
 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item.  
 For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.  
**Notes:** **EXAMPLE :** **MACK :**  
**(MACK)** LIN\*\*JS\*W090107004\*CF\*229934\*ON\*056880\*AB\*4210\*BP  
 \*3180936\*PO\*M41139-567\*BO\*MACK RED 1109\*PS\*LEFT  
 SIDE\*A3\*D26014\*TP\*35@  
**(VOLVO)** **VOLVO :**  
 LIN\*\*LS\*001\*JS\*V090603035\*CF\*289151\*ON\*006138\*AB\*  
 4318\*BP\*20511826\*PO\*M284408\*\*\*PS\*RH 15 GALLONS

**Data Element Summary**

Ref.	Des.	Data Element	Name	Attributes
M	LIN02	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		<b>(VOLVO ONLY)</b>	<b>LS</b> Load Sequence Number	
M	LIN03	234	Product/Service ID	M AN 10/10
			Identifying number for a product or service <b>VOLVO LINE SEQUENCE NUMBER.</b> <b>LS = 001, 002, 003, 004, ETC.</b>	
M	LIN04	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			<b>JS</b> Job Sequence Number	
M	LIN05	234	Product/Service ID	M AN 10/10
			Identifying number for a product or service	
		<b>FORMAT</b>	<b>IS :</b> <b>XYMMDDNNN</b>	
		<b>X</b>	<b>= PLANT-LINE INDICATOR CODE</b>	
		<b>XYMMDD</b>	<b>= YEAR, MONTH AND DAY</b>	
		<b>NNN</b>	<b>= MACK LINE SEQUENCE NUMBER</b>	

LIN06	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<b><u>CF</u> Chassis Serial Number</b>		
LIN07	234	<b>Product/Service ID</b>	X	AN 6/6 Left zero filled
		Identifying number for a product or service		
		<b>CHASSIS NUMBER</b>		
LIN08	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<b>(MACK) <u>ON</u> General Service Order (GSO)</b>		
		<b>(VOLVO) <u>ON</u> Rotation Number</b>		
LIN09	234	<b>Product/Service ID</b>	X	AN 6/6 Left zero filled
		Identifying number for a product or service		
		<b>GSO or Rotation Number</b>		
LIN10	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
(VOLVO ONLY)		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<b><u>AB</u> Assembly</b>		
LIN11	234	<b>Product/Service ID</b>	X	AN 4/4
(VOLVO ONLY)		Identifying number for a product or service		
		<b>ASSEMBLY POINT (VOLVO ONLY)</b>		
LIN12	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<b><u>BP</u> Buyer's Part Number</b>		
LIN13	234	<b>Product/Service ID</b>	X	AN 1/17
		Identifying number for a product or service		
		<b>BUYER'S PART NUMBER</b>		
LIN14	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
(VOLVO ONLY)		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<b><u>PO</u> Purchase Order Number</b>		
LIN15	234	<b>Product/Service ID</b>	X	AN 1/10
(VOLVO ONLY)		Identifying number for a product or service		
		<b>PUCHASE ORDER NUMBER (VOLVO ONLY)</b>		
LIN16	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<b><u>BO</u> Buyers Color</b>		
LIN17	234	<b>Product/Service ID</b>	X	AN 1/40
		Identifying number for a product or service		
		<b>BUYER'S COLOR</b>		
LIN18	235	<b>Product/Service ID Qualifier</b>	X	ID 2/2
		Code identifying the type/source of the descriptive number used in		



Product/Service ID (234)

**PS** Position

**NOTE: Only used for parts that may need positioning clarification.**

LIN19 234 Product/Service ID X AN 1/20

**POSITION OF PART EXAMPLES:**

LH  
 LH 30 GALLONS  
 LEFT SIDE  
 BS  
 BOTH SIDES  
 SECOND INTERMED AXLE  
 FRONT AXLE

LIN20 235 Product/Service ID Qualifier X ID 2/2

**(MACK ONLY)**

Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**A3** Locally Assigned Control Number  
 See format below.

LIN21 234 Product/Service ID X AN 6/6

**(MACK ONLY)**

Identifying number for a product or service

**A3 QUALIFIER FORMAT FOR PAINT OFF-SET =  
 MDD01N**  
 M = 1 CHARACTER MONTH (1-9, O, N & D)  
 DD = DAY OF MONTH  
 01 = LITERAL  
 N = NUMBER OF DAYS FOR OFFSET

LIN22 235 Product/Service ID Qualifier X ID 2/2

**(Tire vendor only)**

Code identifying the type/source of the descriptive number used in Product/Service ID (234)

**TP** Product Type Code

LIN23 234 Product/Service ID X AN 1/3

**(Tire vendor only)**

Identifying number for a product or service

**TIRE PRESSURE**

**Segment:** QTY Quantity  
**Position:** 170  
**Loop:** LIN Mandatory  
**Level:**  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify quantity information  
**Syntax Notes:**  
 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.  
**Semantic Notes:**  
 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**  
**Notes:**

**EXAMPLE :**  
**QTY\*01\*1\*EA@**

**Data Element Summary**

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
M	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
		<u>01</u>	<b>Discrete Quantity</b>	
	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	
	QTY03	C001	<b>Composite Unit of Measure</b>	
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
M	C00101	355	<b>Unit or Basis for Measurement Code</b>	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		<u>EA</u>	<u>Each</u>	

**Segment:** **CTT** Transaction Totals  
**Position:** 195  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Syntax Notes:** 1 If either CTT03 or CTT04 is present, then the other is required.  
 2 If either CTT05 or CTT06 is present, then the other is required.  
**Semantic Notes:**  
**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.  
**Notes:** **EXAMPLE :**  
**CTT\*25@**

**Data Element Summary**

Ref.	Data		Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	
M	CTT01	354 Number of Line Items	M N0 1/6
		Total number of line items in the transaction set	
	CTT02	347 Hash Total	O R 1/10
		Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	

**Segment:** **SE** Transaction Set Trailer  
**Position:** 200  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**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)  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:** 1 SE is the last segment of each transaction set.  
**Notes:** **EXAMPLE :**  
**SE\*30\*747682@**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
M	SE02	329	Transaction Set Control Number 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