

# **X12 Implementation Guidelines for Outbound Material Release (830 V2001)**

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## 830 Planning Schedule with Release Capability

Functional Group ID= **PS**

### Introduction:

This Standard contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment.

The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

	Pos. No.	Seq. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes
M	010	ST	Transaction Set Header	M	1		
M	020	BFR	Beginning Segment for Planning Schedule				
	030	NTE	Note / Special Instruction	F	100		
	050	REF	Reference Number	O	12		
<b>LOOP ID - N1</b>							<b>200</b>
	090	N1	Name	O	1		

<b>LOOP ID - LIN</b>							<b>10000</b>
M	300	LIN	Item Identification	M	1		
M	310	UNT	Unit Detail	M	1		
	430	PRS	Part Release Status	O	1		
	440	REF	Reference Numbers	O	12		
	450	PER	Administrative Communications Contact	O	3		
<b>LOOP ID - SDP</b>							<b>104</b>
M	580	SDP	Ship / Delivery Pattern	M	1		
M	590	FST	Forecast Schedule	M	104		
	610	ATH	Resource Authorization	O	20		
<b>LOOP ID - SHP</b>							<b>25</b>
	620	SHP	Shipped / Received Information	O	1		
	630	REF	Reference Numbers	O	5		
M	690	CTT	Transaction Totals	M	1		
M	700	SE	Transaction Set Trailer	M	1		

**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. The transaction set control number (ST02) in this header must match the transaction set control number (SE02) in the transaction set trailer (SE).

**Syntax Notes:**

**Notes:**       ST~830~000001>

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>ST01</b>	<b>143</b>	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 830 X12.14 Planning Schedule	<b>M</b> <b>ID 3/3</b>
<b>M</b>	<b>ST02</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:**     **BFR**   Beginning Segment for Planning Schedule

**Position:**     020

**Loop:**

**Level:**

**Usage:**       Mandatory

**Max Use:**     1

**Purpose:**       To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

**Syntax Notes: 1**   At least one of BFR02 or BFR03 is required.

**Notes:**       The intent of this segment is to provide information for the entire transaction. Some of this information (i.e., quantity qualifier) may be overridden by subsequent segments in the transaction.

BFR~05~~501-1~SH~C~880801~890805~890304>

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>BFR01</b>	<b>353</b>	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set 00 – first release after annual cumulative reset 05 - Replace	<b>M</b> <b>ID 2/2</b>
	<b>BFR03</b>	<b>328</b>	<b>Release Number</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction Program Number	<b>C</b> <b>AN 1/30</b>
<b>M</b>	<b>BFR04</b>	<b>675</b>	<b>Schedule Type Qualifier</b> Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast BB       Broadcast Based DL       Delivery Based SH       Shipment Based	<b>M</b> <b>ID 2/2</b>
<b>M</b>	<b>BFR05</b>	<b>676</b>	Schedule Quantity Qualifier Code identifying the type of quantities used when defining a schedule or forecast "D" = discrete quantities	<b>M</b> <b>ID 1/1</b>
<b>M</b>	<b>BFR06</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Date from which part quantity accumulations begin	<b>M</b> <b>DT 6/6</b>
<b>M</b>	<b>BFR07</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Horizon End Date - Last Sunday of the Period in the Forecast	<b>M</b> <b>DT 6/6</b>
<b>M</b>	<b>BFR08</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Release Issue Date	<b>M</b> <b>DT 6/6</b>

**Segment:**    **NTE**   **Note / Special Instruction**
**Position:**    030

**Loop:**
**Level:**
**Usage:**        Floating

**Max Use:**      100

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

**Syntax Notes:**

**Notes:**        This optional segment may appear anywhere within the transaction set after the beginning segment (BFR) and before the transaction set trailer (SE). It may be used in all loops, except as the first or last in that loop.

If used at the heading level, it will contain plant information such as scheduled shutdown. If used as the detail level, it will contain information related to a specific part, such as final release information.

NTE~GEN~THIS IS A GENERAL NOTE>

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
	<b>NTE01</b>	<b>363</b>	<b>Note Reference Code</b> Code identifying the functional area or purpose for which the note applies GEN Entire Transaction Set LIN Line Item	<b>O</b> <b>ID 3/3</b>
<b>M</b>	<b>NTE02</b>	<b>3</b>	<b>Free Form Message</b> Free-form text	<b>M</b> <b>AN 1/60</b>

**Segment:**     **REF** Reference Numbers

**Position:**    050

**Loop:**

**Level:**

**Usage:**       Optional

**Max Use:**     12

**Purpose:**      To specify identifying numbers.

**Syntax Notes: 1**    At least one of REF02 or REF03 is required.

### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>REF01</b>	<b>128</b>	<b>Reference Number Qualifier</b> Code qualifying the Reference Number PG       Product Group Release Product Group	<b>M</b> <b>ID 2/2</b>
	<b>REF02</b>	<b>127</b>	<b>Reference Number</b> Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier	<b>C</b> <b>AN 1/30</b>

**Segment:**    **N1**   **Name**
**Position:**    090

**Loop:**        N1 Optional

**Level:**
**Usage:**        Optional

**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.

**Notes:**        This N1 loop in the heading area will be used to identify the release issuer (buyer), the seller (supplier) and the bill-to, ship-to and ship-from locations.

N1~003~~92~1602A&gt;

N1~XXX~~92~M812B&gt;

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>N101</b>	<b>98</b>	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, or an individual SF        Ship From (supplier code) ST        Ship To (site code)	<b>M</b> <b>ID 2/2</b>
<b>M</b>	<b>N103</b>	<b>66</b>	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 92        Assigned by Buyer or Buyer's Agent	<b>M</b> <b>IDN 1/2</b>
<b>M</b>	<b>N104</b>	<b>67</b>	<b>Identification Code</b> Code identifying a party or other code	<b>M</b> <b>AN 5/5</b>

**Segment:**     **LIN**   Item Identification

**Position:**     300

**Loop:**           LIN Mandatory

**Level:**

**Usage:**         Mandatory

**Max Use:**       1

**Purpose:**        To specify basic item identification data

**Syntax Notes:**

- 1**   If LIN04 is present, then LIN05 is required.
- 2**   If LIN06 is present, then LIN07 is required.
- 3**   If LIN08 is present, then LIN09 is required.
- 4**   If LIN10 is present, then LIN11 is required.
- 5**   If LIN12 is present, then LIN13 is required.
- 6**   If LIN14 is present, then LIN15 is required.
- 7**   If LIN16 is present, then LIN17 is required.
- 8**   If LIN18 is present, then LIN19 is required.
- 9**   If LIN20 is present, then LIN21 is required.
- 10** If LIN22 is present, then LIN23 is required.
- 11** If LIN24 is present, then LIN25 is required.
- 12** If LIN26 is present, then LIN27 is required.
- 13** If LIN28 is present, then LIN29 is required.
- 14** If LIN30 is present, then LIN31 is required.

**Notes:**        Used for Linamar part number. This segment begins the detail loop. Linamar part number may consist of a prefix, base, suffix and control code. Any of these, except the base, may or may not be present. The portions of the part are delimited by spaces. In addition, LIN04 and LIN05 may be used to transmit a purchase order number.

LIN~~BP~E6SP 7E396 AA 040>

LIN~~BP~E6SP 7E396 AA 040~PO~FE 4397> (Part Number with Control Number and Purchase Order Number)

LIN~~BP~7E396 AA 040> (Part Number without prefix)



**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>LIN02</b>	<b>235</b>	<b>Product / Service ID Qualifier</b> Code identifying the type / source of the descriptive number used in Product / Service ID (234) BP Buyer's Part Number	<b>M ID 2/2</b>
<b>M</b>	<b>LIN03</b>	<b>234</b>	<b>Product / Service ID</b> Identifying number for a product or service Linamar Part Number	<b>M AN 1/30</b>
	<b>LIN04</b>	<b>235</b>	<b>Product / Service ID Qualifier</b> Code identifying the type / source of the descriptive number used in Product / Service ID (234) PO Purchase Order Number	<b>O ID 2/2</b>
	<b>LIN05</b>	<b>234</b>	<b>Product / Service ID</b> Identifying number for a product or service Linamar Purchase Order Number	<b>C AN 1/30</b>
	<b>LIN06</b>	<b>235</b>	<b>Product / Service ID Qualifier</b> Code identifying the type / source of the descriptive number used in Product / Service ID (234) LI Purchase Order Line Number	<b>M ID 2/2</b>
	<b>LIN07</b>	<b>234</b>	<b>Product / Service ID</b> Identifying number for a product or service Linamar Purchase Order Line Number	<b>M AN 1/30</b>

**Segment:**     **UNT**   Unit Detail

**Position:**    310

**Loop:**         LIN Mandatory

**Level:**

**Usage:**       Mandatory

**Max Use:**     1

**Purpose:**      To specify item unit data.

**Syntax Notes: 1**   If UNT03 is present, then UNT02 is required.

**Notes:**       This is a mandatory segment and indicates the unit of measure for all quantities relating to the line item.

UNT~PC>

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>UNT01</b>	<b>355</b>	<b>Unit or Basis for measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	<b>M</b> <b>ID 2/2</b>

**Segment:**     **REF**   **Reference Numbers**

**Position:**     440

**Loop:**         LIN Mandatory

**Level:**

**Usage:**       Optional

**Max Use:**     12

**Purpose:**      To specify identifying numbers.

**Syntax Notes: 1**   At least one of REF02 or REF03 is required.

**Notes:**       Used to convey the dock code, line feed location or reserve line feed location where the item is to be delivered.

REF~DK~B12>

REF~LF~RR6>

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>REF01</b>	<b>128</b>	<b>Reference Number Qualifier</b> Code qualifying the Reference Number LF       Assembly Line Feed Location RL       Reserve Assembly Line Feed Location	<b>M</b> <b>ID 2/2</b>
	<b>REF02</b>	<b>127</b>	<b>Reference Number</b> Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier	<b>C</b> <b>AN 1/30</b>

**Segment:**     **PER Administrative Communications Contact**

**Position:**     450

**Loop:**         LIN Mandatory

**Level:**

**Usage:**       Optional

**Max Use:**     3

**Purpose:**      To identify a person or office to whom administrative communications should be directed

**Syntax Notes: 1**   If PER03 is present, then PER04 is required.

**Notes:**       This segment relates to interpersonal communications, not network or telecommunications contacts. It can be used to convey a contact person's name and telephone number.

PER~EX~PAUL MUIR~TE~313-555-1212>

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>PER01</b>	<b>366</b>	<b>Contact Function Code</b> Code identifying the major duty or responsibility of the person or group named EX       Expeditor RD       Receiving Dock	<b>M   ID 2/2</b>
	<b>PER02</b>	<b>93</b>	<b>Name</b> Free-form name	<b>O   AN 1/35</b>
	<b>PER03</b>	<b>365</b>	<b>Communication Number Qualifier</b> Code identifying the type of communication number TE       Telephone	<b>O   ID 2/2</b>
	<b>PER04</b>	<b>364</b>	<b>Communication Number</b> Complete communications number including country or area code when applicable	<b>O   AN 7/21</b>

**Segment: FST Forecast Schedule**
**Position:** 590

**Loop:** SDP Mandatory

**Level:**
**Usage:** Mandatory

**Max Use:** 104

**Purpose:** To specify the forecasted dates and quantities

**Syntax Notes:** 1 If FST06 is present, then FST07 is required.

2 If FST08 is present, then FST09 is required.

**Notes:** This FST segment will show cumulative quantities for all discrete forecast qualifiers ("D").

FST~56700~D~W~890304&gt;

FST~58500~D~F~880801~890531&gt;

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
M	FST01	380	<b>Quantity</b> Numeric value of quantity Normally cumulative quantity. Net only when FST02="S" or "C"	M R 1/10
M	FST02	680	<b>Forecast Qualifier</b> Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C Firm D Planning	M ID 1/1
M	FST03	681	<b>Forecast Timing Qualifier</b> Code specifying interval grouping of the forecast D Discrete F Flexible interval (from Date X through Date Y) W Weekly Bucket (Monday through Sunday)	M ID 1/1
M	FST04	373	<b>Date</b> Date (YYMMDD) If flexible interval cumulative quantity start date (beginning of inventory date) If weekly - week starting date	M DT 6/6
	FST05	373	<b>Date</b> Date (YYMMDD) If flexible interval - period ending date (Sunday). (YYMMDD) Not used for discrete intervals.	O DT 6/6
	FST06	374	<b>Date / Time Qualifier</b> Code specifying type of date or time, or both date and time 002 Delivery Requested	O ID 3/3
	FST07	337	<b>Time</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	O TM 4/4
	FST08	128	<b>Release Number Qualifier</b> Code specifying the purchase order release number RN Release Number	M ID 2/2
	FST09	127	<b>Release Number</b> Linamar Purchase Order Release Line Number	M AN 1/30

**Segment:**    **SHP**   Shipped/Received Information

**Position:**    620

**Loop:**        SHP Optional

**Level:**
**Usage:**       Optional

**Max Use:**     1

**Purpose:**      To specify shipment and/or receipt information

**Syntax Notes:** **1**    If SHP01 is present, then SHP02 is required.  
                          **2**    If SHP03 is present, then SHP04 is required.

**Notes:**        This is based on ASN information transceived for the last shipment, and the model year cumulative shipped value. The CUM quantity is equal to CUM receipts plus in-transit through last transceived ASN.

SHP~01~2780~001~890214&gt; (Net quantity from last ASN)

SHP ~02~18300~011~880801~~890214&gt; (Cumulative quantity from last ASN)

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes	
	<b>SHP01</b>	<b>673</b>	<b>Quantity Qualifier</b> Code specifying the type of quantity 01        Discrete quantity 02        Cumulative quantity	<b>O</b>	<b>ID 2/2</b>
	<b>SHP02</b>	<b>380</b>	<b>Quantity</b> Numeric value of quantity	<b>C</b>	<b>R 1/10</b>
	<b>SHP03</b>	<b>374</b>	<b>Date / Time Qualifier</b> Code specifying type of date or time, or both date and time 011       Shipped	<b>O</b>	<b>ID 3/3</b>
	<b>SHP04</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Shipped date or beginning inventory date	<b>C</b>	<b>DT 6/6</b>
	<b>SHP06</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) If present, will contain date of last shipment	<b>C</b>	<b>DT 6/6</b>

**Segment:**     **REF** Reference Numbers

**Position:**    630

**Loop:**         SHP Optional

**Level:**

**Usage:**       Optional

**Max Use:**      5

**Purpose:**       To specify identifying numbers

**Syntax Notes: 1**   At least one of REF02 or REF03 is required.

**Notes:**         Used to convey the shipment ID (ASN) number of the last shipment transceived –as much, it will follow the SHP segment with "01" in SHP01, and will occur only once.

REF~SI~72396>

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>REF01</b>	<b>128</b>	<b>Reference Number Qualifier</b> Code qualifying the Reference Number SI       Shipper's Identifying Number for Shipment (SID) A unique number (to the shipper) assigned by the shipper to identify the shipment	<b>M</b> <b>ID 2/2</b>
<b>M</b>	<b>REF02</b>	<b>127</b>	<b>Reference Number</b> Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier	<b>M</b> <b>AN 1/30</b>

**Segment:**     **CTT Transaction Totals**
**Position:**     690

**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 CTT03 is present, then CTT04 is required.

**2**     If CTT05 is present, then CTT06 is required.

**Notes:**       CTT~4~32969>

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
<b>M</b>	<b>CTT01</b>	<b>354</b>	<b>Number of Line Items</b> Total number of line items in the transaction set Total number of LIN segments	<b>M    NO 1/6</b>
<b>M</b>	<b>CTT02</b>	<b>347</b>	<b>Hash Total</b> 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. Hash total of quantities released (sum of FST01s) - If overflow - truncate high order	<b>M    R 1/10</b>



**Segment:**     **SE** Transaction Set Trailer

**Position:**    700

**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:**

**Notes:**       SE~1~00001>

**Data Element Summary**

	Ref. Des.	Data Element	Name	Attributes
M	SE01	96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	<b>M    NO 1/6</b>
M	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    AN 4/9</b>