

# 830 Planning Schedule with Release Capability

X12/V4010/830: 830 Planning Schedule with Release Capability

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## **Table of Contents**

830	) Pla	anning Schedule with Release Capability	. 1
		Branching Diagram - 1	
		Branching Diagram - 2	
		Branching Diagram - 3	
		Branching Diagram - 4	
	ISA	Interchange Control Header	
	GS	Functional Group Header	
	ST	Transaction Set Header	
	BFR	Beginning Segment for Planning Schedule	
		Reference Identification	
		Carrier Details (Routing Sequence/Transit Time)	
	N1	Name	
	N3	Address Information	
	N4	Geographic Location	
		Reference Identification	
		Administrative Communications Contact	
		Item Identification	
		Unit Detail	
		Product/Item Description	
		Administrative Communications Contact	
		Resource Authorization	
	_	Forecast Schedule	
		Shipped/Received Information	
	REF	Reference Identification	32
	CTT	Transaction Totals	33
	SE	Transaction Set Trailer	34
	GE	Functional Group Trailer	35
	IEA	Interchange Control Trailer	36

## 830

## Planning Schedule with Release Capability

### Functional Group=PS

**Purpose:** This Draft Standard for Trial Use 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.

#### **Not Defined:**

<u>Pos</u>	<u>ld</u>	Segment Name	<u>Req</u>	Max Use	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	М	1			Must use
	GS	Functional Group Header	M	1			Must use

#### Heading:

<u>Pos</u>	<u>ld</u>	Segment Name	<u>Req</u>	Max Use	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	М	1			Must use
020	BFR	Beginning Segment for Planning Schedule	М	1			Must use
050	REF	Reference Identification	0	12			Used
190	TD5	Carrier Details (Routing Sequence/Transit Time)	0	12			Used

LOOP	<u>ID - N1</u>		<u>200</u>			
230	N1	Name	0	1		Used
250	N3	Address Information	0	2		Used
260	N4	Geographic Location	0	1		Used
270	REF	Reference Identification	0	12		Used
280	PER	Administrative Communications Contact	0	3		Used

#### **Detail:**

<u>Pos</u>	<u>ld</u>	Segment Name	<u>Req</u>	Max Use	Repeat	<u>Notes</u>	<u>Usage</u>
LOOP	ID - LIN				<u>&gt;1</u>		
010	LIN	Item Identification	М	1			Must use
020	UIT	Unit Detail	0	1			Used
080	PID	Product/Item Description	0	1000			Used
150	PER	Administrative Communications Contact	0	3			Used
230	ATH	Resource Authorization	0	20			Used
LOOP	ID - FST				<u>&gt;1</u>	N2/410L	

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<u>Pos</u>	<u>ld</u>	Segment Name	Req	Max Use	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
410	FST	Forecast Schedule	0	1			Used
LOOP	ID - SHP				<u>25</u>		
470	SHP	Shipped/Received Information	0	1			Used
480	REF	Reference Identification	0	5			Used

#### **Summary:**

<u>Pos</u>	<u>ld</u>	Segment Name	Req	Max Use	Repeat	<u>Notes</u>	<u>Usage</u>
010	CTT	Transaction Totals	0	1		N3/010	Used
020	SF	Transaction Set Trailer	M	1			Must use

#### **Not Defined:**

<u>Pos</u>	<u>ld</u>	Segment Name	<u>Req</u>	Max Use	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Must use
	IEA	Interchange Control Trailer	M	1			Must use

#### Notes:

- 2/410L At least one occurrence of segment FST is required, either in the FST loop or within the SDP loop. These two loops are mutually exclusive.
- 3/010 Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

#### **BorgWarner Note::**

#### Change Log:

2019-04-25 Pauline Flanigan. Version 2

- 1. N404- Country code added to N101 = ST and SU . New fields in existing segments (Page 19)
- 2. N101 ST add REF DK for Dock Code/Unloading Point . New segment as a child of an existing Segment (Page 20)
- 3. LIN / UIT01 changed logic to map the UOM agreed in the contract instead of hardcoding EA. Updated logic (Page 24)
- 4. ATH PQ = Cumulative Quantity Required Prior to First Schedule Period . New segment (Page 27)
  ATH01 = PQ

ATH02 = Authorization through date

ATH03 = Quantity truncate decimals

ATH05 = Delivery Schedule Date - cumulative quantity authorization

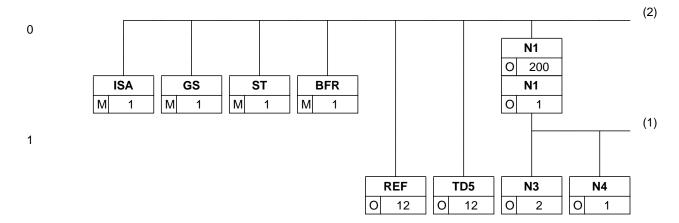
5. ATH FI = End of Production go ahead date. New segment, supplements ATH PQ (Page 27)
ATH01 = FI

ATH02 = Authorization through date

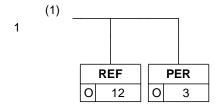
6. ATH MT = Authorization through date for materials. New segment, supplements ATH PQ (Page 27) ATH01 = MT

ATH02 = Authorization through date

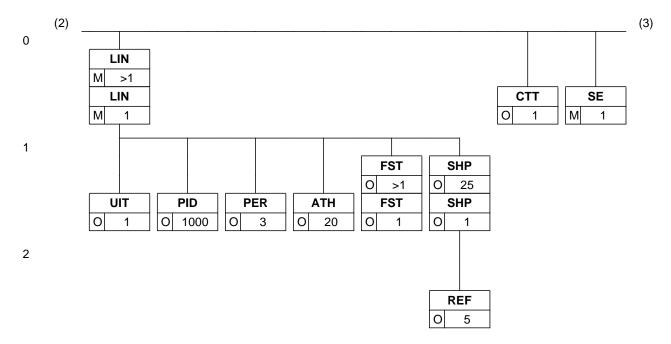
- 7. SHP01 =01 representing the last three deliveries QTY in a "goods received" status. New segment occurs up to three times (Pages 30-31)
- 8. SHP/ REF01 = SI contains the delivery number of the quantity received in SHP01 = 01. New segment supplements SHP01=01 (Page 32)
- 9. Sample data (Page 36)



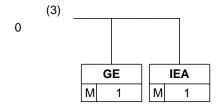
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BorgWarner 6

## **ISA** Interchange Control Header

Pos: Max: 1
Not Defined - Mandatory
Loop: N/A Elements: 16

User Option (Usage): Must use

**Purpose:** To start and identify an interchange of zero or more functional groups and interchange-related control segments

#### **Element Summary:**

<u>Ref</u> ISA01	<u>ld</u> 101	Element Name Authorization Information Qualifier	<u>Req</u> M	<u>Type</u> ID	Min/Max 2/2	<u>Usage</u> Must use
		<b>Description:</b> Code to identify the type of information in the Authorization Information				
		Code List Summary (Total Codes: 7, Incluing Code Name  No Authorization Information Present		eaningfu	l Information ir	n 102)
ISA02	102	Authorization Information	М	AN	10/10	Must use
		<b>Description:</b> Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)				
ISA03	103	Security Information Qualifier	М	ID	2/2	Must use
		<b>Description:</b> Code to identify the type of information in the Security Information				
		Code List Summary (Total Codes: 2, Inclu	ded: 1)			
		Code Name 00 No Security Information Present (No	Meanir	ngful Info	rmation in 104)	
ISA04	104	Security Information	М	AN	10/10	Must use
		<b>Description:</b> This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (103)				
ISA05	105	Interchange ID Qualifier	М	ID	2/2	Must use
		<b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified				
		Code List Summary (Total Codes: 38, Incl	uded: 2	)		
		Code Name				
		O1 Duns (Dun & Bradstreet)  ZZ Mutually Defined				

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Ref ISA06	<u>ld</u> 106	Element Name Interchange Sender ID	Req M	<u>Type</u> AN	Min/Max 15/15	<u>Usage</u> Must use
		<b>Description:</b> Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element				
ISA07	105	Interchange ID Qualifier	М	ID	2/2	Must use
		<b>Description:</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified				
		Code List Summary (Total Codes: 38, Incl	uded: 2	)		
		CodeName01Duns (Dun & Bradstreet)ZZMutually Defined				
ISA08	107	Interchange Receiver ID	M	AN	15/15	Must use
		<b>Description:</b> Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them				
ISA09	108	Interchange Date	М	DT	6/6	Must use
		Description: Date of the interchange				
ISA10	109	Interchange Time	М	TM	4/4	Must use
		<b>Description:</b> Time of the interchange				
ISA11	I10	Interchange Control Standards Identifier	М	ID	1/1	Must use
		<b>Description:</b> Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer				
		Code List Summary (Total Codes: 1, Inclu	ded: 1)			
		Code Name U U.S. EDI Community of ASC X12, TI	DCC, aı	nd UCS		
ISA12	l11	Interchange Control Version Number	М	ID	5/5	Must use
		<b>Description:</b> Code specifying the version number of the interchange control segments				
		Code List Summary (Total Codes: 14, Incl	uded: 1	)		
		Code Name  00401 Draft Standards for Trial Use Appro Review Board through October 199		Publicati	on by ASC X12	2 Procedures

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Ref ISA13	<u>ld</u> l12	Element Name Interchange Control Number	Req M	<u>Type</u> N0	Min/Max 9/9	<u>Usage</u> Must use
		<b>Description:</b> A control number assigned by the interchange sender				
ISA14	I13	Acknowledgment Requested	М	ID	1/1	Must use
		<b>Description:</b> Code sent by the sender to request an interchange acknowledgment (TA1)				
		Code List Summary (Total Codes: 2, Inclu	ided: 1)			
		Code Name				
		No Acknowledgment Requested				
ISA15	l14	Usage Indicator	М	ID	1/1	Must use
		<b>Description:</b> Code to indicate whether data enclosed by this interchange envelope is test, production or information				
		Code List Summary (Total Codes: 3, Inclu	ided: 2)			
		Code Name				
		P Production Data				
		T Test Data				
ISA16	l15	Component Element Separator	М		1/1	Must use
		<b>Description:</b> Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator				

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## **GS** Functional Group Header

Pos: Max: 1
Not Defined - Mandatory
Loop: N/A Elements: 8

User Option (Usage): Must use

Purpose: To indicate the beginning of a functional group and to provide control information

#### **Element Summary:**

Ref	<u>ld</u>	<u>Element Name</u>	Req	<u>Type</u>	Min/Max	<u>Usage</u>
GS01	479	Functional Identifier Code	М	ID	2/2	Must use
		<b>Description:</b> Code identifying a group of application related transaction sets				
		Code List Summary (Total Codes: 240, Ind	cluded:	1)		
		CodeNamePSPlanning Schedule with Release Cap	oability	(830)		
GS02	142	Application Sender's Code	М	AN	2/15	Must use
		<b>Description:</b> Code identifying party sending transmission; codes agreed to by trading partners				
GS03	124	Application Receiver's Code	М	AN	2/15	Must use
		<b>Description:</b> Code identifying party receiving transmission; codes agreed to by trading partners				
GS04	373	Date	М	DT	8/8	Must use
		<b>Description:</b> Date expressed as CCYYMMDD				
GS05	337	Time	М	TM	4/8	Must use
		Description: 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)				
GS06	28	Group Control Number	М	N0	1/9	Must use
		<b>Description:</b> Assigned number originated and maintained by the sender				
GS07	455	Responsible Agency Code	М	ID	1/2	Must use
		<b>Description:</b> Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480				
		Code List Summary (Total Codes: 2, Inclu	ded: 2)			

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#### Code Name

- T Transportation Data Coordinating Committee (TDCC)
- X Accredited Standards Committee X12

GS08 480 Version / Release / Industry Identifier Code

AN 1/12

Must use

**Description:** Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

Code List Summary (Total Codes: 39, Included: 1)

#### Code Name

004010 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Μ

#### **Semantics:**

- 1. GS04 is the group date.
- 2. GS05 is the group time.
- 3. The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

#### Comments:

1. A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.

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### **ST** Transaction Set Header

Pos: 010 Max: 1 Heading - Mandatory Loop: N/A Elements: 2

User Option (Usage): Must use

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

#### **Element Summary:**

<u>Ref</u>	<u>ld</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
ST01	143	Transaction Set Identifier Code	М	ID	3/3	Must use
		<b>Description:</b> Code uniquely identifying a Transaction Set				
		Code List Summary (Total Codes: 298, Inc	cluded:	1)		
		Code Name				
		830 Planning Schedule with Release Ca	pability			
ST02	329	Transaction Set Control Number	М	AN	4/9	Must use
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

#### **Semantics:**

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

## **BFR** Beginning Segment for Planning Schedule

Pos: 020 Max: 1 Heading - Mandatory Loop: N/A Elements: 7

User Option (Usage): Must use

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

#### **Element Summary:**

<u>Ref</u> BFR01	<u>ld</u> 353	Element Name Transaction Set Purpose Code	<u>Req</u> M	Type ID	Min/Max 2/2	<u>Usage</u> Must use
		<b>Description:</b> Code identifying purpose of transaction set				
		Code List Summary (Total Codes: 65, Incl	uded: 1	)		
		Code Name 05 Replace				
BFR02	127	Reference Identification	Х	AN	1/30	Used
		<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
BFR03	328	Release Number	Χ	AN	1/30	Used
		<b>Description:</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction				
BFR04	675	Schedule Type Qualifier	М	ID	2/2	Must use
		<b>Description:</b> Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast				
		Code List Summary (Total Codes: 11, Incl	uded: 1	)		
		CodeNameDLDelivery Based				
BFR05	676	Schedule Quantity Qualifier	М	ID	1/1	Must use
		<b>Description:</b> Code identifying the type of quantities used when defining a schedule or forecast				
		Code List Summary (Total Codes: 4, Inclu	ded: 1)			
		Code Name  A Actual Discrete Quantities				
BFR06	373	Date	М	DT	8/8	Must use
		<b>Description:</b> Date expressed as CCYYMMDD				

<u>Ref</u>	<u>ld</u>	Element Name	<u>Req</u>	<u>Type</u>	Min/Max	<u>Usage</u>
BFR08	373	Date	М	DT	8/8	Must use

Description: Date expressed as

CCYYMMDD

#### **Syntax Rules:**

1. R0203 - At least one of BFR02 or BFR03 is required.

#### **Semantics:**

- 1. If BFR01 contains the value "04" (Net Change), BFR09 is required.
- 2. BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.
- 3. BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.
- 4. BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.
- 5. BFR08 is the date forecast generated: The date the forecast data was generated.
- 6. BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)

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## **REF** Reference Identification

Pos: 050 Max: 12 Heading - Optional Loop: N/A Elements: 2

User Option (Usage): Used

Purpose: To specify identifying information

#### **Element Summary:**

		~- <i>y</i> -				
<u>Ref</u>	<u>ld</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
REF01	128	Reference Identification Qualifier	М	ID	2/3	Must use
		<b>Description:</b> Code qualifying the Reference Identification				
		Code List Summary (Total Codes: 1503, I	ncluded	: 1)		
		Code Name				
		L1 Letters or Notes				
REF03	352	Description	Х	AN	1/80	Used
		<b>Description:</b> A free-form description to clarify the related data elements and their				

#### **Syntax Rules:**

1. R0203 - At least one of REF02 or REF03 is required.

content

#### **Semantics:**

1. REF04 contains data relating to the value cited in REF02.

## **TD5** Carrier Details (Routing Sequence/Transit Time)

Pos: 190 Max: 12 Heading - Optional Loop: N/A Elements: 2

User Option (Usage): Used

Purpose: To specify the carrier and sequence of routing and provide transit time information

#### **Element Summary:**

<u>Ref</u>	<u>ld</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
TD502	66	Identification Code Qualifier	Χ	ID	1/2	Used
		<b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)				
		Code List Summary (Total Codes: 215, In-	cluded:	1)		
		Code Name				
		2 Standard Carrier Alpha Code (SCAC	C)			
TD503	67	Identification Code	Х	AN	2/80	Used
		<b>Description:</b> Code identifying a party or other code				

#### Syntax Rules:

- 1. R0204050612 At least one of TD502, TD504, TD505, TD506 or TD512 is required.
- 2. C0203 If TD502 is present, then TD503 is required.
- 3. C0708 If TD507 is present, then TD508 is required.
- 4. C1011 If TD510 is present, then TD511 is required.
- 5. C1312 If TD513 is present, then TD512 is required.
- 6. C1413 If TD514 is present, then TD513 is required.
- 7. C1512 If TD515 is present, then TD512 is required.

#### **Semantics:**

1. TD515 is the country where the service is to be performed.

#### **Comments:**

1. When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

### N1 Name

Pos: 230 Max: 1
Heading - Optional
Loop: N1 Elements: 4

User Option (Usage): Used

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

#### **Element Summary:**

<u>Ref</u> N101	<u>ld</u> 98	Element Name Entity Identifier Code	Req M	<u>Type</u> ID	Min/Max 2/3	<u>Usage</u> Must use
		<b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual				
		Code List Summary (Total Codes: 1312, I  Code Name  MI Planning Schedule/Material Release ST Ship To SU Supplier/Manufacturer		,		
N102	93	Name	Χ	AN	1/60	Used
		Description: Free-form name				
N103	66	Identification Code Qualifier	Χ	ID	1/2	Used
		<b>Description:</b> Code designating the system/method of code structure used for Identification Code (67)				
		Code List Summary (Total Codes: 215, In Code Name  1 D-U-N-S Number, Dun & Bradstreet 92 Assigned by Buyer or Buyer's Agent		2)		
N104	67	Identification Code	Х	AN	2/80	Used
		<b>Description:</b> Code identifying a party or other code				

#### Syntax Rules:

- 1. R0203 At least one of N102 or N103 is required.
- 2. P0304 If either N103 or N104 is present, then the other is required.

#### **Comments:**

- 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.

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## **N3** Address Information

Pos: 250 Max: 2 Heading - Optional Loop: N1 Elements: 1

User Option (Usage): Used

Purpose: To specify the location of the named party

#### **Element Summary:**

RefIdElement NameReqTypeMin/MaxUsageN301166Address InformationMAN1/55Must use

**Description:** Address information

## **N4** Geographic Location

Pos: 260 Max: 1 Heading - Optional Loop: N1 Elements: 4

User Option (Usage): Used

Purpose: To specify the geographic place of the named party

#### **Element Summary:**

<u><b>Ref</b></u> N401	<u>ld</u> 19	Element Name City Name	Req O	<u>Type</u> AN	Min/Max 2/30	<u>Usage</u> Used
		Description: Free-form text for city name				
N402	156	State or Province Code	0	ID	2/2	Used
		<b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency				
N403	116	Postal Code	0	ID	3/15	Used
		<b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)				
N404	26	Country Code	0	ID	2/3	Used
		Description: Code identifying the country				

#### **Syntax Rules:**

1. C0605 - If N406 is present, then N405 is required.

#### **Comments:**

- 1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
- 2. N402 is required only if city name (N401) is in the U.S. or Canada.

## **REF** Reference Identification

Pos: 270 Max: 12 Heading - Optional Loop: N1 Elements: 2

User Option (Usage): Used

Purpose: To specify identifying information

#### **Element Summary:**

<u>Ref</u>	<u>ld</u>	Element Name	<u>Req</u>	<u>Type</u>	Min/Max	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Must use
		<b>Description:</b> Code qualifying the Reference Identification				
		Code List Summary (Total Codes: 1503, I	Included	: 1)		
		Code Name				
		DK Dock Number				
REF02	127	Reference Identification	Х	AN	1/30	Used
		Description: Reference information as				

**Description:** Reference information as defined for a particular Transaction Set or

as specified by the Reference

Identification Qualifier

#### **Syntax Rules:**

1. R0203 - At least one of REF02 or REF03 is required.

#### **Semantics:**

1. REF04 contains data relating to the value cited in REF02.

## PER Administrative Communications Contact

Pos: 280 Max: 3 Heading - Optional Loop: N1 Elements: 4

User Option (Usage): Used

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

#### **Element Summary:**

<u>Ref</u> PER01	<u>ld</u> 366	Element Name Contact Function Code	Req M	Type ID	Min/Max 2/2	<u>Usage</u> Must use
		<b>Description:</b> Code identifying the major duty or responsibility of the person or group named				
		Code List Summary (Total Codes: 230, In Code Name IC Information Contact	cluded:	1)		
PER02	93	Name	0	AN	1/60	Used
		Description: Free-form name				
PER03	365	Communication Number Qualifier	Х	ID	2/2	Used
		<b>Description:</b> Code identifying the type of communication number				
		Code List Summary (Total Codes: 40, Inc Code Name TE Telephone	luded: 1	)		
PER04	364	Communication Number	Х	AN	1/80	Used
		<b>Description:</b> Complete communications number including country or area code when applicable				

#### **Syntax Rules:**

- 1. P0304 If either PER03 or PER04 is present, then the other is required.
- 2. P0506 If either PER05 or PER06 is present, then the other is required.
- 3. P0708 If either PER07 or PER08 is present, then the other is required.

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## **LIN** Item Identification

Pos: 010 Max: 1
Detail - Mandatory
Loop: LIN Elements: 7

User Option (Usage): Must use

Purpose: To specify basic item identification data

#### **Element Summary:**

<u>Ref</u> LIN01	<u>ld</u> 350	Element Name Assigned Identification	Req O	<u>Type</u> AN	Min/Max 1/20	<u>Usage</u> Used
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
LIN02	235	Product/Service ID Qualifier	М	ID	2/2	Must use
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code List Summary (Total Codes: 477, Ir Code Name  BP Buyer's Part Number	ncluded:	1)		
LIN03	234	Product/Service ID	М	AN	1/48	Must use
		<b>Description:</b> Identifying number for a product or service				
LIN04	235	Product/Service ID Qualifier	Χ	ID	2/2	Used
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code List Summary (Total Codes: 477, Ir	ncluded:	1)		
		CodeNamePOPurchase Order Number				
LIN05	234	Product/Service ID	Χ	AN	1/48	Used
		<b>Description:</b> Identifying number for a product or service				
LIN06	235	Product/Service ID Qualifier	Χ	ID	2/2	Used
		<b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234)				
		Code List Summary (Total Codes: 477, Ir	ncluded:	1)		
		CodeNameECEngineering Change Level				
LIN07	234	Product/Service ID	Χ	AN	1/48	Used
		<b>Description:</b> Identifying number for a product or service				

#### Ref Id Element Name Reg Type Min/Max Usage

#### Syntax Rules:

- 1. P0405 If either LIN04 or LIN05 is present, then the other is required.
- 2. P0607 If either LIN06 or LIN07 is present, then the other is required.
- 3. P0809 If either LIN08 or LIN09 is present, then the other is required.
- 4. P1011 If either LIN10 or LIN11 is present, then the other is required.
- 5. P1213 If either LIN12 or LIN13 is present, then the other is required.
- 6. P1415 If either LIN14 or LIN15 is present, then the other is required.
- 7. P1617 If either LIN16 or LIN17 is present, then the other is required.
- 8. P1819 If either LIN18 or LIN19 is present, then the other is required.
- 9. P2021 If either LIN20 or LIN21 is present, then the other is required.
- 10. P2223 If either LIN22 or LIN23 is present, then the other is required.
- 11. P2425 If either LIN24 or LIN25 is present, then the other is required.
- 12. P2627 If either LIN26 or LIN27 is present, then the other is required.
- 13. P2829 If either LIN28 or LIN29 is present, then the other is required.
- 14. P3031 If either LIN30 or LIN31 is present, then the other is required.

#### **Semantics:**

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.

BorgWarner 23 Enterprise SAP

## **UIT** Unit Detail

Pos: 020 Max: 1
Detail - Optional
Loop: LIN Elements: 1

**User Option (Usage):** Used **Purpose:** To specify item unit data

#### **Element Summary:**

<u>Ref</u> UIT01	<u>Id</u> C001	Element Name Composite Unit of Measure	Req M	<u>Type</u> Comp	Min/Max	<u>Usage</u> Must use
		<b>Description:</b> To identify a composite unit of measure				
		(See Figures Appendix for examples of use)				
UIT01-01	355	Unit or Basis for Measurement Code	М	ID	2/2	Must use
	<b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken					
		BorgWarner Note:: This is the UOM agreed on for the between BorgWarner and the vendor				
		Code List Summary (Total Codes: 704 In	oludod:	16)		

Code List Summary (Total Codes: 794, Included: 16)

<u>Code</u>	<u>Name</u>
BX	Box
CA	Case
CT	Carton
EA	Each
FT	Foot
GA	Gallon
GR	Gram
KG	Kilogram
LB	Pound
LT	Liter
MR	Meter
PC	Piece
PK	Package
RL	Roll
SF	Square Foot
YD	Yard

#### **Syntax Rules:**

1. C0302 - If UIT03 is present, then UIT02 is required.

## PID Product/Item Description

Pos: 080 Max: 1000 Detail - Optional Loop: LIN Elements: 2

User Option (Usage): Used

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

#### **Element Summary:**

<u>Ref</u> PID01	<u>ld</u> 349	Element Name Item Description Type	Req M	Type ID	Min/Max 1/1	<u>Usage</u> Must use
		<b>Description:</b> Code indicating the format of a description				
		Code List Summary (Total Codes: 3, Inclu Code Name Free-form	ded: 1)			
PID05	352	Description	Х	AN	1/80	Used
		<b>Description:</b> A free-form description to clarify the related data elements and their content				

#### Syntax Rules:

- 1. C0403 If PID04 is present, then PID03 is required.
- 2. R0405 At least one of PID04 or PID05 is required.
- 3. C0703 If PID07 is present, then PID03 is required.
- 4. C0804 If PID08 is present, then PID04 is required.
- 5. C0905 If PID09 is present, then PID05 is required.

#### **Semantics:**

- 1. Use PID03 to indicate the organization that publishes the code list being referred to.
- 2. PID04 should be used for industry-specific product description codes.
- 3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
- 4. PID09 is used to identify the language being used in PID05.

#### **Comments:**

- 1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
- 2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
- 3. PID07 specifies the individual code list of the agency specified in PID03.

## PER Administrative Communications Contact

Pos: 150 Max: 3 Detail - Optional Loop: LIN Elements: 4

User Option (Usage): Used

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

#### **Element Summary:**

Ref PER01	<u>ld</u> 366	Element Name Contact Function Code	<u>Req</u> M	<u>Type</u> ID	Min/Max 2/2	<u>Usage</u> Must use
		<b>Description:</b> Code identifying the major duty or responsibility of the person or group named				
		Code List Summary (Total Codes: 230, In	cluded:	1)		
		CodeNameBDBuyer Name or Department				
PER02	93	Name	0	AN	1/60	Used
		Description: Free-form name				
PER03	365	Communication Number Qualifier	Χ	ID	2/2	Used
		<b>Description:</b> Code identifying the type of communication number				
		Code List Summary (Total Codes: 40, Inc	luded: 1	)		
		Code Name TE Telephone				
PER04	364	Communication Number	Χ	AN	1/80	Used
		<b>Description:</b> Complete communications number including country or area code when applicable				

#### **Syntax Rules:**

- 1. P0304 If either PER03 or PER04 is present, then the other is required.
- 2. P0506 If either PER05 or PER06 is present, then the other is required.
- 3. P0708 If either PER07 or PER08 is present, then the other is required.

### **ATH** Resource Authorization

Pos: 230 Max: 20 Detail - Optional Loop: LIN Elements: 4

User Option (Usage): Used

Purpose: To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

#### **Element Summary:**

<u>Ref</u> ATH01	<u>ld</u> 672	Element Name Resource Authorization Code	<u>Req</u> M	<u>Type</u> ID	Min/Max 2/2	<u>Usage</u> Must use
		<b>Description:</b> Code identifying the resource which the buyer is authorizing the seller to commit to				
		Code List Summary (Total Codes: 8, Inclu	ded: 3)			
		Code Name				
		FI Finished (Labor, Material, and Overl	nead/Bu	ırden)		
		MT Material				
		PQ Cumulative Quantity Required Prior	to First	Schedule	e Period	
ATH02	373	Date	Χ	DT	8/8	Used
		<b>Description:</b> Date expressed as CCYYMMDD				
ATH03	380	Quantity	Χ	R	1/15	Used
		Description: Numeric value of quantity				
ATH05	373	Date	Χ	DT	8/8	Used
		<b>Description:</b> Date expressed as CCYYMMDD				

#### Syntax Rules:

- 1. R0203 At least one of ATH02 or ATH03 is required.
- 2. C0305 If ATH03 is present, then ATH05 is required.
- 3. C0405 If ATH04 is present, then ATH05 is required.

#### **Semantics:**

- 1. ATH02 is the resource authorization through date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
- 2. ATH03 is the current cumulative requirements quantity: The cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02).
- 3. ATH05 is the cumulative start date: The date where the cumulative quantity count starts. This date might be the start date of a contract period, a calendar or fiscal year, or other.

#### **Comments:**

- 1. It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
- 2. ATH04 is the maximum cumulative requirements quantity: The maximum cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02). This is a high water mark. If the forecast decreases, the current cumulative requirements quantity also decreases, but the maximum cumulative requirements quantity does not decrease.

BorgWarner 27 Enterprise SAP

## **FST** Forecast Schedule

Pos: 410 Max: 1
Detail - Optional
Loop: FST Elements: 4

User Option (Usage): Used

Purpose: To specify the forecasted dates and quantities

#### **Element Summary:**

Ref FST01	<u>ld</u> 380	Element Name Quantity	<u>Req</u> M	<u>Type</u> R	Min/Max 1/15	<u>Usage</u> Must use
		Description: Numeric value of quantity				
FST02	680	Forecast Qualifier	М	ID	1/1	Must use
		<b>Description:</b> Code specifying the sender's confidence level of the forecast data or an action associated with a forecast				
		Code List Summary (Total Codes: 21, Inc.  Code Name C Firm D Planning	cluded: 2	2)		
FST03	681	Forecast Timing Qualifier	М	ID	1/1	Must use
		<b>Description:</b> Code specifying interval grouping of the forecast				
		Code List Summary (Total Codes: 11, Inc	cluded: 1	11)		
		Code Name  A Annually (Calendar Year)  C Daily  D Discrete  F Flexible Interval (from Date X through M Monthly Bucket (Calendar Months)  Q Quarterly (Calendar Quarters)  S Semi-Annually (Calendar Year)  T Four week bucket (13 buckets per young with the work of the work	/ear)	Y)		
FST04	373	Date	М	DT	8/8	Must use
		Description: Date expressed as				

#### CCYYMMDD

#### **Syntax Rules:**

- 1. P0607 If either FST06 or FST07 is present, then the other is required.
- 2. P0809 If either FST08 or FST09 is present, then the other is required.

#### **Semantics:**

BorgWarner 28 Enterprise SAP

1. If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval.

#### **Comments:**

- 1. As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval.
- 2. FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m.

## SHP Shipped/Received Information

Pos: 470 Max: 1
Detail - Optional
Loop: SHP Elements: 4

User Option (Usage): Used

Purpose: To specify shipment and/or receipt information

#### **Element Summary:**

	<u>ld</u> 673	Element Name  Quantity Qualifier	Req O	<u>Type</u> ID	Min/Max 2/2	<u>Usage</u> Used
		<b>Description:</b> Code specifying the type of quantity				
		Code List Summary (Total Codes: 832, Inc.  Code Name  Discrete Quantity  Cumulative Quantity	cluded:	2)		
SHP02	380	Quantity	X	R	1/15	Used
		<b>Description:</b> Numeric value of quantity				
SHP03	374	Date/Time Qualifier	Χ	ID	3/3	Used
		<b>Description:</b> Code specifying type of date or time, or both date and time				
		Code List Summary (Total Codes: 1112, In Code Name 050 Received	ncluded	: 1)		
SHP04	373	Date	Χ	DT	8/8	Used
		<b>Description:</b> Date expressed as CCYYMMDD				

#### **Syntax Rules:**

- 1. C0102 If SHP01 is present, then SHP02 is required.
- 2. L030405 If SHP03 is present, then at least one of SHP04 or SHP05 is required.
- 3. C0403 If SHP04 is present, then SHP03 is required.
- 4. C0503 If SHP05 is present, then SHP03 is required.

#### **Semantics:**

- 1. SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
- 2. SHP06 is the cumulative quantity end date.

#### **Comments:**

- 1. The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.
- 2. If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

#### **BorgWarner Note::**

SHP01 = 01 are the last deliveries received. There will be up to three of these depending on the number of shipments in our system
SHP02 = 02 is the cumulative quantity

BorgWarner 31 Enterprise SAP

### **REF** Reference Identification

Pos: 480 Max: 5
Detail - Optional
Loop: SHP Elements: 2

User Option (Usage): Used

Purpose: To specify identifying information

#### **Element Summary:**

<u>Ref</u>	<u>ld</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
REF01	128	Reference Identification Qualifier	М	ID	2/3	Must use

Description: Code qualifying the

Reference Identification

Code List Summary (Total Codes: 1503, Included: 1)

Code Name

SI Shipper's Identifying Number for Shipment (SID)

Description: A unique number (to the shipper) assigned by the shipper to

identify the shipment

REF02 127 Reference Identification X AN 1/30 Used

**Description:** Reference information as defined for a particular Transaction Set or

as specified by the Reference

Identification Qualifier

#### Syntax Rules:

1. R0203 - At least one of REF02 or REF03 is required.

#### **Semantics:**

1. REF04 contains data relating to the value cited in REF02.

### **CTT** Transaction Totals

Pos: 010 Max: 1 Summary - Optional Loop: N/A Elements: 1

User Option (Usage): Used

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

#### **Element Summary:**

<u>Ref</u>	<u>ld</u>	Element Name	<u>Req</u>	<u>Type</u>	Min/Max	<u>Usage</u>
CTT01	354	Number of Line Items	М	N0	1/6	Must use

Description: Total number of line items in

the transaction set

#### **Syntax Rules:**

1. P0304 - If either CTT03 or CTT04 is present, then the other is required.

2. P0506 - If either CTT05 or CTT06 is present, then the other is required.

#### **Comments:**

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

## **SE** Transaction Set Trailer

Pos: 020 Max: 1 Summary - Mandatory Loop: N/A Elements: 2

User Option (Usage): Must use

**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)

#### **Element Summary:**

Ref	<u>ld</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
SE01	96	Number of Included Segments	M	N0	1/10	Must use
		<b>Description:</b> Total number of segments included in a transaction set including ST and SE segments				
SE02	329	Transaction Set Control Number	М	AN	4/9	Must use
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

#### **Comments:**

1. SE is the last segment of each transaction set.

## **GE** Functional Group Trailer

Pos: Max: 1
Not Defined - Mandatory
Loop: N/A Elements: 2

User Option (Usage): Must use

Purpose: To indicate the end of a functional group and to provide control information

#### **Element Summary:**

<u>Ref</u> GE01	<u>ld</u> 97	Element Name  Number of Transaction Sets Included	Req M	Type N0	Min/Max 1/6	<u>Usage</u> Must use
		<b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				
GE02	28	Group Control Number	М	N0	1/9	Must use
		<b>Description:</b> Assigned number originated and maintained by the sender				

#### **Semantics:**

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

#### **Comments:**

 The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

## **IEA** Interchange Control Trailer

Pos: Max: 1 Not Defined - Mandatory Loop: N/A Elements: 2

User Option (Usage): Must use

**Purpose:** To define the end of an interchange of zero or more functional groups and interchange-related control segments

#### **Element Summary:**

<u>Ref</u>	<u>ld</u>	Element Name	Req	<u>Type</u>	Min/Max	<u>Usage</u>
IEA01	I16	Number of Included Functional Groups	М	N0	1/5	Must use
		<b>Description:</b> A count of the number of functional groups included in an interchange				
IEA02	l12	Interchange Control Number	М	N0	9/9	Must use
		<b>Description:</b> A control number assigned by the interchange sender				

#### **BorgWarner Note::**

Sample Data:

ISA\*00\* \*00\* \*ZZ\*005457221 \*01\*004312401 \*190325\*1735\*U\*00401\*100039717\*0\*P\*|~

GS\*PS\*005457221\*004312401\*20190325\*1735\*100039717\*X\*004010~

ST\*830\*0001~

BFR\*05\*20190325173130\*394\*DL\*A\*20190301\*\*20190325~

N1\*MI\*BORGWARNER - Bellwood\*1\*005457221~

PER\*IC\*NAME\*TE\*555-547-2642~

N1\*SU\*VENDOR NAME\*92\*105292~

N3\*100 ANYWHERE ST~

N4\*PORTER\*IN\*46304\*US~

N1\*ST\*\*92\*5100~

N3\*700 25th Avenue~

N4\*Bellwood\*IL\*60104\*US~

REF\*DK\*RCV~

LIN\*00010\*BP\*33762RS\*PO\*5500021022\*EC\*A~

UIT\*LB-

PID\*F\*\*\*\*RAW STEEL - CR 20 / 0.0315" / 10.40~

PER\*BD\*NAME\*TE\*555-547-2642~

ATH\*PQ\*20190801\*3579567\*\*20190324~

ATH\*FI\*20190612~

ATH\*MT\*20190710~

FST\*92430\*C\*D\*20190301~

FST\*186000\*C\*D\*20190401~

FST\*186000\*C\*D\*20190501~

FST\*186000\*C\*D\*20190601~

FST\*8500\*C\*D\*20190601~ FST\*178500\*C\*D\*20190701~

F31 1/0500 C D 20190/01~

FST\*93500\*C\*D\*20190801~

SHP\*01\*2660\*050\*20190514~

REF\*SI\*46844147~

SHP\*01\*3040\*050\*20190507~

REF\*SI\*46811676~

SHP\*01\*4180\*050\*20190429~

REF\*SI\*46771207~

SHP\*02\*2648637\*051\*20120101\*\*20190324~

CTT\*1~

BorgWarner

SE\*34\*0001~ GE\*1\*100039717~ IEA\*1\*100039717~