

*Ford Motor Company*

**X12 Implementation  
Guidelines  
For**

**Outbound  
Material Release  
v002001FORD**

**(8300)**

# 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.

	<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	BFR	Beginning Segment for Planning Schedule	M	1		
	030	NTE	Note/Special Instruction	F	100		
	050	REF	Reference Numbers	O	12		
LOOP ID - N1						200	
	090	N1	Name	O	1		
LOOP ID - LIN						10000	
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		
LOOP ID - SDP						104	
M	580	SDP	Ship/Delivery Pattern	M	1		
M	590	FST	Forecast Schedule	M	104		
	610	ATH	Resource Authorization	O	20		
LOOP ID - SHP						25	
	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**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 830 X12.14 Planning Schedule	M ID 3/3
M	ST02	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	M AN 4/9

**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**

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

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

**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**

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

**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\*ST\*\*92\*1602A'  
 N1\*Sf\*\*92\*M812B'

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	<b>Entity Identifier Code</b>	M ID 2/2
			Code identifying an organizational entity, a physical location, or an individual	
			BT Bill-to-Party	Used only if different from 'ship to'.
			BY Buying Party (Purchaser)	Used only if different from 'ship to'.
			IC Intermediate Consignee	
			SE Selling Party	Used only if different from 'ship from'.
			SF Ship From	
			ST Ship To	
M	N103	66	<b>Identification Code Qualifier</b>	M ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			92 Assigned by Buyer or Buyer's Agent	
M	N104	67	<b>Identification Code</b>	M AN 5/5
			Code identifying a party or other code	

**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 Ford part number. This segment begins the detail loop. Ford 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.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
M	LIN02	235	<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	M ID 2/2
M	LIN03	234	<b>Product/Service ID</b> Identifying number for a product or service Ford Part Number.	M AN 1/30
	LIN04	235	<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	O ID 2/2
	LIN05	234	<b>Product/Service ID</b> Identifying number for a product or service Ford Purchase Order Number.	C AN 1/30



**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.	Data Element	Name	Attributes
M	UNT01	355 Unit or Basis for Measurement Code	M ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		Refer to 002001FORD Data Element Dictionary for acceptable code values.	

**Segment:** **PRS** Part Release Status  
**Position:** 430  
**Loop:** LIN Mandatory  
**Level:**  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To indicate the status of the part being ordered or forecast with respect to this material release or planning document

**Syntax Notes:**

**Notes:** Only used when the part is to be coded "Balanced Out' or "Final Release".  
 PRS\*3'

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	PRS01	682 Part Release Status Code	M ID 1/2
		Code identifying the status of the specific part number being released or forecast or being used in an engineering change	
		3 Part will be Canceled at the Material Quantity	
		7 Final Release for this Cancelled Part	
	PRS02	352 Description	O AN 1/80
		A free-form description to clarify the related data elements and their content	

**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**

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

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

**Segment:** **SDP** Ship/Delivery Pattern  
**Position:** 580  
**Loop:** SDP Mandatory  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To identify specific ship/delivery requirements  
**Syntax Notes:**  
**Notes:** SDP\*Y\*Y'

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SDP01	678	<b>Ship/Delivery or Calendar Pattern Code</b> Code which specifies the routine shipments, deliveries, or calendar pattern Y None (Also Used to Cancel or Override a Previous Pattern)	M ID 1/2
M	SDP02	679	<b>Ship/Delivery Pattern Time Code</b> Code which specifies the time for routine shipments or deliveries Y None (Also Used to Cancel or Override a Previous Pattern)	M ID 1/1

**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.  
**Notes:** This FST segment will show cumulative quantities for all discrete forecast qualifiers ("D"). For strike protection and Kentucky Truck firm orders, the FST segment will show discrete (net) quantities.

When FST02 identifies strike protection ("S") or firm ("C") quantity, the quantities in the FST01 element will be discrete (net) quantities.

FST\*56700\*D\*W\*890304'  
 FST\*58500\*D\*F\*880801\*890531'

**Data Element Summary**

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	FST01	380	<b>Quantity</b> M R 1/10 Numeric value of quantity Normally cumulative quantity. Net only when FST02="S" or "C".
M	FST02	680	<b>Forecast Qualifier</b> M ID 1/1 Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C Firm Used by Kentucky Truck D Planning S Strike Protection
M	FST03	681	<b>Forecast Timing Qualifier</b> M ID 1/1 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	FST04	373	<b>Date</b> M DT 6/6 Date (YYMMDD) If flexible interval cumulative quantity start date (beginning of inventory date) If weekly - week starting date. If strike protection - strike protection date. (YYMMDD)
	FST05	373	<b>Date</b> O DT 6/6 Date (YYMMDD) If flexible interval - period ending date (Sunday). (YYMMDD) Not used for discrete intervals.
	FST06	374	<b>Date/Time Qualifier</b> O ID 3/3 Code specifying type of date or time, or both date and time 002 Delivery Requested
	FST07	337	<b>Time</b> O TM 4/4 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)

**Segment:** **ATH** Resource Authorization  
**Position:** 610  
**Loop:** LIN Mandatory  
**Level:**  
**Usage:** Optional  
**Max Use:** 20  
**Purpose:** To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

- Syntax Notes:**
- 1 At least one of ATH02 or ATH03 is required.
  - 2 If ATH03 is present, then ATH05 is required.
  - 3 If ATH04 is present, then ATH05 is required.

**Notes:** The quantity fields in this segment are always cumulative quantities. There will always be at most one ATH\*FI and one ATH\*MT for each LIN.

ATH\*FI\*890401\*56000\*\*010801'  
 ATH\*MT\*890501\*60000\*\*010801'

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	ATH01	672	<b>Resource Authorization Code</b> Code identifying the resource which the buyer is authorizing the seller to commit to	M ID 2/2
			FI Finished (Labor, Material, and Overhead/Burden) Fabrication.	
			MT Material	
M	ATH02	373	<b>Date</b> Date (YYMMDD) Last day of the week.	M DT 6/6
M	ATH03	380	<b>Quantity</b> Numeric value of quantity Cumulative quantity authorized through date in ATH02.	M R 1/10
M	ATH05	373	<b>Date</b> Date (YYMMDD) Cumulative quantity start date. (Beginning inventory date.)	M DT 6/6

**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' (Net quantity from last ASN)  
 SHP \*02\*18300\*011\*880801\*\*890214' (Cumulative quantity from last ASN)

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>SHP01</b>	<b>673</b>	<b>Quantity Qualifier</b> Code specifying the type of quantity 01 Discrete Quantity 02 Cumulative Quantity	<b>O ID 2/2</b>
<b>SHP02</b>	<b>380</b>	<b>Quantity</b> Numeric value of quantity	<b>C 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 ID 3/3</b>
<b>SHP04</b>	<b>373</b>	<b>Date</b> Date (YYMMDD) Shipped date or beginning inventory date.	<b>C 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 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**

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

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354	<b>Number of Line Items</b> Total number of line items in the transaction set Total number of LIN segments.	M N0 1/6
M	CTT02	347	<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.	M R 1/10

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.

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SE01	96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	M N0 1/6
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	M AN 4/9