Briggs & Stratton

856 Ship Notice/Manifest
Version 004010

B&S 856 ASN EDI Manual

Revision: March 2007

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856 – Ship Notice Introduction

The purpose of this document is to provide an explanation of Briggs & Stratton's [B&S] use of some of the major sections in the 856 Advance Ship Notice. The information provided in this document only applies to domestic shipments by Briggs & Stratton trading partners who ship direct to B&S Manufacturing Plants and Distribution Centers. This includes all B&S divisions, such as Engines, Home Power Products, and Yard Power Products (Simplicity, Snapper, and Ferris).

The SHIP NOTICE [856] is the EDI document used by trading partners to report shipping information and pallet/carton content details to Briggs & Stratton. It is used in conjunction with the SSCC Carton Label as part of our routing, distribution and receiving processes.

This specification contains the format and establishes the data contents of the Ship Notice Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey Information.

When implementing electronic transactions with B&S, please be sure you are using the latest guidelines.

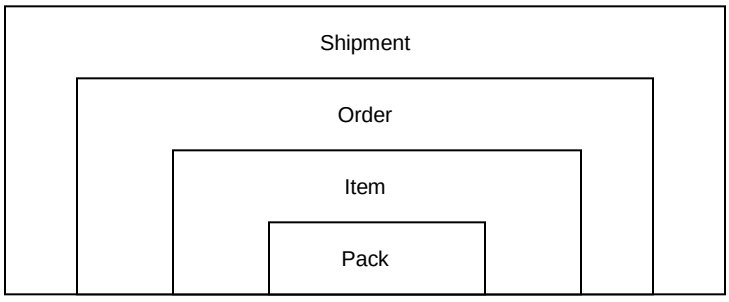
The ship notice is structured hierarchically with 4 levels: shipment, order, item, and pack (pallet and/or carton). One or more orders can be included per shipment number. One or more items may be reported for each order. Finally, packs may be reported for the items.

When packing level is used, only the Standard Carton Pack hierarchical data structure is supported. This structure contains the 4 levels, i.e., Shipment, Order, Item and Pack.

IMPORTANT: ALL ADVANCE SHIPMENT NOTICE DOCUMENTS NEED TO MATCH EXACTLY WHAT WILL BE RECEIVED ON THE PHYSICAL SHIPMENT.

Standard Carton Structure

The Standard Carton Pack structure (BSN05 = "0002", SOITP), with a hierarchy of Shipment, Order, Item, and Packaging, is the format preferred by B&S. In this structure, the Item level is subordinate to the Order and the Packaging levels are subordinate to the Item level, e.g., the specification of the shipping containers is always within the Item level. Once the Item is specified, then all the shipping containers for the Item are identified.



This format is used whether different or identical Items are packed within a shipping container. Pack is the lowest level, i.e., packaging is subordinate to the item level.

If a supplier is incapable of providing packaging level information, the SOI format (BSN05 = “0004”) may be used. In this case, the hierarchy includes only Shipment, Order, and Item information.

Note that the Pick and Pack structure (BSN05 = “0001”, SOTPI) is not supported by B&S, and is not to be used.

856 – Ship Notice Overview

Purpose

The SHIP NOTICE [856] provides the following information:

- Shipment details such as Bill of Lading number, shipment weight, number of cartons shipped, carrier details, and ship date, to help us manage receiving workload and other related logistics issues.
- Detailed pallet and carton content information that is used to credit inventory when each pallet/carton SSCC Carton Label is scanned at the receiving location.
- En-Route shipment and carton contents visibility to determine when specific product was shipped, and when its arrival can be anticipated.

Timeliness

ASNs [Ship Notice] must be transmitted immediately upon release of the shipment to the carrier. The Ship Notice [856] should not be transmitted before the shipment actually leaves the shipping location. While they may be prepared in advance, ASNs may need to be edited for accuracy if the carrier doesn't show up on time or if last minute changes are made to the shipment.

** A special note to Trading Partners who enlist the services of Service Bureaus, Public Warehouses or other third-party services to handle their EDI transactions with Briggs & Stratton: Be advised that it is the Trading Partner's responsibility to insure that all EDI transactions are sent, received and processed by your third-party in an accurate and timely manner. Briggs & Stratton will send Functional Acknowledgements [997] to the third party if they are the ones transmitting the original documents. However, it is the individual Trading Partner who is ultimately responsible to Briggs & Stratton for the timeliness and accuracy of these transactions.

Segments

Header Level

BEGINNING SEGMENT [BSN]
This segment identifies the ship notice number, date, time and hierarchical structure of the 856 document. The data element BSN01 will contain a purpose code of '00' for Original.

The data element BSN05, mandatory [by Briggs & Stratton] element, will identify the hierarchical structure code of either

- 0002 [Shipment, Order, Item, Tare, Pack], or
- 0004 [Shipment, Order, Item]

When providing packing information (preferred) the SOITP Standard Carton Pack Structure (0002) must be used. If you are not able to provide packing information, then the SOI Structure (0004) must be used.
Example: BSN*00*987654*20060410*1545*0002

The Pick and Pack Structure (0001, Shipment, Order, Pack, Item] will not be processed by the B&S EDI system, and should not be used.

Shipment Level

CARRIER DETAILS [TD1]
This segment communicates the total lading quantity and total weight shipped on the associated Bill of Lading.
Example: TD1*PLT*5****645*G*LB

CARRIER DETAILS [TD5]
This segment identifies the carrier. The SCAC code for the carrier must be provided.
Example: TD5**2*USPN

CARRIER DETAILS [TD3]
This segment identifies trailer information for TL shipments.
Example: TD3*TL*XYZ*765432

REFERENCE IDENTIFICATION [BM]
This reference segment communicates the Bill of Lading number of the shipment. This is **required** for all B&S shipments.
Example: REF*BM*678650

REFERENCE IDENTIFICATION [CN]
This reference segment communicates the carrier reference number for the shipment, as assigned by the carrier. This is usually a PRO Number for a TL / LTL shipment, or a Tracking Number for a UPS or other parcel shipment.
Example: REF*CN*1234567890

REFERENCE IDENTIFICATION [ZZ]
This reference segment communicates a reference number to identify the shipment from the supplier's AR perspective, and which B&S will use as reference during our AP processing of the payment to the supplier. This should contain one of the following (in preferential order):

1. Supplier's Invoice Number
2. Supplier's Packing Slip Number
3. Supplier's Bill of Lading Number
4. Other reference number from supplier to assist in their AR processing of the B&S payment

Example: REF*ZZ*0076545678

Note: The REF ZZ value is a header value from the ASN, which is applied as a default to all line items on the ASN. If desired, a unique, detail reference number can be provided at the line item level with the use of the ZZ qualifier on the LIN segment; see LIN below.

DATE/TIME REFERENCE [DTM - 011]
This segment is used to communicate the date and time the product was shipped. The information provided in this segment must represent the actual date and time that the carrier picked up the shipment.
Example: DTM*011*20060410*1642

DATE/TIME REFERENCE [DTM - 067]
The purpose of this segment is to identify the supplier's estimated shipment arrival date of the product to the B&S plant. If the supplier has valid information to provide from their shipping systems, then that arrival date should be provided. If such information is not readily available, it is sufficient to provide a rough estimate of the arrival date by taking the current system date and offsetting it with a reasonable ship number of days based on the distance to the B&S facility and typical transportation method.
Example: DTM*067*20060413

NAME [N1]
There are two N1 segments in the Shipment Level. B&S requires only the Ship To [ST] segment.
N1 ST [Ship To Party]: This identifies the Bill of Lading delivery location, which is the B&S facility. Please refer to the table below.
Example: N1*ST**92*0009

B&S Facilities

B&S facilities and their associated plant numbers are as follow. The full 4-digit plant number, including leading zeros, must be provided in the N1*ST*92 segment. Contact your B&S Buyer for further information or an updated list.

B&S Plant #	Location
0002	Statesboro, GA (Engine Plant)
0003	Rolla, MO (Engine Plant)
0005	Poplar Bluff, MO (Engine Plant)
0006	Murray, KY (Engine Plant)
0009	Menomonee Falls, WI (MFDC)
0015	Auburn, AL (Engine Plant)
0016	Wauwatosa, WI
0017	Wauwatosa, WI
0018	Wauwatosa, WI
0020	Wauwatosa, WI
0021	Menomonee Falls, WI (Graphic Services)
0026	Nijmegan, Netherlands (European DC)
0027	Shanghai, China (Trading Company)
0028	Chongqing, China (Engine Plant)
0029	Shanghai / QingPu China (Product Plant)
0030	Miami, FL (Latin America DC)
0031	Czech Republic (Engine Plant)
0050	Wauwatosa, W (BSD)
0051	Wauwatosa, WI (TBS)
0090	Jefferson, WI (Murray Brand Product)
0100	Jefferson, WI (Home Power Products Mfg)
0101	Port Washington, WI (Simplicity Yard Products Mfg)
0102	McDonough, GA (Snapper Yard Products Mfg)
0103	Munnsville, NY (Ferris Yard Products Mfg)
0110	McDonough, GA (Snapper DC)
0111	Greeneville, OH (Snapper DC)
0112	Grand Prairie, TX (Snapper DC)
0113	Reno, NV (Snapper DC)
0114	Steamboat Rock, IA (Snapper DC)
0115	Windom, MN (Snapper DC)
0116	Billings, MT (Snapper DC)
0117	Beaverton, OR (Snapper DC)
0118	Newbern, TN (Yard Products Mfg)

Order Level

PURCHASE ORDER REFERENCE [PRF]
This segment identifies the Purchase Order Number on the shipment. PRF01 will contain a 10-digit purchase order number, numeric, for both standard purchase orders and schedule agreements.

Item Level

ITEM IDENTIFICATION [LIN]
This segment identifies the item in the carton. The B&S PO Item number is required as provided on the Purchase Order and must be contained in the LIN01data element. This item number must match exactly the item number from the B&S PO, including all leading and trailing zeros. Data elements LIN03 and LIN05 are used to identify the B&S and supplier part numbers, respectively. Optional element LIN07 can be used to provide a unique detail payment reference number per item; this is similar to the REF ZZ field listed above, but at the detail line item level. This detail reference number would be used instead during the B&S AP processing, and may provide the supplier AR department with better information. If the LIN ZZ field is not provided for a given item, the REF ZZ value from the ASN header is used as a default.
Examples:
LIN*00010*BP*12345*VP*98765
LIN*00010*BP*12345*VP*98765*ZZ**INV001234

ITEM DETAIL (SHIPMENT) [SN1]
The purpose of this segment is to communicate the item quantity shipped. Data element SN102 must contain the number of units shipped against the item identified in LIN03. SN103 contains the unit of measure code.

SUB-ITEM DETAIL (SERIAL NUMBERS) [SLN]
The purpose of this segment is to communicate serial numbers associated with items.

Pack Level

MARKS AND NUMBERS [MAN]
This segment lists a unique UCC-128 Serial Shipping Container Code [MAN02] that is used on the shipping label. This serial number identifies each individual pallet and/or carton in the shipment. This segment also contains the quantity of the item on each pallet or in each carton. See the Briggs & Stratton Supplier Manual for label specifications.

856 – Ship Notice Transaction Summary

Heading:

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use 010	ST	Transaction Set Header	M	1		
Must Use 020	BSN	Beginning Segment for Ship Notice	M	1		

Detail:

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	LOOP ID - HL (Shipment level)				200000	
Must Use 010	HL	Hierarchical Level	M	1		c1
110	TD1	Carrier Details (Quantity and Weight)	O	20		
120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
130	TD3	Carrier ID	O	12		
150	REF	Reference Identification	O	>1		
200	DTM	Date/Time Reference	O	10		
220	N1	Name	O	1		

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	LOOP ID - HL (Order level)				200000	
Must Use 010	HL	Hierarchical Level	M	1		
050	PRF	Purchase Order Reference	O	1		c2

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	LOOP ID - HL (Item level)				200000	
Must Use 010	HL	Hierarchical Level	M	1		
020	LIN	Item Identification	O	1		
030	SN1	Item Detail	O	1		
040	SLN	Subline Item Detail	O	1		
050	PRF	Purchase Order Reference	O	1		c3

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	LOOP ID - HL (Tare level)				200000	
010	HL	Hierarchical Level	O	1		
030	MAN	Marks and Numbers	O	>1		

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	LOOP ID - HL (Pack level)				200000	
Must Use 010	HL	Hierarchical Level	M	1		
190	MAN	Marks and Numbers	O	>1		

Summary:

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use 010	CTT	Transaction Totals	M	1		
Must Use 020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

C1. Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment
C2. The PRF segment is used in the Order HL Loop when there is only one PO contained in the shipment.
C3. The PRF segment is used within the Item HL Loop when there are two or more PO's contained in the shipment.

856 – Ship Notice Transaction Details

Segment: ST **Transaction Set Header**
Position: 010
Loop:
Level: Heading
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) 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:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
ST01	**143**	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set 856 Ship Notice/Manifest	**M ID 3/3**
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. The number is sequentially assigned by the sender, starting with one within each functional group. For each functional group, the first transaction set control number will be 0001 and incremented by one for each additional transaction set within the group.	**M AN 4/9**

Segment: BSN **Beginning Segment for Ship Notice**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Syntax Notes:
Semantic Notes: **1** BSN03 is the date the shipment transaction set is created.
2 BSN04 is the time the shipment transaction set is created.
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
BSN01	**353**	**Transaction Set Purpose Code** Code identifying purpose of transaction set 00 Original	**M ID 2/2**
BSN02	**396**	**Shipment Identification** A unique control number assigned by the original shipper to identify a specific shipment *Sequentially assigned shipment number*	**M AN 2/30A**
BSN03	**373**	**Date** Date expressed as CCYYMMDD	**M DT 8/8**
BSN04	**337**	**Time** 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)	**M TM 4/8**
BSN05	**1005**	**Hierarchical Structure Code** Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set. **0002** Shipment, Order, Item, Packaging (SOITP) *Standard Carton Pack Structure* **0004** Shipment, Order, Item, without Packaging (SOI) Note: B&S does not support, and will not accept type 0001, Shipment, Order, Packaging, Item (Pick and Pack Structure, SOTPI). You must use either 0002 or 0004.	**O ID 4/4**

Segment: HL **Hierarchical Level**
Position: 010
Loop: HL Mandatory
Level: Detail – Shipment
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments: **1** The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
3 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
HL01	**628**	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure *The value for this level (shipment) is 1*	**M AN 1/12**
HL03	**735**	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure S Shipment	**M ID 1/2**

Segment: TD1 **Carrier Details (Quantity and Weight)**
Position: 110
Loop: HL Mandatory
Level: Detail – Shipment
Usage: Mandatory
Max Use: 20
Purpose: To specify the transportation details relative to commodity, weight, and quantity
Syntax Notes: **1** If TD101 is present, then TD102 is required.
2 If TD106 is present, then TD107 and TD108 are required.
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD101	**103**	**Packaging Code** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required PLT Pallet BOX Box	**O AN 3/5**
TD102	**80**	**Lading Quantity** Number of units (pieces) of the lading commodity The number of packages in the shipment as described in TD101 *Number of cartons in shipment*	**X N0 1/7**
TD106	**187**	**Weight Qualifier** Code defining the type of weight G Gross Weight	**O ID 1/2**
TD107	**81**	**Weight** Numeric value of weight *Total weight of shipment*	**X R 1/10**
TD108	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken LB Pound	**X ID 2/2**

Segment: TD5 **Carrier Details (Routing Sequence/Transit Time)**
Position: 120
Loop: HL Mandatory
Level: Detail – Shipment
Usage: Mandatory
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD501	**133**	**Routing Sequence Code** Code describing the relationship of a carrier to a specific shipment movement O Origin Carrier (Air, Motor, or Ocean)	**O ID 1/2**
TD502	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) 91 Assigned by Seller or Seller's Agent	**M ID 1/2**
TD503	**67**	**Identification Code** Code identifying a party or other code *SCAC code* Note: B&S requires the carrier's 4-char SCAC code to be provided in this field.	**M AN 2/80**

Segment: TD3 **Carrier Details (Quantity and Weight)**
Position: 130
Loop: HL
Level: Detail – Shipment
Usage: Optional
Max Use: 12
Purpose: To specify the transportation details relating to the equipment used by the carrier
Syntax Notes: **1** If TD302 is present, then TD303 is required.
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD301	**40**	**Equipment Description Code** Code identifying type of equipment used for shipment 20 20 ft container 40 40 ft container TL Trailer FT Flat Bed RR Rail Car CN Container CZ Refrigerated Container	**C ID 2/2**
TD302	**206**	**Equipment Initial** Prefix or alphabetic part of an equipment unit's identifying number.	**O AN 1/4**
TD303	**207**	**Equipment Number** Sequencing or serial part of an equipment unit's identifying number (numeric preferred). Container ID on multiple container shipments (or use MAN02)	

Segment: REF **Reference Identification**
Position: 150
Loop: HL Mandatory
Level: Detail – Shipment
Usage: Mandatory
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: **1** REF02 is required.
Semantic Notes:
Comments: **1** Three consecutive REF segments can be included in the ASN. The first should be used to identify the Supplier BOL #, the second the Carrier Reference #, and the third the Supplier Payment Reference #, which will be used by B&S in the payment process.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
REF01	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification BM Bill of Lading Number CN Carrier's Reference Number (PRO/Invoice) ZZ Payment Reference Number	**M ID 2/3**
REF02	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier *Bill of Lading Number, PRO Number, Invoice Number, etc* Note: See “Comments” above for more information. Also refer to the “Overview” section earlier in this document for related instructions.	**X AN 1/30**

Example:
REF*BM*11111
REF*CN*22222
REF*ZZ*33333

Segment: DTM **Date/Time Reference**
Position: 200
Loop: HL Mandatory
Level: Detail – Shipment
Usage: Mandatory
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments: **1** Both 011 and 067 are mandatory.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
DTM01	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 011 Shipped 067 Estimated Delivery	**M ID 3/3**
DTM02	**373**	**Date** Date expressed as CCYYMMDD Note: Please refer to the “Overview” section earlier in this document for related instructions.	**X DT 8/8**

Example:
DTM*011*20060523
DTM*067*20060525

Segment: N1 **Name**
Position: 220
Loop: N1 Mandatory
Level: Detail – Shipment
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.
Notes:
Use "92" and the "Ship To" location provided on the purchase order.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
N101	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual ST Ship To SF Ship From	**M ID 2/3**
N102	**93**	**Name** Name of shipper / supplier	**X AN 2/80**
N103	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) 92 Assigned by Buyer or Buyer's Agent	**X ID 1/2**
N104	**67**	**Identification Code** Code identifying a party or other code Note: Please refer to the "Overview" section earlier in this document for further information on B&S facilities, including a list of plant numbers to be used for this code.	**X AN 2/80**

Example:
N1*ST92*0009** (with 0009 being the B&S MFDC "ship to location" number)
N1*SF*ABC COMPANY

Segment: HL **Hierarchical Level**
Position: 010
Loop: HL Mandatory
Level: Detail – Order
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments: **1** The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
HL01	**628**	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure *Increments for each order*	**M AN 1/12**
HL02	**734**	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to When HL03=O, set HL02=1 to link the order to the parent shipment. Multiple orders may be sent per shipment.	**O AN 1/12**
HL03	**735**	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure O Order	**M ID 1/2**

Segment: PRF **Purchase Order Reference**
Position: 050
Loop: HL Mandatory
Level: Detail – Order
Usage: Mandatory
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes: **1** PRF04 is the date assigned by the purchaser to purchase order.
Comments: **1** The PRF segment is used here in the Order level when the shipment contains only one PO. If the shipment contains multiple PO's, then the PRF segment should be used at the Item level.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
PRF01	**324**	**Purchase Order Number** Identifying number for Purchase Order assigned by the B&S purchaser	**M AN 1/22**
PRF04	**327**	**Purchase Order Date** Date expressed as CCYYMMDD	**X DT 8/8**

Example: PRF*4500012345*20060414**

Segment: HL **Hierarchical Level**
Position: 010
Loop: HL Mandatory
Level: Detail – Item
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments: **1** The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
HL01	**628**	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure *Increments for each item*	**M AN 1/12**
HL02	**734**	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to When HL03=I, set HL02 to the ID number of its parent order, to link the item to the order. Multiple items may be sent per order.	**O AN 1/12**
HL03	**735**	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure I Item	**M ID 1/2**

Segment: LIN **Item Identification**
Position: 020
Loop: HL Mandatory
Level: Detail – Item
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:
Semantic Notes: **1** LIN01 is the PO line item identification
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
LIN01	**350**	**Assigned Identification** PO Line Item number	**O AN 1/20**
LIN02	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number (i.e., the B&S part number)	**M ID 2/2**
LIN03	**234**	**Product/Service ID** Identifying number for a product or service Buyer's Part Number	**M AN 1/48**
LIN04	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (236) VP Vendor's Part Number (i.e., the supplier part number)	**M ID 2/2**
LIN05	**236**	**Product/Service ID** Identifying number for a product or service Vendor's Part Number Note: The LIN01 Assigned ID number must match exactly the B&S PO Item number, including all leading and trailing zeros. Note: The LIN03 Part Number must match exactly the B&S Part Number as specified on the B&S PO Item.	**M AN 1/48**
LIN06	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (236) ZZ Payment Reference Number	**O ID 2/2**
LIN07	**236**	**Product/Service ID** Identifying number for a product or service Vendor's Payment Reference Number for the item Note: This optional field can be used to provide a payment reference number that is unique to the item, as opposed to the REF ZZ value provided at the ASN header.	**O AN 1/48**

Examples:
LIN*00010*BP*223344*VP*987888
LIN*00010*BP*223344*VP*987888*ZZ*INV001234

Segment: SN1 **Item Detail (Shipment)**
Position: 030
Loop: HL Mandatory
Level: Detail – Item
Usage: Mandatory
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes:
Semantic Notes:
Comments: **1** SN103 defines the unit of measurement for SN102.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
SN102	**382**	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set *Quantity shipped*	**M R 1/10**
SN103	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken EA Each	**M ID 2/2**

Segment: SLN **Subline Item Detail (Shipment)**
Position: 040
Loop: HL Mandatory
Level: Detail – Item
Usage: Mandatory
Max Use: 1
Purpose: To specify subline-item detail relative to shipment. For B&S, this is used to specify serial numbers, if applicable.
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
SLN01	**350**	**Assigned Identification** Alphanumeric characters assigned for differentiation with a transaction set	**O AN 1/20**
SLN03	**662**	**Relationship Code** Code indicating the relationship between entities I Included	**M ID 1/1**
SLN04	**380**	**Quantity** Numeric value of quantity *Quantity pertaining to the Serial Number, usually 1*	**C R 1/15**
SLN05	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken EA Each	**M ID 2/2**
SLN09	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (SLN10) SN Serial Number	**M ID 2/2**
SLN10	**236**	**Product/Service ID** Identifying number for a product or service *Serial Number*	**M AN 1/48**

Segment: PRF **Purchase Order Reference**
Position: 050
Loop: HL Mandatory
Level: Detail – Item
Usage: Mandatory
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes: **1** PRF04 is the date assigned by the purchaser to purchase order.
Comments: **1** The PRF segment is used here in the Item level when the shipment contains multiple PO's. If the shipment contains only one PO, then the PRF segment should be used at the Order level.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
PRF01	**324**	**Purchase Order Number** Identifying number for Purchase Order assigned by the B&S purchaser	**M AN 1/22**
PRF04	**327**	**Purchase Order Date** Date expressed as CCYYMMDD	**X DT 8/8**

Example: PRF*4500012345*20060414**

Segment: HL **Hierarchical Level**
Position: 010
Loop: HL Mandatory
Level: Detail – Pack
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments: **1** The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
The HL segment defines a top-down/left-right ordered structure.
2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
HL01	**628**	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure *Increment for each carton*	**M AN 1/12**
HL02	**734**	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	**O AN 1/12**
HL03	**735**	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure T Tare (pallet) P Pack (carton)	**M ID 1/2**

Segment: MAN **Marks and Numbers**
Position: 190
Loop: HL Mandatory
Level: Detail – Pack
Usage: Mandatory
Max Use: >1
Purpose: To indicate identifying marks and numbers for shipping containers
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
MAN01	**88**	**Marks and Numbers Qualifier** Code specifying the application or source of Marks and Numbers (87) GM SSCC-18 and Application Identifier This is a twenty-character UCC/EAN-128 Serial Shipping Container Code (SSCC-18) that includes the two digit application identifier. The symbology code and the module 103 check digit are not included.	**M ID 1/2**
MAN02	**87**	**Marks and Numbers** Marks and numbers used to identify a shipment or parts of a shipment UCC 128 Code	**M AN 1/48**
MAN03	**87**	**Marks and Numbers** Quantity of the item on each pallet or in each carton	**M AN 1/48**

Segment: CTT **Transaction Totals**
Position: 010
Loop:
Level: Detail - Item
Usage: Mandatory
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes:
Semantic Notes:
Comments: **1** This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
CTT01	**354**	**Number of Line Items** Total number of line items in the transaction set The number of HL segments present in the transaction set	**M N0 1/6**

Segment: SE **Transaction Set Trailer**
Position: 020
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.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
SE01	**96**	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	**M N0 1/10**
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 This must be the same number as is in the ST segment (ST02) for the transaction set.	**M AN 4/9**

Appendix A – Summary Descriptions

Summary Description 1, No Pack Level – SOI

ST*856*Control number
BSN*00*Shipment ID number*Date*Time*0004
HL*1**S [Begin **Shipment** level details]
TD1*Packaging code*Lading quantity****G*Weight*LB
TD5**2*SCAC code
TD3*TL*Trailer prefix*Trailer number [for TL shipments only]
REF*BM*Bill of Lading Number
REF*CN*Carrier PRO number, UPS Tracking number, Unique Shipment number
REF*ZZ*Invoice number, Packing Slip number, Bill of Lading number, Unique Shipment number
DTM*011*Actual Ship date
DTM*067*Current Scheduled Delivery date
N1*ST**92*Ship to Unit number
N1*SF*Shipper name
HL*HL ID number*1*O [Begin **Order** level details]
PRF*PO number***PO date
HL*HL ID number*Parent ID number*I [Begin **Item** level details]
LIN*PO Line Item number*BP*Buyer part number*VP*Vendor part number*ZZ*Vendor reference number
SN1**Quantity shipped*Unit of measure
SLN*ID number**I*Quantity*Unit of measure****SN*Serial number
CTT*Number of HL Loops in the transaction
SE*Count of segments*Control number from ST

Summary Description 2, Standard Carton Pack – SOITP

ST*856*Control number
BSN*00*Unique Shipment ID number*Date*Time*0002
HL*1**S [Begin **Shipment** level details]
TD1*Packaging code*Lading quantity****G*Weight*LB
TD5**2*SCAC code
TD3*TL*Trailer prefix*Trailer number [for TL shipments only]
REF*BM*Bill of Lading Number
REF*CN*Carrier PRO number, UPS Tracking number, Unique Shipment number
REF*ZZ*Invoice number, Packing Slip number, Bill of Lading number, Unique Shipment number
DTM*011*Actual Ship date
DTM*067*Current Scheduled Delivery date
N1*ST**92*Ship to Unit number
N1*SF*Shipper name
HL*HL ID number*1*O [Begin **Order** level details]
PRF*PO number***PO date [If only 1 PO in shipment]
HL*HL ID number*Parent ID number*I [Begin **Item** level details]
LIN*PO Line Item number*BP*Buyer part number*VP*Vendor part number*ZZ*Vendor reference number
SN1**Quantity shipped*Unit of measure
SLN*ID number**I*Quantity*Unit of measure****SN*Serial number
PRF*PO number***PO date [If >1 PO in shipment]
HL*HL ID number*Parent ID number*T [Begin **Tare** level details]
MAN*GM*UCC-128 SSCC Pallet Serial Number*Qty of Item on Pallet
HL*HL ID number*Parent ID number*P [Begin **Pack** level details]
MAN*GM*UCC-128 SSCC Carton Serial Number*Qty of Item in Carton
CTT*Number of HL Loops in transaction
SE*Count of segments*Control number

Appendix B – Examples

Example 1, No Pack Level – SOI (single PO with two PO Items)

```
ST*856*987654
BSN*00*123456*20060523*1525*0004
HL*1**S
TD1*CNT*120****G*75*LB
TD5**2*AFTT
TD3*TL*XXX*12345
REF*BM*11111
REF*CN*22222
REF*ZZ*33333
DTM*011*20060523
DTM*067*20060525
N1*ST**92*0009
N1*SF*ABC CO
HL*2*1*O
PRF*4500012345***20060414                ← PO Ref specified at Order HL
HL*3*2*I
LIN*00010*BP*223344*VP*987888
SN1**80*EA
HL*4*2*I
LIN*00020*BP*223355*VP*987777
SN1**40*EA
CTT*4
SE*23*987654
```

Example 2, Standard Carton Pack – SOITP (single PO, two PO Items, on 3 pallets)

```
ST*856*987654
BSN*00*123456*20060523*1525*0004
HL*1**S
TD1*CNT*120****G*75*LB
TD5**2*AFTT
TD3*TL*XXX*12345
REF*BM*11111
REF*CN*22222
REF*ZZ*33333
DTM*011*20060523
DTM*067*20060525
N1*ST**92*0009
N1*SF*ABC CO
HL*2*1*O
PRF*4500012345***20060414                ← PO Ref specified at Order HL
HL*3*2*I
LIN*00010*BP*223344*VP*987888*ZZ*INV001
SN1**80*EA
HL*4*3*T
MAN*GM*123456789001*40
MAN*GM*123456789002*40
HL*5*2*I
LIN*00020*BP*223355*VP*987777*ZZ*INV002
SN1**40*EA
HL*6*5*T
MAN*GM*123456789003*40
CTT*6
SE*23*987654
```

Example 3, Standard Carton Pack – SOITP (two POs, 3 PO Items, on 3 pallets)

```
ST*856*987654
BSN*00*123456*20060523*1525*0004
HL*1**S
TD1*CNT*120****G*75*LB
TD5**2*AFTT
TD3*TL*XXX*12345
REF*BM*11111
REF*CN*22222
REF*ZZ*33333
DTM*011*20060523
DTM*067*20060525
N1*ST**92*0009
N1*SF*ABC CO
HL*2*1*O                              ← Order HL
HL*3*2*I                              ← Item HL
LIN*00010*BP*223333*VP*987888         ← first PO Item
SN1**45*EA
PRF*4500011111***20060414             ← PO Ref specified at Item HL
HL*4*3*T
MAN*GM*123456789001*45
HL*5*2*I                              ← new Item HL
LIN*00020*BP*223344*VP*987888         ← second PO Item for the PO
SN1**45*EA
PRF*4500011111***20060414             ← PO Ref specified at Item HL, same PO
HL*6*5*T
MAN*GM*123456789001*45
HL*7*1*O                              ← new Order HL
HL*8*7*I                              ← new Item HL
LIN*00020*BP*223355*VP*987777         ← only PO Item for this PO
SN1**55*EA
PRF*4500022222***20060414             ← PO Ref specified Item HL, new PO
HL*9*8*T
MAN*GM*123456789003*55
CTT*9
SE*35*987654
```

Example 4, No Pack Level – SOI (single PO, two PO Items, with 8 serial numbers)

ST*856*987654
BSN*00*123456*20060523*1525*0004
HL*1**S
TD1*CNT*8****G*75*LB
TD5**2*AFTT
TD3*TL*XXX*12345
REF*BM*11111
REF*CN*22222
REF*ZZ*33333
DTM*011*20060523
DTM*067*20060525
N1*ST**92*0009
N1*SF*ABC CO
HL*2*1*O
PRF*4500012345***20060414
HL*3*2*I
LIN*00010*BP*223344*VP*987888*ZZ*INV001
SN1**3*EA
SLN*1**I*1*EA****SN*980001
SLN*2**I*1*EA****SN*980002
SLN*3**I*1*EA****SN*980003
HL*4*2*I
LIN*00020*BP*223355*VP*987777*ZZ*INV002
SN1**5*EA
SLN*1**I*1*EA****SN*990001
SLN*2**I*1*EA****SN*990002
SLN*3**I*1*EA****SN*990003
SLN*4**I*1*EA****SN*990004
SLN*5**I*1*EA****SN*990005
CTT*4
SE*23*987654