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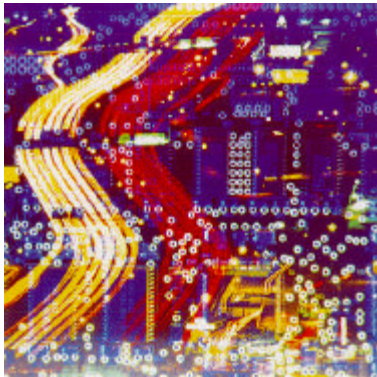
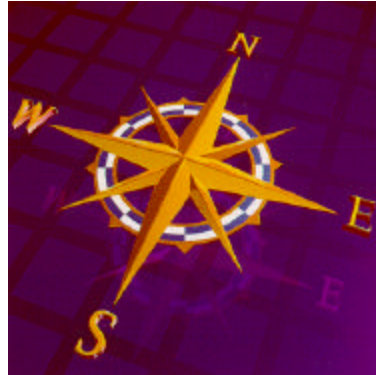
VICS EDI 856

REVISED
MARCH 1998

Ship Notice/Manifest Guidelines



VICS EDI Implementation
Guidelines for the Ship
Notice/Manifest Transaction
Set (856), Version 004010



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PREFACE

The Uniform Code Council, Inc. is providing this voluntary guideline for implementation of the Ship Notice/Manifest Transaction Set (856) as a service to the industry.

This guideline has been developed using VICS EDI Implementation Guidelines, Version 004010.

INTRODUCTION

The VICS EDI Ship Notice/Manifest Transaction Set (856) provides order and shipment information in one electronic transaction sent from the supplier to the receiver. The key to the success of the Ship Notice/Manifest is the advanced receipt of the notice, and the accuracy of the information being sent. Information such as Bill of Lading, carton identification, carton contents, and carrier identification, helps to speed the flow of merchandise through the pipeline. This information is used for receiving and inventory control purposes.

The scope of this implementation guideline includes pertinent data concerning the use of the Ship Notice/Manifest from the perspectives of a supplier (usually the shipper) and a receiver.

Who Is This Guideline Written For?

This guideline is written primarily for the first-time implementor of the 856 Ship Notice/Manifest document. It was designed to help users more fully understand and implement this document, and integrate it into the business flow. Users of this transaction should possess technical knowledge of EDI implementation.

Merchandise/product shippers and receivers should read this guideline before implementing the Ship Notice/Manifest. Users should gain a thorough knowledge of the transaction's contents before beginning the implementation process.

What Is The Goal Of This Guideline?

The goal of this guide is to provide the retail industry, both buyer and supplier, with the information needed to integrate the Ship Notice/Manifest document within their business systems.

What Are The Benefits Of Implementing The Ship Notice/Manifest?

- Eliminates the need for paper based communications,
- Ensures accuracy between product shipped and product received,
- Reduces off-loading time at receiving dock,
- Reduces check-in time from receipt to selling floor,
- Facilitates the cross docking process,
- Allows for advance order allocation,
- Facilitates mechanized receiving,
- Allows for integration of data to multiple systems without multiple data entry,

- Allows for resource scheduling by the receiver, and
- Smooths the payment process by facilitating accurate matching.

OVERVIEW

This document includes the following sections:

I. Business Flow

This section describes the basic flow of the Ship Notice/Manifest document as it relates to the merchandising process. This includes:

- Timing and accuracy,
- Document flow, and
- Illustrations.

II. Technical Considerations

This section discusses hierarchical data structures, data segments, business examples, and the processing considerations for the Ship Notice/Manifest document.

III. Business Examples

This section illustrates the different business scenarios within which the user may use the Ship Notice/Manifest document. This section also shows the reader the different levels of complexity allowed with the Ship Notice/Manifest document.

IV. Glossary

This section includes definitions of those key terms used throughout this implementation guide.

V. Questions & Answers

This section addresses some of the most commonly asked questions regarding issues surrounding the implementation of the Ship Notice/Manifest document.

This implementation guide is not intended to replace existing technical or architectural documents. Instead, it was designed to complement those publications. The following companion publications are available for use with this guide:

- VICS EDI Retail Industry Conventions and Implementation Guidelines for Electronic Data Interchange.
- VICS EDI Architecture Guide.
- Application Standard for Shipping Container Codes.

These publications are available by contacting:

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Fax: (937) 435-7317
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BUSINESS FLOW

When using the Ship Notice/Manifest, the user must have a clear understanding of the following:

- Business processes which initiate the Ship Notice/Manifest,
- EDI documents that surround the Ship Notice/Manifest,
- The actual required events,
- The timing of those events, and
- The need for accuracy when describing shipment contents.

GENERAL CONSIDERATIONS

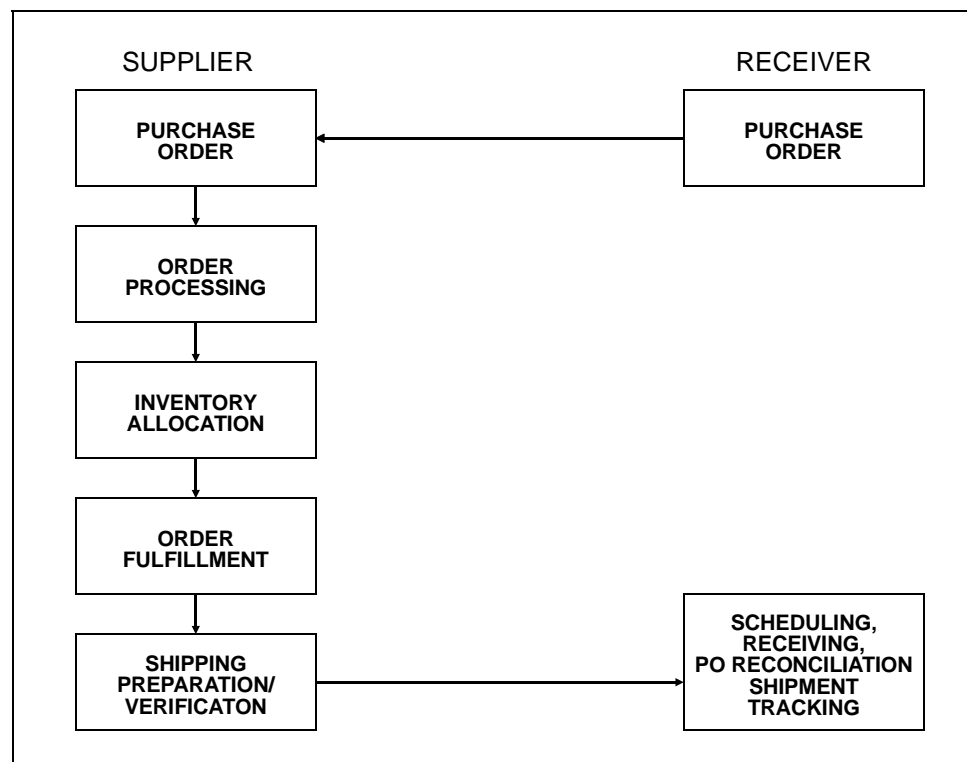


Figure 1. Ship Notice/Manifest Business Flow

The Supplier

The process begins with a purchase order. The supplier must then begin the order processing cycle. Once the order processing cycle is complete, the product is ready to be verified for shipment. Accuracy and the completeness of information are imperative.

Verifying the shipment entails collecting ALL pertinent data relative to an accurate description of the shipment. Using this data, the shipper creates an Ship Notice/Manifest. This transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail.

Timing of the Ship Notice/Manifest is critical. The supplier must generate the ship notice, transmit it to the receiver, and the receiver must process the data into the application systems prior to the arrival of the product at the receiving location. The use of the UCC/EAN-128 Serial Shipping Container Code (SSCC-18) label can expedite the handling of the cartons in the shipment.

Ideally, the Ship Notice/Manifest should be sent immediately upon closing the trailer.

The Receiver

The Ship Notice/Manifest provides the receiver with the advanced information about the shipment. This enables the receiver to better plan the following:

- **Receipt Processing**

The receiver can use the Ship Notice/Manifest to validate the purchases, and allocate as the purchases are being processed at the point of check-in.

- **P.O. Reconciliation**

The Ship Notice/Manifest allows the receiver to:

- Validate the shipment,
- Perform specific store billing, and
- Measure supplier ship performance against outstanding purchase orders.

- **Scheduling**

The receiver can use the Ship Notice/Manifest to schedule:

- Manpower,
- Ticketing,
- Merchandise preparation, and
- Equipment requirements at the receiving site.

- **Shipment Tracking**

Data contained within the Ship Notice/Manifest can be used in conjunction with the carrier EDI information to track shipment movements.

The receiver must be aware that the order level of the transaction is the supplier's order and not a buyer's purchase order. The supplier's order may not be one-to-one with the buyer's purchase order.

The receiver must also consider the Ship Notice/Manifest source. This source may be either a manufacturer or a consolidator. Therefore, the receiver may need to link ship notice information with the EDI Transportation Carrier Shipment Status Message Transaction Set (214).

There are several methods of associating purchase orders and ship notices with a shipment. For example, there may be multiple purchase orders described in one ship notice, multiple ship notices for a single purchase order, or multiple ship notices for one Bill of Lading. However, it is not acceptable to have multiple Bills of Lading for one ship notice.

The receiver can gain the greatest benefit from the Ship Notice/Manifest, only if their receiving system can process the shipment without opening the container. The use of the UCC/EAN-128 Serial Shipping Container Code (SSCC-18) label can facilitate this if the information associated with the container number on the label and the container number in the Ship Notice/Manifest are accurate and the Ship Notice/Manifest is timely.

TECHNICAL CONSIDERATIONS

HIERARCHICAL LEVELS

The concept of hierarchical levels is a key feature of the Ship Notice/Manifest. Applying a common hierarchy to levels of data allows the supplier to describe the details of a physical shipment in an electronic format. In this way, the receiver can successfully process the transaction - correctly associating the ship notice data to the physical shipment. Each level within the Ship Notice/Manifest groups together related details about a physical shipment. Data is transmitted at the level to which it logically applies, thereby avoiding redundancy. The six levels defined for use within retail industry implementations are:

- **SHIPMENT** - Data related to a shipment moving from an origin location to a receiving location, such as Bill of Lading number, ship to, ship from, etc. There is one and only one shipment level in each transaction set.
- **UNIT LOAD** - Data related to a physical shipping unit which is marked with a UCC/EAN-128 Serial Shipping Container Code (SSCC-18), and, consists of transport packages marked for multiple final destinations.
- **ORDER** - Data related to the supplier's order and buyer's original purchase order, such as purchase order number, buying location, department number, etc.
- **TARE** - Data related to pallets. This may be omitted if there are no identifiable pallets.
- **PACK** - Data related to the shipping cartons, racks, bags, etc., such as carton serial number. This may be omitted if there are no identifiable packs, or there is no desire to transmit pack level information.
- **ITEM** - Data related to the shipped products, such as SKU identification, quantity shipped, etc.

The hierarchical structure defines the sequence or order in which the levels will appear within a Ship Notice/Manifest. There are two distinct hierarchical structures which are defined for use within retail industry implementations: *Pick and Pack* and *Standard Carton Pack*. Each structure contains the same levels, and the usage of each level is the same for both. The only difference between the two is the order in which the levels may appear within the transaction set (i.e., where the Packaging levels are positioned in relation to the Item level). A code in the beginning segment of the Ship Notice/Manifest (BSN05) indicates which structure is used.

BSN*00*ABC111222333444*19980522*1345*0001

0001 Shipment, Order, Packaging, Item (Pick and Pack)

0002 Shipment, Order, Item, Packaging (Standard Carton Pack)

0004 Shipment, Order, Item (No Packaging Level)

The actual structure of the Ship Notice/Manifest is determined by the sender (shipper) of the transaction set. Depending on the shipper's packing environment, one of these two structures will be more applicable to use than the other. The shipper should choose whichever structure best reflects the packing environment; however, *only one data structure can be present in a single ship notice*. The buyer (receiver) should be prepared to receive and process any data structure.

In the event the partnership does not require a packaging level to be transmitted in the Ship Notice/Manifest, code 0004 is used in BSN05.

PICK AND PACK

The Pick and Pack structure should be used in a Pick and Pack order filling environment. Typically when different SKUs are packed within the same physical shipping container [e.g., 48 men's shirts in 3 colors and 4 sizes each (12 different U.P.C.s)], at least one packaging level must be included. However, two packaging levels may be present if Tare is used. The transaction hierarchy is:

- Shipment,
- Order,
- Packaging (Tare and Pack), and
- Item.

The Item level is subordinate to the Packaging levels (i.e., the specification of the SKU is always within the shipping container Tare or Pack level). The shipping container is specified, then all SKUs within the shipping container are identified.

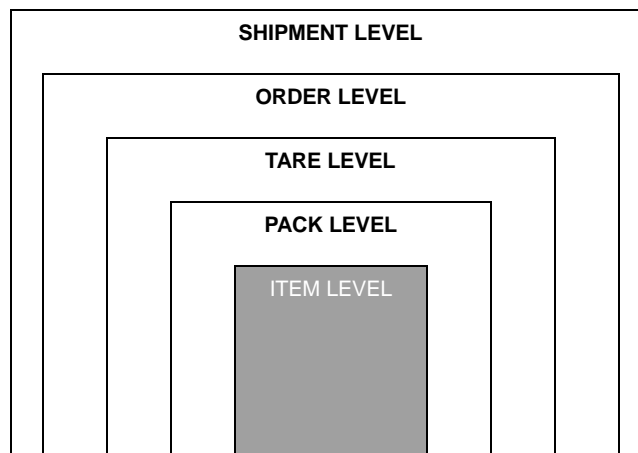


Figure 2. Pick and Pack

- **Different SKUs packed within a shipping container**
- **Item is the lowest level**
- **Item is subordinate to the packaging levels**

STANDARD CARTON PACK

The Standard Carton Pack structure should be used in an environment where identical SKUs are packed within one or more physical shipping containers [e.g., 12 blue twin-size sheets (one U.P.C.)]. The transaction hierarchy is:

- Shipment,
- Order,
- Item, and
- Packaging (Tare and Pack).

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 SKU (Item level)]. Once the SKU is specified, then all the shipping containers for the SKUs are identified.

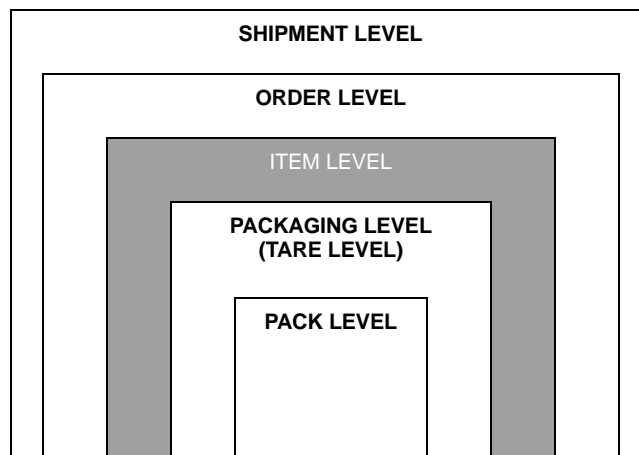


Figure 3. Standard Carton Pack

- **Identical SKUs packed within a shipping container**
- **Pack or tare is the lowest level**
- **Packaging is subordinate to the item level**

NO PACKAGING LEVEL

In some implementations, it may be appropriate to omit the packaging levels from the transaction. Depending on the retailer's receiving environment, carton identification may not be required. Here, only three levels are present in the transaction. The transaction hierarchy is:

- Shipment,
- Order, and
- Item.

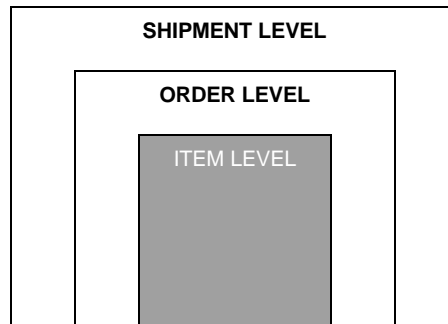


Figure 4. No Packaging Level

- **One or more U.P.C.s**
- **No packaging level**

HL SEGMENT

The HL segment marks the beginning of a detail loop. A clear understanding of how the HL segment works is a critical factor in the successful generation and receipt of the Ship Notice/Manifest transaction. There are three data elements in the HL segment which are defined for use within retail industry implementations. These elements include:

- Hierarchical ID Number,
- Parent ID Number, and
- Hierarchical Level Code.

The Hierarchical ID Number (HL01) is a sequential number beginning with 1 for each transaction set and incremented by one for each occurrence of the HL segment within the transaction set.

The Hierarchical Parent ID Number (HL02) relates the current level of detail to its parent level or “points” to its parent (e.g., the Order level is related to the Shipment level through the Parent ID Number). The Parent ID Number is omitted for the first occurrence of the HL segment (Shipment level) in the transaction since it has no parent.

The Hierarchical Level Code (HL03) identifies the level of detail information contained in the segments within that HL loop (e.g., Shipment, Order, Tare, Pack, Item).

The following example illustrates the component elements of the HL segment in a Pick and Pack structure. The arrows show how the HL segments relate to one another.

HL Segment

HL	*	01	*	*	S
Seg ID	*	HL ID#	*	Parent ID	Level
HL	*	02	*	01	O
HL	*	03	*	02	P
HL	*	04	*	03	I
HL	*	05	*	02	P
HL	*	06	*	05	I
HL	*	07	*	05	I
HL	*	08	*	05	I

- **HL Segment marks the beginning of a detail loop**
- **(HL ID#) is a sequential number beginning with 1 and incremented by one for each occurrence of the HL segment within the transaction set**
- **(Parent ID) “points” to its parent (the Shipment level has no parent)**
- **(Level Code) identifies the level of detail information**

Reporting Sequence

When generating the data, each detail loop (hierarchical level) is reported using a top-down/left-right order. The shipment is always the highest level, and is reported first. Then, the first order is reported. And depending on the structure, packaging and items are reported for the first order. Additional orders within the shipment follow the same sequence. In the diagram which follows, the number in the upper left corner is the Hierarchical ID Number (HL01). The number in the top right corner is the Parent ID Number for that HL loop (HL02).

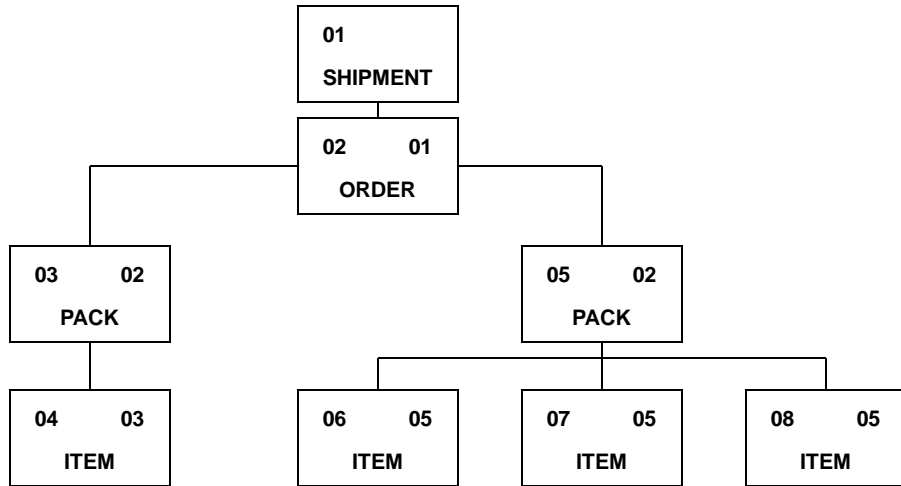


Figure 5. HL Segment Structure

HIERARCHICAL STRUCTURE EXAMPLES

Following are examples of Pick and Pack and Standard Carton Pack hierarchical structures. Each box in the diagram represents a detail loop (one HL segment followed by data segments) in an Ship Notice/Manifest transaction set.

Pick and Pack Structure Example

In this example, the shipment contains 2 orders. The first order has 3 cartons. The first carton contains a quantity of 2 SKUs (Items). The second carton contains 2 SKUs (Items). The third carton contains 1 SKU (Item). The second order contains one carton with quantities of 3 different SKUs (Items).

The data segments in a single Pack level will uniquely identify only one physical shipping container. The data segments in the associated Item levels specify the SKU contents of the shipping container. (For additional understanding, review the “Pick and Pack” examples in the Business Examples section of this guide.)

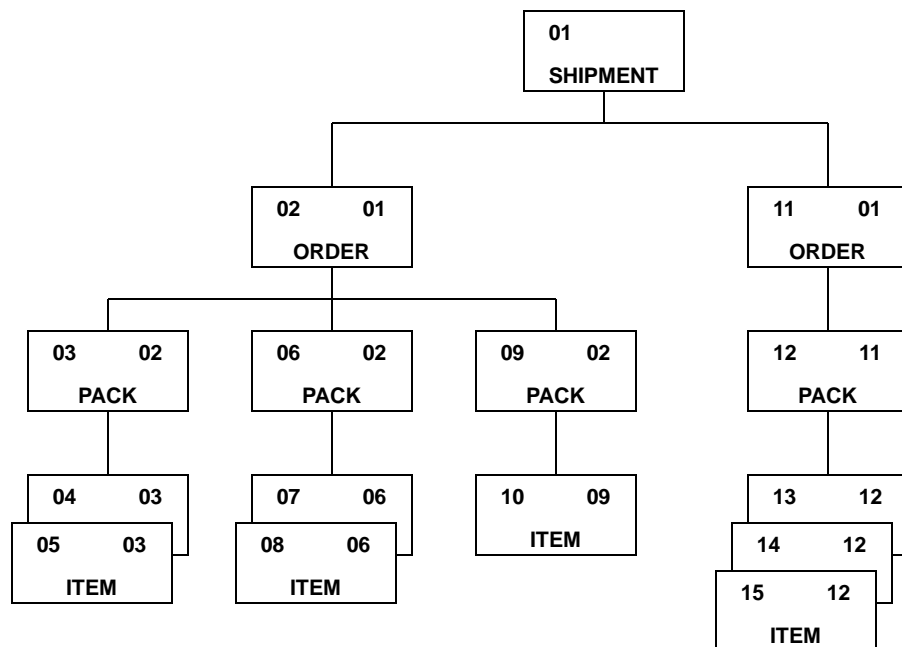


Figure 6. Pick and Pack Structure Example

- Top-down/left-right reporting sequence is used
- The Item level is subordinate to the packaging level
- Only one shipping container in a single packaging level

Standard Carton Pack Structure Example

In this example, the shipment contains 2 orders. The first order has 3 SKUs (Items). Each SKU (Item) has 1 Pack level. The second order has 1 SKU (Item) with 4 Pack levels, each pack containing a quantity of the same SKU.

The packaging levels are below the Item. The data segments in a single Pack level specify the total quantity shipped for the SKU. The data segments in the associated Pack levels uniquely identify the shipping containers, and report the quantity of SKUs in a single shipping container.

A single packaging level may specify one or more physical shipping containers, each containing a quantity of the same SKU. (For additional understanding, review the “Standard Pack” examples in the Business Examples section of this guide.)

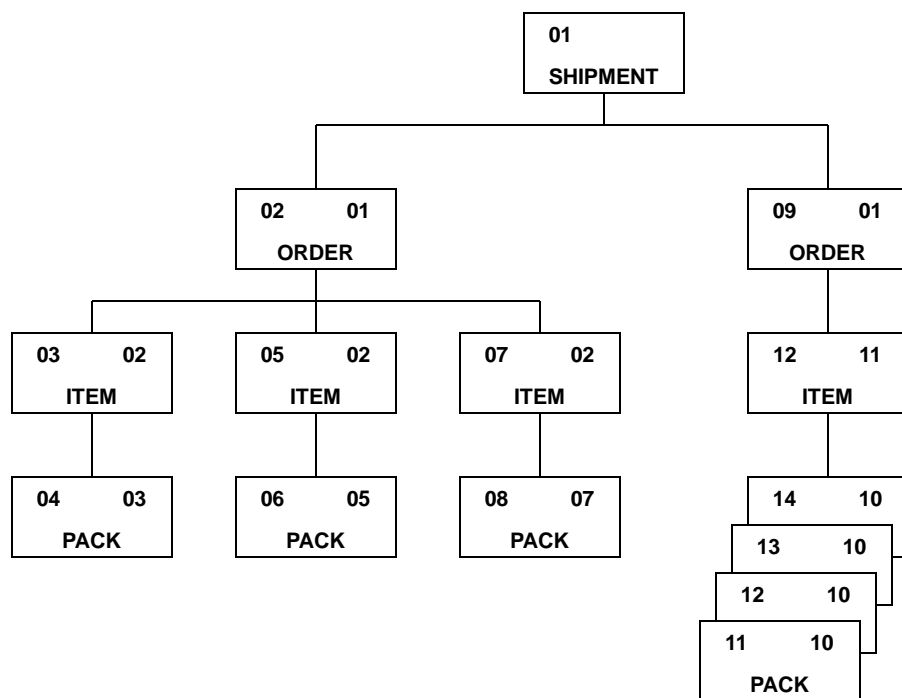


Figure 7. Standard Carton Pack Structure Example

- Top-down/left-right reporting sequence is used
- The Packaging level is subordinate to the Item level
- More than one shipping container may be specified within a single packaging level

No Packaging Level Example

In this example, the shipment consists of a single order containing 3 SKUs (Items). The Item level is subordinate to the Order level. The packaging level is not present, i.e., there are no unique identification numbers on the container(s).

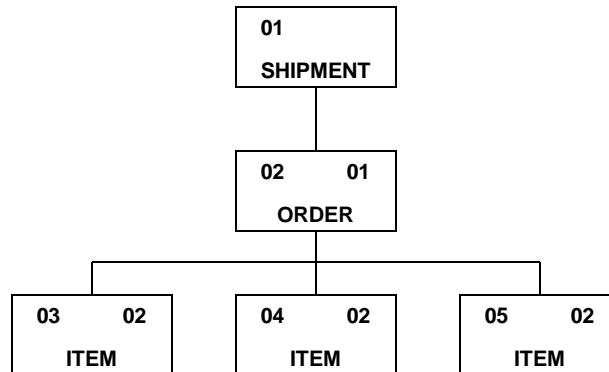


Figure 8. No Packaging Level Example

- Top-down/left-right reporting sequence is used
- The Item level is subordinate to the Order level
- The shipping container is not specified

MAPPING CONVENTIONS

Following are mapping conventions for:

1. Reporting carton identification numbers
2. Using two packaging levels, and
3. Reporting multiple purchase orders packed within the same physical shipping container

Shipping Container Identification Numbers

Container identification numbers are transmitted in MAN segments within the appropriate packaging level (Shipment, Unit Load, Tare or Pack). The recommended ID is the human-readable interpretation of the UCC/EAN-128 Serial Shipping Container Code (SSCC-18). When MAN01 contains code AA, MAN02 will contain the eighteen-character UCC/EAN-128 Serial Shipping Container Code which does not include the two-digit application identifier. When MAN01 contains code GM, MAN02 will contain the twenty-character UCC/EAN-128 Serial Shipping Container Code, which includes the two-digit application identifier. Codes AA and GM should not be used to identify the same shipping container; use one or the other, but not both. Container ID numbers are transmitted without any spaces or dashes. Other shipping containers that may need to be reported include U.P.C./EAN Shipping Container Code (SCC-14) or carrier assigned package IDs.

SSCC-18 (without Application Identifier)

MAN*AA*000123459876543210

SSCC-18 and Application Identifier

MAN*GM*00000123459876543210

SCC-14

MAN*UC*00098765100018

CARRIER-ASSIGNED PACKAGE ID

MAN*CP*426711103

When reporting two ID numbers which have been assigned to the same physical shipping container, one MAN segment will be sent containing both ID numbers. For example, if both the UCC/EAN-128 Serial Shipping Container Code (SSCC-18) and the U.P.C./EAN Shipping Container Code (SCC-14) are assigned to the same physical shipping container, one MAN segment will be present to specify the two ID numbers.

MAN*GM*00000123459876543210UC*50098765100018**

When there are more than two ID numbers which have been assigned to the same physical shipping container, one HL loop will be created for each physical shipping container, and multiple MAN segments within that HL loop will be used to specify the ID numbers assigned to the container. In this scenario, each Pack level will represent one and only one physical shipping container.

Pick and Pack

For Pick and Pack shipments, each packaging loop will report the serial number for one shipping container. The SKU contents of the shipping container are reported in one or more item loops which follow a packaging loop. Example 1 is a carton with a UCC/EAN-128 carton ID (SSCC-18). Example 2 is a pallet with a UCC/EAN-128 pallet ID (SSCC-18).

Example 1

HL*3*2*P
MAN*GM*00000123459876543210

Example 2

HL*3*2*T
MAN*GM*00100123459876543210

Standard Carton Pack

When using the Standard Carton Pack structure, the sender may choose to create a single Pack level to report all container IDs for a shipped SKU. For example, to report a shipment of 4 cases of blue twin-size blankets, each case containing a quantity of 6, one packaging level is generated with 4 MAN segments to specify the 4 cartons. The PO4 segment is used to report the quantity of blankets contained in one shipping container. The Item loop will specify the shipped SKU and the total quantity shipped for that SKU (24 each).

HL*3*2*I
LINUP*012345555558**
SN124*EA**

HL*4*3*P
PO4*6
MAN*GM*00000123451111111110
MAN*GM*00000123452222222220
MAN*GM*00000123453333333330
MAN*GM*00000123454444444440

Using Two Packaging Levels

In some implementations it may be necessary to report shipping container IDs using two packaging levels. All items in the highest identifiable container (e.g. pallet, truck, etc.) must be marked for the same final location. The Pick and Pack structure must be used if more than one U.P.C. is contained in the highest identifiable container.

In the following example, one pallet is shipped containing 15 cases of case code "4444" (Item 1111) and 9 cases of case code "5555" (Item 2222). The Pick and Pack data structure must be used (Item below Packaging).

Example 1:

HL*3*2*T
MAN*GM*00100123451111111110

HL*4*3*P
PO4*15***6**
MAN*UC*5001234544448

HL*5*4*I
LINUP*01234511110**
SN190*EA**

HL*6*3*P
PO4*9***5**
MAN*UC*5001234555558

HL*7*6*I
LINUP*01234522220**
SN145*EA**

Multiple POs Packed in the Same Shipping Container

Some retailers allow more than one PO for the same buying location to be packed within the same physical shipping container when the orders are destined for the same location. When this occurs, the buyer's purchase order should be referenced at the Item level, rather than at the Order level.

In the following example, two buyer purchase orders have been combined in one supplier order and are packed in the same physical shipping container. Both orders will be shipped to the buyer's distribution center (2222), and marked for the same buying location (1111). The Order level specifies the buying location. One item is shipped for Purchase Order 77777. Two items are shipped for Purchase Order 88888. The Item levels specify the SKU contents of the shipping container:

- The SKU identification,
- The quantity shipped, and
- The buyer's original purchase order number.

Pick and Pack is the only data structure which can be used when referencing more than one Purchase Order packed in the same physical shipping container.

HL*1S**
N1*ST92*2222**

HL*2*1*O
N1*BY92*1111**

HL*3*2*P
MAN*GM*00000654321234567890

HL*4*3*I
LINUP*012345878782**
SN124*EA**
PRF*77777*19980621**

HL*5*3*I
 LIN**UP*0123458782
 SN1**12*EA
 PRF*88888***19980628

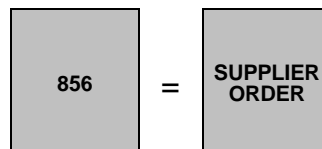
HL*6*3*I
 LIN**UP*012345987652
 SN1**30*EA
 PRF*88888***19980629

PROCESSING CONSIDERATIONS

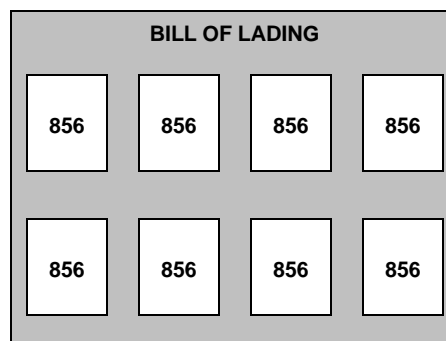
In creating the Ship Notice/Manifest, the sender has some choices to make. A ship notice may represent a single supplier order or many orders. A single ship notice may also represent a part of the physical shipment or the entire physical shipment or Bill of Lading. Both single order and multi-order ship notices are acceptable on the same Bill of Lading. The sender should choose whichever method is best for the sender. The buyer should be prepared to receive both types.

Single Order Processing

With single-order processing, one Ship Notice/Manifest fully describes the shipped items for one supplier order. Each purchase order received and processed is turned into one or more supplier orders, generating a ship notice and possibly an invoice transaction for each supplier order. With one order per ship notice, many ship notice transactions may reference the same Bill of Lading — many orders shipped to the same destination at the same time and consigned to the same carrier. Each ship notice is uniquely identified in the BSN segment, but may reference the same Bill of Lading. The shipment level data for each ship notice will be the same.



One Supplier Order equals one Ship Notice

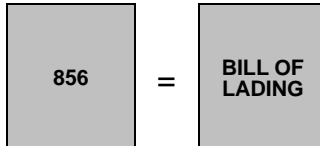


Many Ship Notices may reference the same Bill of Lading

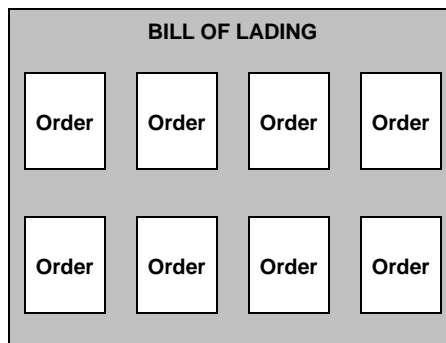
Figure 9. Single Order Processing

Multi-Order Processing

With the multi-order processing option, one Ship Notice/Manifest fully describes the contents of a single Bill of Lading. In this scenario, the sender generates one ship notice representing the entire physical shipment consigned to a carrier. Many order levels may be present in the transaction — each referencing a different purchase order.



One Ship Notice equals one Bill of Lading



Many Purchase Orders may be referenced

Figure 10. Multi-Order Processing

SCOPE OF THE SHIP NOTICE

Within the retail industry, the scope of the ship notice cannot exceed the contents of the associated Bill of Lading for a buyer's ship to location. There can be more than one ship notice referencing the same Bill of Lading, but one ship notice cannot reference more than one Bill of Lading. Each full truck load (TL) requires a separate Bill of Lading and therefore, a separate Ship Notice/Manifest.

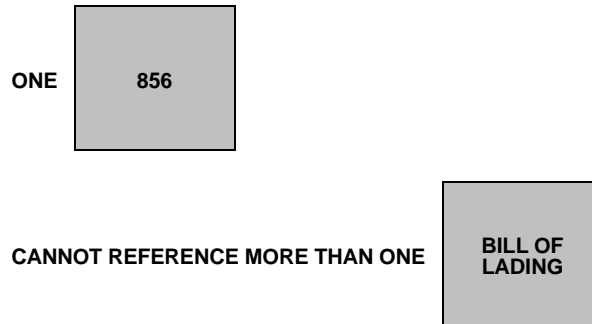


Figure 11. Scope of the Ship Notice

Timing

Ideally, the Ship Notice/Manifest should be transmitted by the shipper after the doors are closed on the truck. The buyer needs to receive and process the data before the physical shipment arrives at the receiving location. Therefore, the latest time the ship notice may be sent is the time of shipment. In practice, the ship notice must arrive before the shipment.

EXAMPLE 1

Version 004010

SINGLE ORDER, STANDARD CARTON PACK STRUCTURE

The following example depicts a single supplier order which contains three different SKUs, each represented by a unique U.P.C.

The total quantity of the first U.P.C. is 72, packed 12 to a case, in 6 cases. The total quantity of the second U.P.C. is 70, packed 10 to a case, in 7 cases. The third U.P.C. is an example of inner pack where there is a carton containing 6 inner packs each of the 6 inner pack has 4 salable units for a total of 24 eaches.

In the standard carton pack environment, the Item level identifies the shipped U.P.C. and the total quantity shipped of that U.P.C. The Pack level identifies the container serial number(s) and specifies the quantity of the product within a single shipping container.

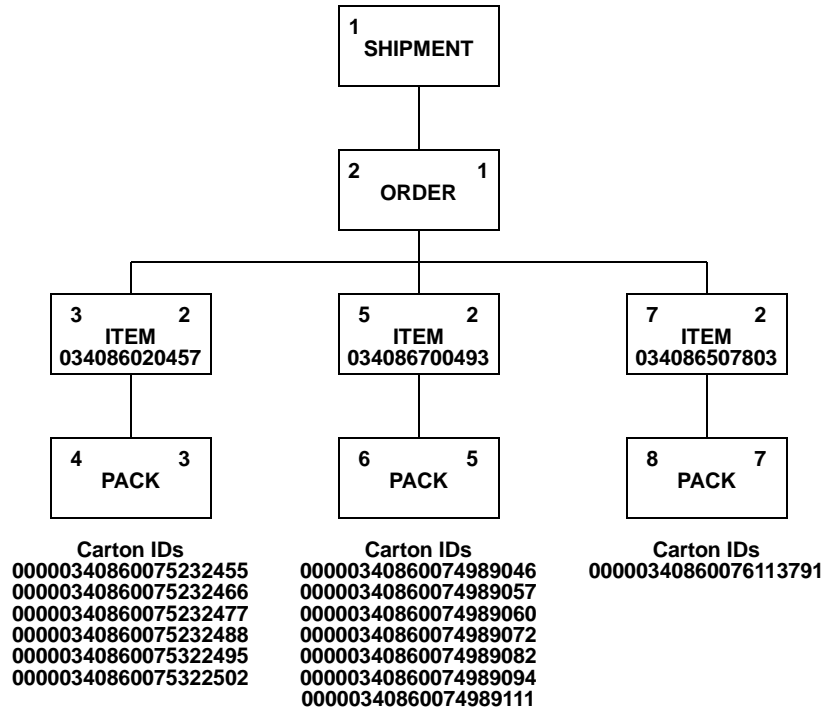


Figure 12. Single Order, Standard Carton Pack Structure

<u>EDI TRANSMISSION</u>	<u>DATA EXPLANATION</u>
ST*856*0130 N/L	856 indicates Transaction Set 856; 0130 is the EDI control number.
BSN*00*R5067*19981125* 1108*0002 N/L	00 indicates this is an original transaction set; R5067 is the ship notice number; 19981125 is the date (November 25,1998); 1108 indicates the time is 11:08 A.M.; 0002 indicates the transaction set structure is Standard Carton Pack.
HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*CTN25*19****G* 188*LB N/L	CTN25 indicates product is packed in corrugated or solid carton; 19 indicates the number of cartons being shipped; G is ID code that indicates type of weight is gross weight; LB indicates that pounds is the weight unit of measure; 188 pounds gross weight.
TD5*O*2*SECO N/L	O indicates the origin carrier; 2 is an ID qualifier indicating the ID used in the next field will be a Standard Carrier Alpha Code (SCAC) code; SECO is the SCAC for a carrier.
REF*BM*70684 N/L	BM indicates the data that follows is a Bill of Lading (BOL) Number; 70684 is the Bill of Lading Number.
DTM*011*19981125 N/L	011 indicates date that follows is the shipped date; 19981125 is the date of the shipment, November 25, 1998.
N1*SF**91*6999 N/L	SF is an ID qualifier indicating the ship from. The sender's location number 6999 is the ship from.
N1*ST**92*0679 N/L	ST is an ID qualifier indicating the ship to. The buyer's assigned location number 0679 is the ship to.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.

PRF*0796578***19980916 N/L	0796578 is the original purchase order number; 19980916 is the buyer's original purchase order date, September 16, 1998.
REF*DP*127 N/L	Retailer's department number 127.
NI*BY**92*0679 N/L	BY is an ID qualifier indicating the buying party. The buyer's location 0679 is the buying party.
HL*3*2*I N/L	3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is item.
LIN**UP*034086020457 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086020457 is the actual U.P.C. code.
SN1**6*CA N/L	6 is the number of cases shipped; CA is the unit of measurement (case).
HL*4*3*P N/L	4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*12 N/L	12 is the quantity of SKUs within the pack (case).
MAN*GM* 00000340860075232455 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232455 is the actual bar coded number.
MAN*GM* 00000340860075232466 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232466 is the actual bar coded number.
MAN*GM* 00000340860075232477 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232477 is the actual bar coded number.
MAN*GM* 00000340860075232488 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232488 is the actual coded number.

MAN*GM* 00000340860075322495 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075322495 is the actual bar coded number.
MAN*GM* 00000340860075322502 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075322502 is the actual bar coded number.
HL*5*2*I N/L	5 indicates the fifth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086700493 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700493 is the actual U.P.C. code.
SN1**7*CA N/L	7 is the number of cases shipped; CA is the unit of measurement (case).
HL*6*5*P N/L	6 indicates the sixth occurrence of the HL segment in the transaction set; 5 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*10 N/L	10 is the quantity of SKUs within the pack (case). The total units of this U.P.C. are 7 cases x 10 units each = 70 SKUs.
MAN*GM* 00000340860074989046 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989046 is the actual bar coded number.
MAN*GM* 00000340860074989057 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989057 is the actual bar coded number.
MAN*GM* 00000340860074989060 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989060 is the actual bar coded number.
MAN*GM* 00000340860074989072 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989072 is the actual bar coded number.
MAN*GM* 00000340860074989082 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container

MAN*GM*
00000340860074989094 N/L

Code (SSCC-18); 00000340860074989082 is the actual bar coded number.

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989094 is the actual bar coded number.

MAN*GM*
00000340860074989111 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989111 is the actual bar coded number.

HL*7*2*I N/L

7 indicates the seventh occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*034086507803 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086507803 is the actual U.P.C. code.

SN16*CA N/L**

6 is the number of cases shipped; CA is the unit of measurement (case).

HL*8*7*P N/L

8 indicates the eighth occurrence of the HL segment in the transaction set; 7 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

PO4*6***4 N/L**

6 is the number of inner packs and 4 is the number of units in each inner pack.

MAN*GM*
0000034086076113791 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 0000034086076113791 is the actual bar coded number.

CTT*8 N/L

8 indicates the number of HL segments present in the transaction set.

SE*44*0130 N/L

44 is the number of included segments in this transaction set; 0130 is the control number.

EXAMPLE 2

Version 004010

SINGLE ORDER, PICK and PACK STRUCTURE

The following example depicts a single supplier order which contains 3 different cartons. The first carton contains 2 different items (U.P.C.s). The first U.P.C. is packed into 3 inner packs each containing 9 items, for a total of 27 units. The second U.P.C. is packed into 3 inner packs each containing 7 items, for a total of 21 units. Therefore, the first carton contains 6 inner packs and a total of 48 units. The second carton is similar to the first with different U.P.C. and inner pack sizes. The third carton contains 24 units of the same U.P.C. packed loose, i.e. no inner packs in the carton.

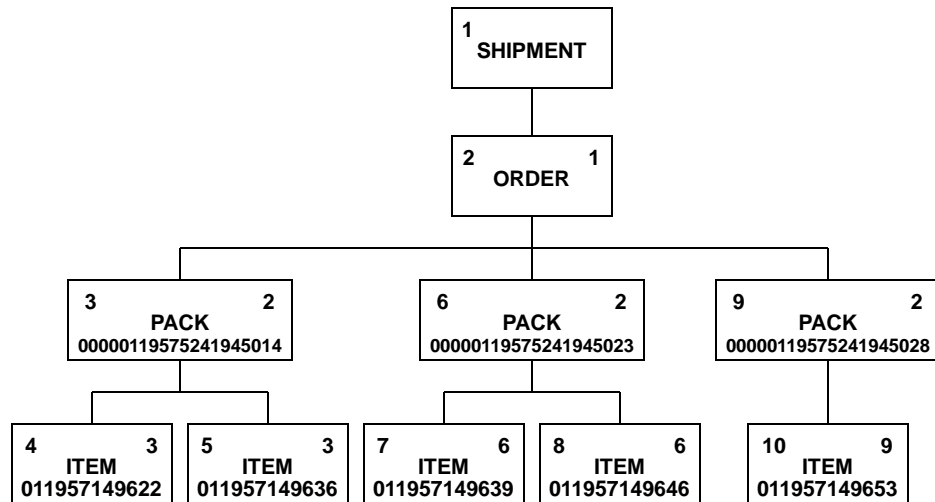


Figure 13. Single Order, Pick and Pack Structure

EDI TRANSMISSION DATA

EXPLANATION

ST*856*00813 N/L

856 indicates the transaction set. 00813 is the control number.

**BSN*00*12345*19981210*
2310*0001 N/L**

00 indicates this is an original transaction set; 12345 is the ship notice number. 19981210 is the transaction date of December 12, 1998; 2310 indicates the transaction time is 11:10 P.M.; 0001 indicates the transaction set structure is Pick and Pack.

HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*CTN25*3 N/L	CTN25 indicates the product is packed in corrugated or solid carton; 3 indicates three cartons were shipped.
TD5**2*BBBB**M*THE BEST CARRIER N/L	2 indicates the presence of a Standard Alpha Carrier Code (SCAC) code, BBBB indicates the SCAC for The Best Carrier company.
REF*BM*33333 N/L	BM indicates the number that follows is a Bill of Lading number; 33333 is the Bill of Lading (BOL) number.
DTM*011*19981210 N/L	011 indicates the date that follows is the shipped date; 19981210 is the date of shipment, December 10, 1998.
FOB*CC N/L	CC indicates the shipping charges are collect.
N1*ST**92*22 N/L	ST indicates the segment is describing the ship to location for the shipment; 92 indicates the element that follows is a code assigned by the buyer; 22 is the ship to location.
N1*SF**91*133 N/L	SF indicates the segment is describing the ship from location for the shipment; the shipment was made from the seller's east coast DC, location 133.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*12345678***19981202 N/L	The buyer's purchase order is 12345678; 19981202 is the purchase order date December 2, 1998.
REF*IA*4567 N/L	IA indicates that the data that follows is the buyer's assigned vendor number ; 4567 is the vendor code assigned by the buyer.
REF*DP*063 N/L	DP indicates the data that follows is the department number; 063 is the actual department number assigned by the buyer.
N1*BY**92*7824 N/L	Buyer's buying location 7824 (store number).

HL*3*2*P N/L

3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

**MAN*GM*
00000119575241945014 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945014 is the actual bar coded number.

HL*4*3*I N/L

4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item (the data that follows is about the SKU shipped).

LINUP*011957149622 N/L**

UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149622 is the actual U.P.C. code.

SN127*EA N/L**

27 units were shipped.

PO4*3***9 N/L**

The 27 units are packed in 3 inner packs within the carton with 9 units in each inner pack.

HL*5*3*I N/L

5 indicates the fifth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item (another SKU in the same carton).

LINUP*011957149636 N/L**

UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149636 is the actual U.P.C. code.

SN121*EA N/L**

21 units were shipped.

PO4*3***7 N/L**

The 21 units are packed in 3 inner packs within the carton with 7 units in each inner pack.

HL*6*2*P N/L

6 indicates the sixth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

**MAN*GM*
00000119575241945023 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945023 is the actual bar coded number.

HL*7*6*I N/L	7 indicates the seventh occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149639 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149639 is the actual U.P.C. code.
SN1**12*EA N/L	12 units were shipped.
PO4*3*****4 N/L	The 12 units are packed in 3 inner packs within the carton with 4 units in each inner pack.
HL*8*6*I N/L	8 indicates the eighth occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149646 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149646 is the actual U.P.C. code.
SN1**36*EA N/L	36 units were shipped.
PO4*3*****12 N/L	The 36 units are packed in 3 inner packs within the carton with 12 units in each inner pack.
HL*9*2*P N/L	9 indicates the ninth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
MAN*GM* 00000119575241945028 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945028 is the actual bar coded number.
HL*10*9*I N/L	10 indicates the tenth occurrence of the HL segment in the transaction set; 9 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149653 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149653 is the actual U.P.C. code.
SN1**24*EA N/L	24 units were shipped; the unit of measure is each; 24 units are packed loose in the carton (no PO4 Segment).

CTT*10 N/L

10 indicates the number of HL segments present in the transaction set.

SE*42*00813 N/L

42 is the number of included segments in this transaction set; 00813 is the control number.

EXAMPLE 3

Version 004010

MULTIPLE ORDERS, STANDARD CARTON PACK STRUCTURE

The following example depicts two supplier orders which are being shipped to the buyer's distribution center. The supplier has split the original PO into individual store orders; each order is packaged for a different store. Therefore, both orders reference the same PO number. The various SKUs and their pack are similar to the previous Standard Carton Pack Single Order example.

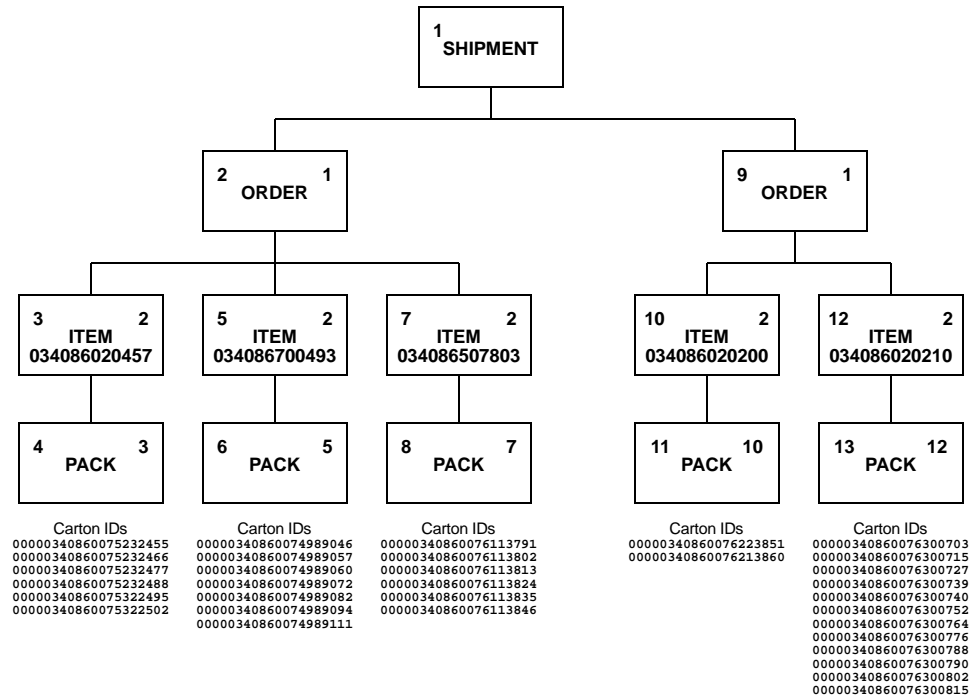


Figure 14. Multiple Orders, Standard Carton Pack Structure

<u>EDI TRANSMISSION DATA</u>	<u>EXPLANATION</u>
ST*856*1158 N/L	856 indicates Transaction Set 856; 1158 is the control number.
BSN*00*R5067*19981125* 1108*0002 N/L	00 indicates this is an original transaction set; R5067 is the ship notice number; 19981125 is the date (November 25, 1998); 1108 indicates the time is 11:08 A.M.; 0002 indicates the transaction set structure is Standard Carton Pack.
HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*CTN25*33****G*188* LB N/L	CTN25 indicates product is packed in corrugated or solid carton; 33 indicates the number of cartons being shipped; G is ID code that indicates type of weight is gross weight; LB indicates that pounds is the weight unit of measure. 188 pounds gross weight.
TD5**2*SECO N/L	2 is an ID qualifier indicating the ID used in the next field will be a Standard Carrier Alpha Code (SCAC) code; SECO is the SCAC for the carrier.
REF*BM*70684 N/L	BM indicates the data that follows is a Bill of Lading (BOL) Number; 70684 is the Bill of Lading Number.
DTM*011*19981125 N/L	011 indicates the date that follows is the shipped date; 19981125 is the date of the shipment, November 25, 1998.
N1*SF**91*6999 N/L	SF is an ID qualifier indicating the ship from; 91 is an ID code that indicates the next field will be a location code assigned by the sender; 6999 is the ship from.
N1*ST**92*D08 N/L	ST is an ID qualifier indicating the ship to. 92 is an ID code indicating the next field will be a location assigned by the buyer; D08 is the ship to.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.

PRF*0796578***19980916 N/L	0796578 is the buyer's original purchase order number; 19980916 is the buyer's original purchase order date, September 16, 1998.
REF*DP*127 N/L	Retailer's department number 127.
NI*BY**92*0679 N/L	BY indicates the buying party is identified in this segment; 92 indicates the number that follows is a buyer assigned ID code; 0679 is the location code.
HL*3*2*I N/L	3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086020457 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code. 034086020457 is the actual U.P.C. code.
SN1**6*CA N/L	6 is the number of cases shipped; CA is the unit of measurement (case).
HL*4*3*P N/L	4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the Parent ID Number; P indicates the hierarchical level is Pack.
PO4*6 N/L	6 is the quantity of SKUs within the pack. There is a total of 36 units of the U.P.C., 6 Cases x 6 SKUs per case.
MAN*GM* 00000340860075232455 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232455 is the actual bar coded number.
MAN*GM* 00000340860075232466 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232466 is the actual bar coded number.
MAN*GM* 00000340860075232477 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232477 is the actual bar coded number.
MAN*GM* 00000340860075232488 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232488 is the actual bar coded number.
MAN*GM* 00000340860075322495 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container

MAN*GM*
00000340860075322502N/L

Code (SSCC-18); 00000340860075322495 is the actual bar coded number.

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075322502 is the actual bar coded number.

HL*5*2*I N/L

5 indicates the fifth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*034086700493 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code. 034086700493 is the actual U.P.C. code.

SN17*CA N/L**

7 is the number of cases shipped; CA is the unit of measurement (case).

HL*6*5*P N/L

6 indicates the sixth occurrence of the HL segment in the transaction set; 5 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

PO4*10 N/L

10 is the quantity of SKUs within the pack. There is a total of 70 units of the U.P.C., 7 cases x 10 SKUs per case.

MAN*GM*
00000340860074989046 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989046 is the actual bar coded number.

MAN*GM*
00000340860074989057 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989057 is the actual bar coded number.

MAN*GM*
00000340860074989060 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989060 is the actual bar coded number.

MAN*GM*
00000340860074989072 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989072 is the actual bar coded number.

MAN*GM*
00000340860074989082 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989082 is the actual bar coded number.

<p>MAN*GM* 00000340860074989094 N/L</p>	<p>GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989094 is the actual bar coded number.</p>
<p>MAN*GM* 00000340860074989111 N/L</p>	<p>GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989111 is the actual bar coded number.</p>
<p>HL*7*2*I N/L</p>	<p>7 indicates the seventh occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.</p>
<p>LIN**UP*034086507803 N/L</p>	<p>UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086507803 is the actual U.P.C. code.</p>
<p>SN1**6*CA N/L</p>	<p>6 is the number of cases shipped; CA is the unit of measurement (case).</p>
<p>HL*8*7*P N/L</p>	<p>8 indicates the eighth occurrence of the HL segment in the transaction set; 7 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.</p>
<p>PO4*1 N/L</p>	<p>1 is the quantity of SKUs within the pack. There is a total of 6 units of the U.P.C., 6 cases x 1 SKU per case</p>
<p>MAN*GM* 00000340860076113791 N/L</p>	<p>GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113791 is the actual bar coded number.</p>
<p>MAN*GM* 00000340860076113802 N/L</p>	<p>GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113802 is the actual bar code number.</p>
<p>MAN*GM* 00000340860076113813 N/L</p>	<p>GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113813 is the actual bar coded number.</p>
<p>MAN*GM* 00000340860076113824 N/L</p>	<p>GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113824 is the actual bar coded number.</p>

MAN*GM* 00000340860076113835 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113835 is the actual bar coded number.
MAN*GM* 00000340860076113846 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113846 is the actual bar coded number.
HL*9*1*O N/L	9 indicates the ninth occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*0796578***19980917 N/L	0796578 is the buyer's original purchase order number; 19980917 is the buyer's original purchase order date, September 17, 1998.
REF*DP*127 N/L	Retailer's department 127.
N1*BY**92*0679 N/L	BY indicates the buying party is identified in this segment; 92 indicates the number that follows is a buyer assigned ID code; 0679 is the location code.
HL*10*9*I N/L	10 indicates the tenth occurrence of the HL segment in the transaction set; 9 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086020200 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086020200 is the actual U.P.C. code.
SN1**2*CA N/L	2 is the number of cases shipped; CA is the unit of measurement (case).
HL*11*10*P N/L	11 indicates the eleventh occurrence of the HL segment in the transaction set; 10 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*4 N/L	4 is the quantity of SKUs within the pack. There is a total of 8 units of the U.P.C., 2 cases x 4 SKUs per case.
MAN*GM* 00000340860076223851 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076223851 is the actual bar coded number.
MAN*GM* 00000340860076213860 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container

HL*12*9*I N/L

Code (SSCC-18); 00000340860076213860 is the actual bar coded number.

12 indicates the twelfth occurrence of the HL segment in the transaction set; 9 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*034086020210 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086020210 is the actual U.P.C. code.

SN112*CA N/L**

12 is the number of cases shipped; CA is the unit of measurement (case).

HL*13*12*P N/L

13 indicates the thirteenth occurrence of the HL segment in the transaction set; 12 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

PO4*10 N/L

10 is the quantity of SKUs within the inner pack. There is a total of 120 units of the U.P.C., 12 cases x 10 SKUs per case.

**MAN*GM*
00000340860076300703 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300703 is the actual bar coded number.

**MAN*GM*
00000340860076300715 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300715 is the actual bar coded number.

**MAN*GM*
00000340860076300727 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300727 is the actual bar coded number.

**MAN*GM*
00000340860076300739 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300739 is the actual bar coded number.

**MAN*GM*
00000340860076300740 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300740 is the actual bar coded number.

**MAN*GM*
00000340860076300752 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300752 is the actual bar coded number.

MAN*GM*
00000340860076300764 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300764 is the actual bar coded number.

MAN*GM*
00000340860076300776 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300776 is the actual bar coded number.

MAN*GM*
00000340860076300788 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300788 is the actual bar coded number.

MAN*GM*
00000340860076300790 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300790 is the actual bar coded number.

MAN*GM*
00000340860076300802 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300802 is the actual bar coded number.

MAN*GM*
00000340860076300815 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076300815 is the actual bar coded number.

CTT*13 N/L

13 indicates the number of HL segments present in the transaction set.

SE*77*1158 N/L

77 is the number of included segments in this transaction set; 1158 is the control number.

EXAMPLE 4

Version 004010

MULTIPLE ORDER, PICK and PACK STRUCTURE

The following example depicts two supplier orders which are being shipped to the receiver's distribution center. This example is similar to the "Single Order - Pick and Pack" example, however, there are multiple SKUs within the cartons and each supplier order references a different PO shipped to the same location.

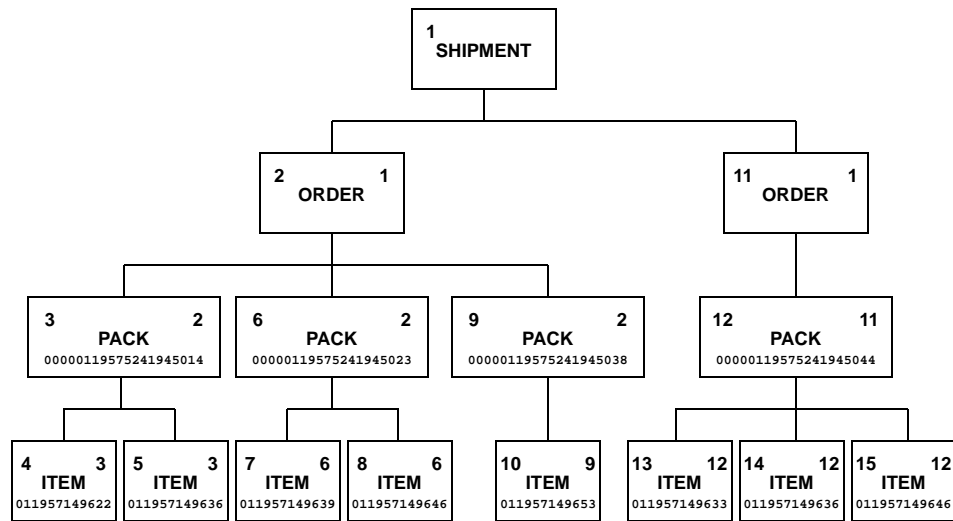


Figure 15. Multiple Order, Pick and Pack Structure

EDI TRANSMISSION DATA

ST*856*0813 N/L

**BSN*00*12345*19981210*
2310*0001 N/L**

EXPLANATION

856 indicates the transaction set. 0813 is the control number.

00 indicates this is an original transaction set; 12345 is the ship notice number. 19981210 is the shipment date of December 10, 1998; the transaction time is 11:10 P.M.; 0001 indicates the transaction set structure is Pick and Pack.

HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*CTN25*4 N/L	CTN25 indicates the product is packed in corrugated or solid carton; 4 indicates three cartons were shipped.
TD5**2*BBBB N/L	2 indicates the presence of a Standard Carrier Alpha Code (SCAC) code, BBBB indicates the SCAC for The Best Carrier company.
REF*BN*33333 N/L	BN indicates the number that follows is a Bill of Lading (BOL) Number; 33333 is the BOL number.
DTM*011*19981210 N/L	011 indicates the date that follows is the shipped date, 19981210 is the date of shipment, December 10, 1998.
FOB*CC N/L	CC indicates the shipping charges are collect.
N1*ST**92*22 N/L	ST indicates the segment is describing the ship-to location for the shipment; 92 indicates the data that follows is assigned by the buyer; 22 is the ship-to location.
N1*SF**91*0133 N/L	SF indicates the segment is describing the ship-from location for the shipment; 91 indicates the data that follows is assigned by the seller; the shipment was made from the seller's location 0133 (East Coast Distribution Center).
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*12345678***19981202 N/L	The buyer's purchase order number is 12345678; 19981202 is the purchase order date, December 2, 1998.
REF*IA*4567 N/L	IA indicates that the data to follow is the buyer's assigned vendor number; 4567 is the vendor code assigned by the buyer.
REF*DP*63 N/L	DP indicates the data to follow is the department number; 63 is the actual department number assigned by the buyer.

N1*BY92*345 N/L**

BY indicates the buying party is identified in this segment; 92 indicates the data that follows is assigned by the buyer; buyers ordering store number (store location) is 345.

HL*3*2*P N/L

3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

**MAN*GM*
00000119575241945014 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945014 is the actual bar coded number.

HL*4*3*I N/L

4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item (the data to follow is about the item shipped).

LINUP*011957149622 N/L**

UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149622 is the actual U.P.C. code.

SN127*EA**27*EA N/L**

27 units were shipped; the unit of measure is each; 27 were ordered; the unit of measure is each.

HL*5*3*I N/L

5 indicates the fifth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*011957149636 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 011957149636 is the actual U.P.C. code.

SN121*EA**33*EA N/L**

21 units were shipped; the unit of measure is each; 33 units were ordered; the unit of measure is each.

HL*6*2*P N/L

6 indicates the sixth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

**MAN*GM*
00000119575241945023 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945023 is the actual bar coded number.

HL*7*6*I N/L	7 indicates the seventh occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149639 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149639 is the actual U.P.C. code.
SN1**12*EA**33*EA N/L	12 units were shipped; the unit of measure is each; 33 units were ordered; the unit of measure is each.
HL*8*6*I N/L	8 indicates the eighth occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149646 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149646 is the actual U.P.C. code.
SN1**36*EA**36*EA N/L	36 units were shipped; the unit of measure is each; 36 units were ordered; unit of measure is each.
HL*9*2*P N/L	9 indicates the ninth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
MAN*GM* 00000119575241945038 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945038 is the actual bar coded number.
HL*10*9*I N/L	10 indicates the tenth occurrence of the HL segment in the transaction set; 9 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149653 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149653 is the actual U.P.C. code.
SN1**24*EA**24*EA N/L	24 units were shipped; the unit of measure is each; 24 units were ordered; unit of measure is each.
HL*11*1*O N/L	11 indicates the eleventh occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.

PRF*12345679***19981204 N/L	The buyer's purchase order is number 12345679; 19981204 is the purchase order date, December 4, 1998.
REF*IA*4567 N/L	IA indicates the buyer's assigned vendor number will follow; 4567 is the vendor code assigned by the buyer.
REF*DP*063 N/L	DP indicates the number that follows is a department number; 063 is the actual department number assigned by the buyer.
N1*BY**92*346 N/L	BY indicates the buying party is identified in this segment; 92 indicates the data that follows is assigned by the buyer; 346 is the buyer's ordering store (buying location).
HL*12*11*P N/L	12 indicates the twelfth occurrence of the HL segment in the transaction set; 11 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
MAN*GM* 00000119575241945044 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000119575241945044 is the actual bar coded number.
HL*13*12*I N/L	13 indicates the thirteenth occurrence of the HL segment in the transaction set; 12 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*011957149633 N/L	UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149633 is the actual U.P.C. code.
SN1**27*EA**27*EA N/L	27 units were shipped; the unit of measure is each; 27 were ordered; the unit of measure is each.
HL*14*12*I N/L	14 indicates the fourteenth occurrence of the HL segment in the transaction set; 12 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN*UP*011957149636 N/L	UP indicates the number is the U.P.C.-A Consumer Package Code; 011957149636 is the actual U.P.C. code.

SN121*EA**21*EA N/L**

21 units were shipped; the unit of measure is each; 21 units were ordered; the unit of measure is each.

HL*15*12*I N/L

15 indicates the fifteenth occurrence of the HL segment in the transaction set; 12 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*011957149646 N/L**

UP indicates the number is a U.P.C.-A Consumer Package Code; 011957149646 is the actual U.P.C. code.

SN136*EA**36*EA N/L**

36 units were shipped; the unit of measure is each; 36 units were ordered; unit of measure is each.

CTT*15 N/L

15 indicates the number of HL segments present in the transaction set.

SE*54*0813 N/L

54 is the number of included segments in this transaction set; 0813 is the control number.

EXAMPLE 5

Version 004010

TARE, STANDARD CARTON PACK STRUCTURE

The following example depicts a single supplier's order which contains three different SKUs, each represented by a unique U.P.C. The units for each U.P.C. are packed in cartons which are then palletized. Each pallet contains a quantity of a single U.P.C. In this example two packaging levels are present. The supplier is placing UCC/EAN-128 Serial Shipping Container Codes (SSCC-18) on the pallets as well as the individual cartons. The merchandise was ordered for, and shipped to the same location, therefore the ship-to specified in the N1 segment at the Shipment level and the buying party specified in the N1 segment at the Order level identify the same location.

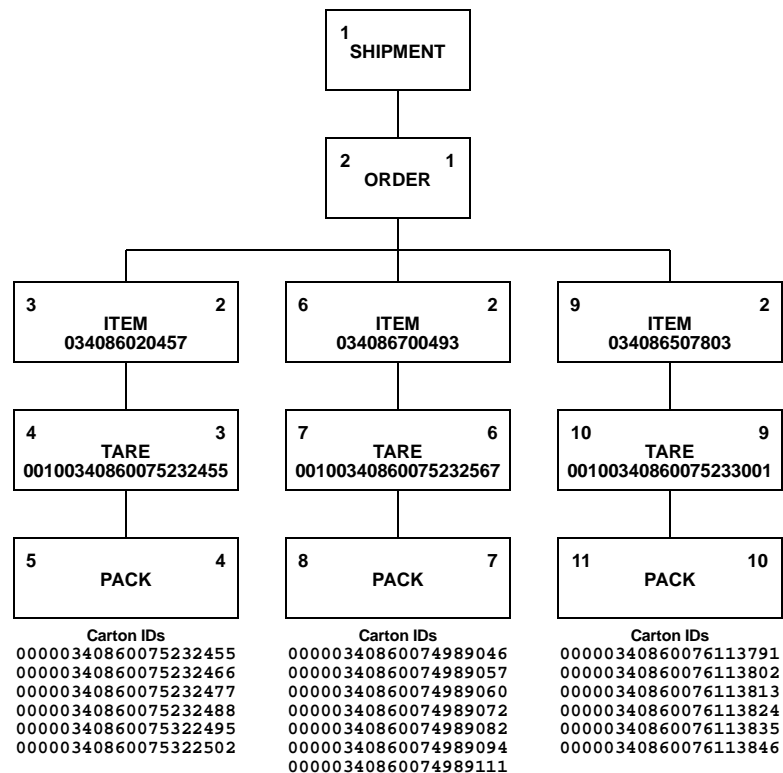


Figure 16. Tare, Standard Carton Pack Structure

<u>EDI TRANSMISSION DATA</u>	<u>EXPLANATION</u>
ST*856*6123 N/L	856 indicates Transaction Set 856; 6123 is the control number.
BSN*00*R5067*19981125* 1108*0002 N/L	00 indicates this is an original transaction set; R5067 is the ship notice number; 19981125 is the date (November 25, 1998); 1108 indicates the time is 11:08 A.M.; 0002 indicates the transaction set structure is Standard Carton Pack.
HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*PLT03*3****G*388* LB N/L	PLT03 indicates wooden pallets; 3 indicates the number of pallets being shipped; G is the ID code that indicates gross weight; LB indicates pounds is the weight unit of measure; 388 pounds gross weight.
TD5*O*2*SECO N/L	O indicates the origin carrier; 2 is an ID qualifier indicating the ID used in the next field will be a Standard Carrier Alpha Code (SCAC) code; SECO is the SCAC for the carrier.
REF*BM*70684 N/L	BM indicates the number that follows is a Bill of Lading (BOL) Number; 70684 is the BOL Number.
DTM*011*19981125 N/L	011 indicates the date that follows is the shipped date; 19981125 is the date of the shipment; November 25, 1998.
N1*SF**91*6999 N/L	SF is an ID qualifier indicating the ship from (shipper); 91 is an ID code that indicates the next field will be a supplier assigned location number; 6999 is the ship from.
N1*ST**92*0679 N/L	ST is an ID qualifier indicating the ship to; 92 is an ID code that indicates the next field will be a buyer assigned location number; 0679 is the ship to.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.

PRF*0796578***19980916 N/L	0796578 is the buyer's original purchase order number; 19980916 is the buyer's original purchase order date, September 16, 1998.
REF*DP*127 N/L	DP indicates the number that follows is a department number; 127 is the department number.
N1*BY**92*0679 N/L	BY indicates the buying party is identified in this segment; 92 indicates the number that follows is a buyer assigned ID code; 0679 is the location code.
HL*3*2*I N/L	3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086020457 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086020457 is the actual U.P.C. code.
SN1**36*EA N/L	36 is the number of eaches shipped; EA is the unit of measurement.
HL*4*3*T N/L	4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; T indicates the hierarchical level is Tare.
MAN*GM* 00100340860075232455 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00100340860075232455 is the actual bar coded number.
PAL*6*1*****120*LB* **3 N/L	6 specifies wood pallet; 1 indicates the number of layers; 120 is the gross weight in pounds; 3 indicates the pallet is to be returned.
HL*5*4*P N/L	5 indicates the fifth occurrence of the HL segment in the transaction set; 4 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*6 N/L	6 is the quantity of SKUs within the pack.
MAN*GM* 00000340860075232455 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232455 is the actual bar coded number.

MAN*GM*
00000340860075232466 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232466 is the actual bar coded number.

MAN*GM*
00000340860075232477 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232477 is the actual bar coded number.

MAN*GM*
00000340860075232488 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232488 is the actual bar coded number.

MAN*GM*
00000340860075322495 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075322495 is the actual bar coded number.

MAN*GM*
00000340860075322502N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075322502 is the actual bar coded number.

HL*6*2*I N/L

6 indicates the sixth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LIN*UP*034086700493 N/L

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700493 is the actual U.P.C. code.

SN170*EA N/L**

70 is the number of eaches shipped.

HL*7*6*T N/L

7 indicates the seventh occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; T indicates the hierarchical level is Tare.

MAN*GM*
00100340860075232567 N/L

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00100340860075232567 is the actual bar coded number.

PAL*6*1***148***
LB*3 N/L**

6 specifies wood pallet; 1 indicates the number of layers; 148 is the gross weight in pounds; and 3 indicates the pallet is to be returned.

HL*8*7*P N/L	8 indicates the eighth occurrence of the HL segment in the transaction set; 7 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*10 N/L	10 is the quantity of SKUs within the pack.
MAN*GM* 00000340860074989046 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074909046 is the actual bar coded number.
MAN*GM* 00000340860074989057 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989057 is the actual bar coded number.
MAN*GM* 00000340860074989060 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989060 is the actual bar coded number.
MAN*GM* 00000340860074989072 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989072 is the actual bar coded number.
MAN*GM* 00000340860074989082 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989082 is the actual bar coded number.
MAN*GM* 00000340860074989094 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989094 is the actual bar coded number.
MAN*GM* 00000340860074989111 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860074989111 is the actual bar coded number.
HL*9*2*I N/L	9 indicates the ninth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086507803 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086507803 is the actual U.P.C. code.
SN1**72*EA N/L	72 is the number of eaches shipped.

HL*10*9*T N/L

10 indicates the tenth occurrence of the HL segment in the transaction set; 9 indicates the hierarchical Parent ID Number; T indicates the hierarchical level is Tare.

**MAN*GM*
00100340960075233001 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00100340960075233001 is the actual bar coded number.

PAL*6*1***120*LB*
3 N/L

6 specifies wood pallet; 1 indicates the number of layers; 120 is the gross weight in pounds; and 3 indicates the pallet is to be returned.

HL*11*10*P N/L

11 indicates the eleventh occurrence of the HL segment in the transaction set; 10 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

PO4*12 N/L

12 is the quantity of SKUs within the pack.

**MAN*GM*
00000340860076113791 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113791 is the actual bar coded number.

**MAN*GM*
00000340860076113802 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113802 is the actual bar coded number.

**MAN*GM*
00000340860076113813 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113813 is the actual bar coded number.

**MAN*GM*
00000340860076113824 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113824 is the actual bar coded number.

**MAN*GM*
00000340860076113835 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113835 is the actual bar coded number.

**MAN*GM*
00000340860076113846 N/L**

GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860076113846 is the actual bar coded number.

CTT*11 N/L

11 indicates the number of HL segments present in the transaction set.

SE*58*6123 N/L

58 is the number of included segments in this transaction set; 6123 is the control number.

EXAMPLE 6

Version 004010

TARE, PICK and PACK STRUCTURE

The following example depicts a single supplier order which contains two different SKUs, each represented by unique U.P.C. Two packaging levels are used. Two cartons have been shipped for the first U.P.C. and two cartons have been shipped for the second U.P.C. The four cartons have been combined on one pallet. Each Pack level in the Ship Notice/Manifest identifies only one carton on the pallet.

There are 5 UCC/EAN-128 Serial Shipping Container Codes (SSCC-18) assigned; one for the pallet, and one for each carton. In addition, each carton is identified by a U.P.C./EAN Shipping Container Code (SCC-14).

Although each carton contains a quantity of a single U.P.C., the Pick and Pack structure must be used because the highest identifiable package level (Pallet) contains multiple SKUs.

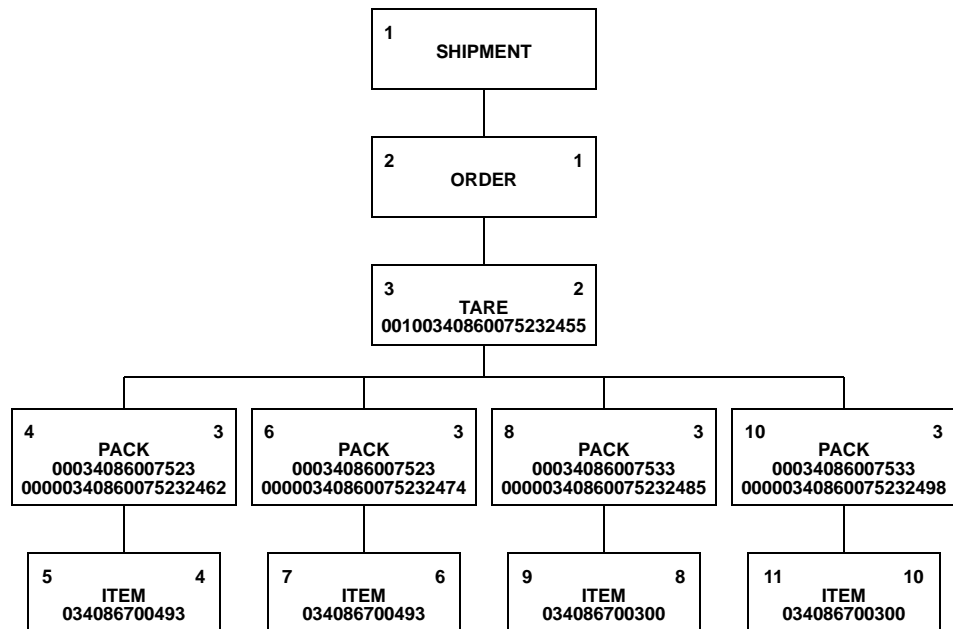


Figure 17. Tare, Pick and Pack Structure

<u>EDI TRANSMISSION DATA</u>	<u>EXPLANATION</u>
ST*856*123 N/L	856 indicates Transaction Set 856; 123 is the control number.
BSN*00*R5067*19981125* 1108*0001 N/L	00 indicates this is an original transaction set; R5067 is the ship notice number; 19981125 is the date (November 25, 1998); 1108 indicates the time is 11:08 A.M.; 0001 indicates the transaction set structure is Pick and Pack.
HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*PLT03*1****G*250* LB N/L	PLT03 wood pallet; 1 indicates the number of pallets being shipped; G is ID code that indicates type of weight is gross weight; LB indicates that pounds is the weight unit of measure. 250 pounds gross weight.
TD5*O*2*SECO N/L	O indicates the origin carrier; 2 is an ID qualifier indicating the ID used in the next field will be a Standard Carrier Alpha Code (SCAC) code; SECO is the SCAC for the carrier.
REF*BM*766804 N/L	BM indicates the number that follows is a Bill of Lading (BOL) Number; 766804 is the Bill of Lading Number.
DTM*011*19981125 N/L	011 indicates the date that follows is the shipped date; 19981125 is the date of the shipment; November 25, 1998.
N1*SF**91*6999 N/L	SF is an ID qualifier indicating the ID used in the next field will be ship from (shipper); 91 is an ID code that indicates the next field will be the supplier assigned location number; 6999 is the ship from.
N1*ST**92*0679 N/L	ST is an ID qualifier indicating the ship to; 92 is an ID code that indicates the next field will be a buyer assigned location number; 0679 is the ship to.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.

PRF*0796578***19980916 N/L	0796578 is the buyer's original purchase order number; 19980916 is the buyer's original purchase order date, September 16, 1998.
REF*DP*128 N/L	DP indicates the number that follows is a department number; 128 is the department number.
N1*BY**92*0679 N/L	BY indicates the buying party is identified in this segment; 92 indicates the number that follows is a buyer assigned ID code; 0679 is the location code.
HL*3*2*T N/L	3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; T indicates the hierarchical level is Tare.
MAN*GM* 00100340860075232455 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00100340860075232455 is the actual bar coded number.
PAL*6***4*****3 N/L	6 identifies a wood pallet; 4 is the number of cartons on the pallet; 3 indicates it is a returnable pallet.
HL*4*3*P N/L	4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
MAN*UC*00034086007523** GM* 00000340860075232462 N/L	UC indicates the number that follows is a U.P.C. Shipping Container Code (SCC-14); 00034086007523 is the actual shipping container code; GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232462 is the actual bar coded number.
HL*5*4*I N/L	5 indicates the fifth occurrence of the HL segment in the transaction set; 4 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086700493 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700493 is the actual U.P.C. code.
SN1**48*EA N/L	48 is the number of units shipped; EA is the unit of measurement code (each).

HL*6*3*P N/L

6 indicates the sixth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

MAN*UC*
00034086007523GM***
00000340860075232474 N/L

UC indicates the number that follows is a U.P.C./EAN Shipping Container Code (SCC-14); 00034086007523 is the actual shipping container code; GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232474 is the actual bar coded number.

HL*7*6*I N/L

7 indicates the seventh occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*034086700493 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700493 is the actual U.P.C. code.

SN148*EA N/L**

48 is the number of units shipped; EA is the unit of measurement.

HL*8*3*P N/L

8 indicates the eighth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

MAN*UC*
00034086007533GM***
00000340860075232485 N/L

UC indicates the number that follows is a U.P.C./EAN Shipping Container Code (SCC-14); 00034086007533 is the actual shipping container code; GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232485 is the actual bar coded number.

HL*9*8*I N/L

9 indicates the ninth occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*034086700300 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700300 is the actual U.P.C. code.

SN160*EA N/L**

60 is the number of units shipped; EA is the unit of measurement .

HL*10*3*P N/L

10 indicates the tenth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

**MAN*UC*
00034086007533**GM*
00000340860075232498 N/L**

UC indicates the number that follows is a U.P.C./EAN Shipping Container Code (SCC-14); 00034086007533 is the actual shipping container code; GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860075232498 is the actual bar coded number.

HL*11*10*I N/L

11 indicates the eleventh occurrence of the HL segment in the transaction set; 10 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is item.

LINUP*034086700300 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700300 is the actual U.P.C. code.

SN160*EA N/L**

60 is the number of units shipped; EA is the unit of measurement.

CTT*11 N/L

11 indicates the number of HL segments present in the transaction set.

SE*38*123 N/L

38 is the number of included segments in this transaction set; 123 is the control number.

EXAMPLE 7

Version 004010

TWO PACKAGING LEVELS, PICK AND PACK STRUCTURE

The following example depicts a single supplier order being shipped on single pallet. There are two different SKUs each represented by a unique U.P.C. The shipped quantity for the first U.P.C. is 30 cases, packed 12 to a case. The shipped quantity for the second U.P.C. is 30 cases, packed 6 to a case.

The Pallet level contains the UCC/EAN-128 Serial Shipping Container Code (SSCC-18). Each carton in the Pack level is identified by the U.P.C./EAN Shipping Container Code (SCC-14), and specifies the quantity of the product within a single carton.

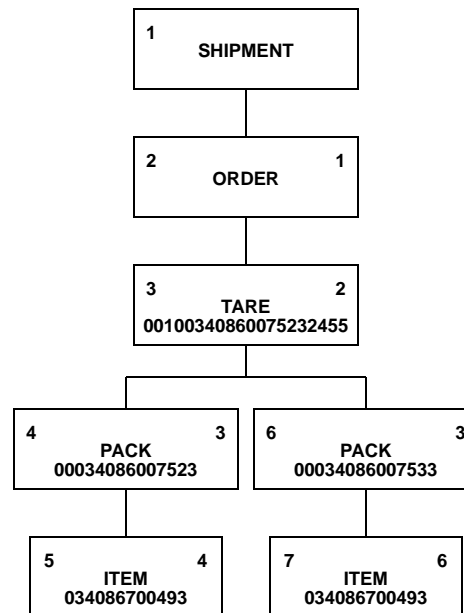


Figure 18. Two Packaging Levels, Pick and Pack Structure

EDI TRANSMISSION DATA

EXPLANATION

ST*856*123 N/L

856 indicates Transaction Set 856; 123 is the control number.

BSN*00*R5067*19981125*
1108*0001 N/L

00 indicates this is an original transaction set; R5067 is the ship notice number; 19981125 is the date (November 25, 1998); 1108 indicates the time is 11:08 A.M.; 0001 indicates the transaction set structure is Pick and Pack.

HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*CTN25*60****G*750* LB N/L	CTN25 indicates cartons; 60 indicates the number of cartons being shipped; G is ID code that indicates type of weight is gross weight; LB indicates that pounds is the weight unit of measure. 750 pounds gross weight.
TD5*O*2*SECO N/L	O indicates the origin carrier; 2 is an ID qualifier indicating the ID used in the next field will be a Standard Carrier Alpha Code (SCAC) code; SECO is the SCAC for the carrier.
REF*BM*766804 N/L	BM indicates the number that follows is a Bill of Lading (BOL) Number; 766804 is the Bill of Lading Number.
DTM*011*19981125 N/L	011 indicates the date that follows is the shipped date; 19981125 is the date of the shipment; November 25, 1998.
N1*SF**91*6999 N/L	SF is an ID qualifier indicating the ship from (shipper); 91 is an ID code that indicates the next field will be a supplier assigned location number; 6999 is the ship from.
N1*ST**92*679 N/L	ST is an ID qualifier indicating the ship to; 92 is an ID code that indicates the next field will be a buyer assigned location number; 0679 is the ship to.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*0796578***19980916 N/L	0796578 is the buyer's original purchase order number; 19980916 is the buyer's original purchase order date, September 16, 1998.
N1*BY**92*0679 N/L	BY indicates the buying party is identified in this segment; 92 indicates the number that follows is a buyer assigned ID code; 0679 is the location code.
HL*3*2*T N/L	3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; T indicates the hierarchical level is Tare.

MAN*GM* 00100340860075232455 N/L	GM indicates the number that follows is a UCC/EAN-128 Serial Shipping Container Code; 00100340860075232455 is the actual bar coded number.
PAL*6***60*****3 N/L	6 identifies a wood pallet; 60 is the number of cartons on the pallet; 3 indicates it is a returnable pallet.
HL*4*3*P N/L	4 indicates the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*12 N/L	12 is the quantity of SKUs within the pack. The total number of U.P.C.s is 360; 30 cases x 12 units per case = 360.
MAN*UC* 00034086007523 N/L	UC indicates the number that follows is a U.P.C./EAN Shipping Container Code (SCC-14); 00034086007523 is the actual shipping container code.
HL*5*4*I N/L	5 indicates the fifth occurrence of the HL segment in the transaction set; 4 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086700493 N/L	UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700493 is the actual U.P.C. code.
SN1**30*CA N/L	30 is the number of units shipped; CA is the unit of measurement.
HL*6*3*P N/L	6 indicates the sixth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
PO4*6 N/L	6 is the quantity of SKUs within the pack. The total number of U.P.C.s is 180; 30 cases x 6 units per case = 180.
MAN*UC* 00034086007533 N/L	UC indicates the number that follows is a U.P.C./EAN Shipping Container Code (SCC-14); 00034086007533 is the actual shipping container code.

HL*7*6*I N/L

7 indicates the seventh occurrence of the HL segment in the transaction set; 6 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.

LINUP*034086700493 N/L**

UP indicates the number that follows is a U.P.C.-A Consumer Package Code; 034086700493 is the actual U.P.C. code.

SN130*CA N/L**

30 is the number of cases shipped; CA is the unit of measurement code (case).

CTT*7 N/L

7 indicates the number of HL segments present in a transaction set.

SE*29*123 N/L

29 is the number of included segments in this transaction set; 123 is the control number.

EXAMPLE 8

Version 004010

NO PACK

The following example depicts a single supplier order which contains three different items, each represented by a unique U.P.C. This order is a direct shipment to the customer of the buyer. Therefore, no carton ID, i.e. UCC/EAN-128 Serial Shipping Container Code (SSCC-18), was placed on the shipping container(s), since the buyer will not be receiving the shipment. This does not preclude the placement of a carton ID for direct shipments to an end customer. In fact, many suppliers have integrated the UCC/EAN-128 Serial Shipping Container Code (SSCC-18) carton ID within their order filling and distribution systems so every carton has a bar coded carton ID. The point is neither the end customer nor the buyer can effectively use the carton ID data. The UCC/EAN-128 Serial Shipping Container Code (SSCC-18) carton ID might only be used for carrier tracking of misdirected shipments. In the no packaging level environment, it is important to the buyer's PO reconciliation process to simply identify the items being shipped.

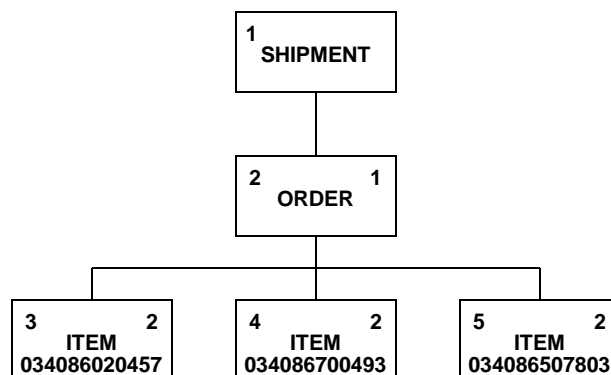


Figure 19. No Packaging Level, No Carton ID

<u>EDI TRANSMISSION DATA</u>	<u>EXPLANATION</u>
ST*856*0204 N/L	856 indicates Transaction Set 856; 0204 is the control number.
BSN*00*R5067*19981125* 1108*0004 N/L	00 indicates this is an original transaction set; R5067 is the ship notice number; 19981125 is the date (November 25, 1998); 1108 indicates the time is 11:08 A.M. Because the HL sequence is Shipment, Order, Item; 0004 is used in BSN05.
HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD5*O*2*UPSS N/L	O indicates the origin carrier; 2 is an ID qualifier indicating the ID used in the next field will be a SCAC code; UPSS is the Standard Carrier Alpha Code (SCAC) for the carrier.
DTM*011*19981125 N/L	011 indicates the date that follows is the shipped date; 19981125 is the date of the shipment; November 25, 1998.
N1*SF**91*6999 N/L	SF is an ID qualifier indicating the ship from (shipper); 91 is an ID code that indicates the next field will be the supplier assigned location number; 6999 is the ship from.
N1*ST*FRANK DOE N/L	End consumer's name.
N3*131 OAKDALE DRIVE N/L	End consumer's street address.
N4*HOMETOWN*KS *66223 N/L	End consumer's city, state, and ZIP code.
HL*2*1*O N/L	2 indicates the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*0796578***19980916 N/L	0796578 is the buyer's original purchase order number; 19980916 is the buyer's original purchase order date, September 16, 1998.
N1*BY**92*0679 N/L	BY indicates the buying party is identified in this segment; 92 indicates the number that follows is a buyer assigned ID code; 0679 is the location code; i.e. ordering store.
HL*3*2*I N/L	3 indicates the third occurrence of the HL segment in the transaction set; 2 indicates the

	hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086020457 N/L	UP indicates the number that follows is a UPC-A Consumer Package Code; 034086020457 is the actual U.P.C. code.
SN1**1*EA N/L	1 is the number of units shipped; Each is the unit of measure.
HL*4*2*I N/L	4 indicates the fourth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086700493 N/L	UP indicates the number that follows is a UPC-A Consumer Package Code; 034086700493 is the actual U.P.C. code.
SN1**1*EA N/L	1 is the number of units shipped; Each is the unit of measurement.
HL*5*2*I N/L	5 indicates the fifth occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086507803 N/L	UP indicates the number that follows is a UPC-A Consumer Package Code; 034086507803 is the actual U.P.C. code.
SN1**1*EA N/L	1 is the number of units shipped; Each is the unit of measurement.
CTT*5 N/L	5 indicates the number of HL segments used in this transaction set.
SE*23*0204 N/L	23 is the number of included segments in this transaction set; 0204 is the control number.

EXAMPLE 9

Version 004010

SINGLE U.P.C. IN MULTIPLE CARTONS

The following example depicts a shipment of 8 lamps. Each lamp is assigned a U.P.C. and is the unit of order. Each lamp is comprised of a shade and a lamp base. There is one lamp base in a carton, however the lamp shades are shipped four to a carton, each in its own box within the shipping carton.

The lamp, comprised of the base and the shade, is identified with a U.P.C. in the LIN segment (Item level). Two pack levels are used to represent each of the two components of the lamp (base and shade). The SLN segment at the Pack level is used to indicate the component and the number of this component within the item referenced in the LIN segment. Note: since neither the shade or lamp base have been assigned a U.P.C., the identification of the component has been omitted, however, the manufacturer may send their internal product code for the shade. The PO4 segment at the Pack level is used to describe the packaging on the component within the package. Finally the MAN segments are used to identify all of the UCC/EAN-128 Serial Shipping Container Code (SSCC-18) for the 10 cartons being shipped.

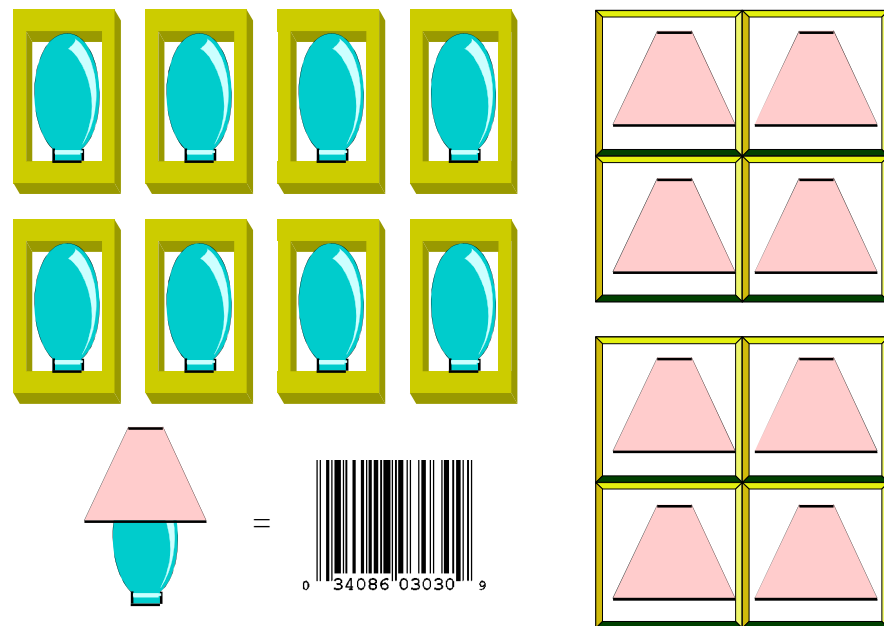


Figure 20. Single U.P.C.s in Multiple Cartons

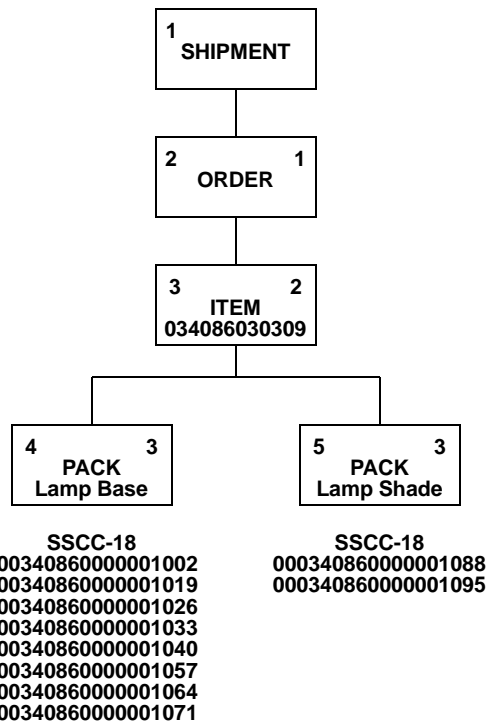


Figure 21. Single U.P.C.s in Multiple Cartons

EDI TRANSMISSION DATA

EXPLANATION

ST*856*1158 N/L

856 indicates Transaction Set 856; 1158 is the control number.

**BSN*00*R5067*19981030*
1108*0002 N/L**

00 indicate this is an original transaction set; R5067 is the ship notice number; 19981030 is the date (October 30, 1998); 1108 indicates the time is 11:08 A.M.; 0002 indicates the transaction set structure is Standard Carton Pack.

HL*1S N/L**

1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.

TD1*CTN25*1000**G*
28000*LB N/L**

CTN25 indicates the shipping containers are corrugated or solid cartons; 1000 indicates the number of cartons being shipped; G is the ID qualifier that indicates the next data element is gross weight; 28000 is the gross weight, LB is the ID qualifier that indicates the previous data element is measured in pounds.

TD5**2*SECO N/L	2 is the ID qualifier that indicates the next data element is a Standard Carrier Alpha Code (SCAC); SECO is the SCAC that identifies the carrier.
REF*BM*70684 N/L	BM is the ID qualifier that indicates the next data element is a Bill of Lading (BOL) number; 70684 is the BOL.
DTM*011*19981030 N/L	011 is the ID qualifier that indicates the next data element is the shipment date; 19981030 is the shipment date (October 30, 1998)
N1*SF**91*6999 N/L	SF indicates ship from location; 91 is the ID qualifier that indicates the next data element is assigned by the sender; 6999 is the ship from location code, in this case the supplier's distribution center.
N1*ST**92*D08 N/L	ST indicates ship to location; 92 is the ID qualifier that indicates the next data element is assigned by the buyer; D08 is the ship to location code, in this case the buyer's distribution center.
HL*2*1*O N/L	2 indicates this is the second occurrence of the HL segment used in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*0796578***19981025 N/L	0796578 is the buyer's PO number; 19981025 is the PO date (October 25, 1998).
REF*DP*127 N/L	DP is the ID qualifier that indicates the next data element is the department number; 127 is the buyer's department number.
N1*BY**92*0679 N/L	BY indicates buying party location; 92 is the ID qualifier that indicates the next data element is assigned by the buyer; 0679 is the buying party location code in this case the store number.
HL*3*2*I N/L	3 indicates this is the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086030309 N/L	UP is the ID qualifier that indicates the next data element is a U.P.C.-A Consumer Package Code; 034086030309 is the U.P.C. assigned to the lamp.

SN18*ST N/L**

8 is the quantity of the item identified in the previous LIN segment (the lamp); ST is the ID qualifier that indicates the quantity is measured in sets.

HL*4*3*P N/L

4 indicates this is the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

SLN*1I*1*EA N/L**

1 is the ID number of the SLN segment; I indicates this is included in the set identified in the previous LIN segment; 1 is the quantity of this item in the set, i.e. the lamp base; EA is the ID qualifier that indicates the quantity is measured in each.

**MAN*GM*
000034086000001002 N/L**

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 000034086000001002 is the SSCC-18 assigned to the carton which contains a lamp base.

**MAN*GM*
000034086000001019 N/L**

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 000034086000001019 is the SSCC-18 assigned to the carton which contains a lamp base.

**MAN*GM*
000034086000001026 N/L**

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 000034086000001026 is the SSCC-18 assigned to the carton which contains a lamp base.

**MAN*GM*
000034086000001033 N/L**

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 000034086000001033 is the SSCC-18 assigned to the carton which contains a lamp base.

**MAN*GM*
000034086000001040 N/L**

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 000034086000001040 is the SSCC-18 assigned to the carton which contains a lamp base.

MAN*GM*
00000340860000001057 N/L

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860000001057 is the SSCC-18 assigned to the carton which contains a lamp base.

MAN*GM*
00000340860000001064 N/L

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860000001064 is the SSCC-18 assigned to the carton which contains a lamp base.

MAN*GM*
00000340860000001071 N/L

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860000001071 is the SSCC-18 assigned to the carton which contains a lamp base.

HL*5*3*P N/L

5 indicates this is the fifth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

SLN*2I*1*EA N/L**

2 is the ID number of the SLN segment; I indicates this is included in the set identified in the previous LIN segment; 1 is the quantity of this item in the set, i.e. the lamp shade; EA is the ID qualifier that indicates the quantity is measured in each.

PO4*4 N/L

4 is the quantity of items, as identified in the previously SLN segment, contained within the pack.

MAN*GM*
00000340860000001088 N/L

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860000001088 is the SSCC-18 assigned to the carton which contains 4 lamp shades.

MAN*GM*
00000340860000001095 N/L

GM is the ID qualifier that indicates the next data element will contain a UCC/EAN-128 Serial Shipping Container Code (SSCC-18); 00000340860000001095 is the SSCC-18 assigned to the carton which contains 4 lamp shades.

CTT*5 N/L5

5 indicates the number of HL segments present in the transaction set.

SE*33*123 N/L

33 is the number of included segments within this transaction set; 123 is the transaction set control number.

EXAMPLE 10

Version 004010

COMPONENT STEREO SOLD AS A SET OR INDIVIDUALLY

The following example depicts a shipment of component stereos which can be sold as a set or as individual components. The set is assigned a U.P.C. and each component is assigned a unique U.P.C. The ordered unit in this example is the set and 200 sets were ordered. Each component is a shipping unit which is assigned a UCC/EAN-128 Serial Shipping Container Code (SSCC-18). The set is comprised of the following:

- 1 Rack Mount
- 1 Tuner Amplifier
- 1 CD Player
- 2 Speakers

Additionally, the supplier has sequentially assigned a UCC/EAN-128 Serial Shipping Container Code (SSCC-18) to each carton without any gaps in the SSCC-18 serial numbers. This allows for the specification of a range of SSCC-18s for each component. If the SSCC-18s were not sequentially assigned, there would be one MAN segment for each of the 1000 cartons within the shipment.

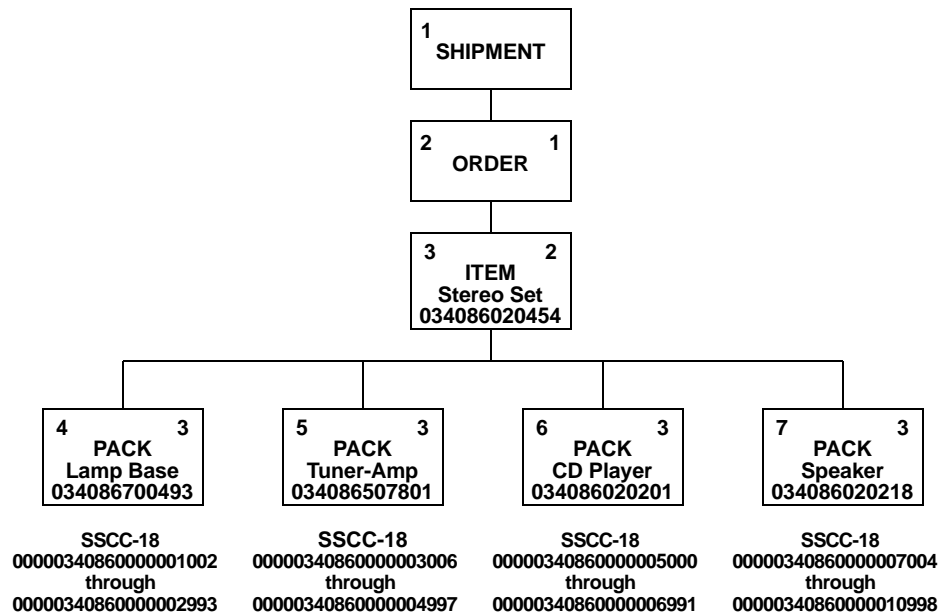


Figure 22. Component Example

<u>EDI TRANSMISSION DATA</u>	<u>EXPLANATION</u>
ST*856*1158 N/L	856 indicates Transaction Set 856; 1158 is the control number.
BSN*00*R5067*19981030 *1108*0002 N/L	00 indicate this is an original transaction set; R5067 is the ship notice number; 19981030 is the date (October 30, 1998); 1108 indicates the time is 11:08 A.M.; 0002 indicates the transaction set structure is Standard Carton Pack.
HL*1**S N/L	1 indicates this is the first occurrence of the HL segment in the transaction set; S indicates the hierarchical level is Shipment.
TD1*CTN25*1000****G* 28000*LB N/L	CTN25 indicates the shipping containers are corrugated or solid cartons; 1000 indicates the number of cartons being shipped; G is the ID qualifier that indicates the next data element is gross weight; 28000 is the gross weight, LB is the ID qualifier that indicates the previous data element is measured in pounds.
TD5**2*SECO N/L	2 is the ID qualifier that indicates the next data element is a Standard Carrier Alpha Code (SCAC); SECO is the SCAC that identifies the carrier.
REF*BM*70684 N/L	BM is the ID qualifier that indicates the next data element is a Bill of Lading (BOL) number; 70684 is the BOL.
DTM*011*19981030 N/L	011 is the ID qualifier that indicates the next data element is the shipment date; 19981030 is the shipment date (October 30, 1998).
N1*SF**91*6999 N/L	SF indicates ship from location; 91 is the ID qualifier that indicates the next data element is assigned by the sender; 6999 is the ship-from location code, in this case the supplier's distribution center.
N1*ST**92*D08 N/L	ST indicates ship to location; 92 is the ID qualifier that indicates the next data element is assigned by the buyer; D08 is the ship to location code, in this case the buyer's distribution center.

HL*2*1*O N/L	2 indicates this is the second occurrence of the HL segment in the transaction set; 1 indicates the hierarchical Parent ID Number; O indicates the hierarchical level is Order.
PRF*0796578***19981025 N/L	0796578 is the buyer's PO number; 19981025 is the PO date (October 25, 1998).
REF*DP*127 N/L	DP is the ID qualifier that indicates the next data element is the department number; 127 is the buyer's department number.
N1*BY**92*0679 N/L	BY indicates buying party location; 92 is the ID qualifier that indicates the next data element is assigned by the buyer; 0679 is the buying party location code, in this case the store number.
HL*3*2*I N/L	3 indicates this is the third occurrence of the HL segment in the transaction set; 2 indicates the hierarchical Parent ID Number; I indicates the hierarchical level is Item.
LIN**UP*034086020454 N/L	UP is the ID qualifier that indicates the next data element is a U.P.C.-A Consumer Package Code; 034086020454 is the U.P.C. assigned to the stereo set.
SN1**200*ST N/L	200 is the quantity of the item identified in the previous LIN segment (the stereo sets); ST is the ID qualifier that indicates the quantity is measured in sets.
HL*4*3*P N/L	4 indicates this is the fourth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.
SLN*1**I*1*EA****UP* 034086700493 N/L	1 is the ID number of the SLN segment; I indicates this is included in the set identified in the previous LIN segment; 1 is the quantity of this item in the set; EA is the ID qualifier that indicates the quantity is measured in each; UP is the ID qualifier that indicates the next data element is a U.P.C.-A Consumer Package Code; 034086700493 is the U.P.C. assigned to the stereo rack.

MAN*GM*
00000340860000001002*
00000340860000002993 N/L

GM is the ID qualifier that indicates the next two data elements will contain UCC/EAN-128 Serial Shipping Container Codes (SSCC-18) (for ease of this example the SSCC-18s were sequentially assigned to the cartons);
00000340860000001002*0000034086000002993 is the range of the SSCC-18s assigned to the cartons which each contain a stereo rack

HL*5*3*P N/L

5 indicates this is the fifth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

SLN*2I*1*EA****UP***
034086507801 N/L

2 is the ID number of the SLN segment; I indicates this is included in the set identified in the previous LIN segment; 1 is the quantity of this item in the set; EA is the ID qualifier that indicates the quantity is measured in each; UP is the ID qualifier that indicates the next data element is a U.P.C.-A Consumer Package Code; 034086507801 is the U.P.C. assigned to the tuner amplifier.

MAN*GM*
00000340860000003006*
00000340860000004997 N/L

GM is the ID qualifier that indicates the next two data elements will contain UCC/EAN-128 Serial Shipping Container Codes (SSCC-18) (for ease of this example the SSCC-18s were sequentially assigned to the cartons);
00000340860000003006*0000034086000004997 is the range of the SSCC-18s assigned to the cartons which each contain a tuner amplifier.

HL*6*3*P N/L

6 indicates this is the sixth occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

SLN*3I*1*EA****UP***
034086020201 N/L

3 is the ID number of the SLN segment; I indicates this is included in the set identified in the previous LIN segment; 1 is the quantity of this item in the set; EA is the ID qualifier that indicates the quantity is measured in each; UP is the ID qualifier that indicates the next data element is a U.P.C.-A Consumer Package Code; 034086020201 is the U.P.C. assigned to the CD player.

MAN*GM*
0000034086000005000*
0000034086000006991 N/L

GM is the ID qualifier that indicates the next two data elements will contain UCC/EAN-128 Serial Shipping Container Codes (SSCC-18) (for ease of this example the SSCC-18s were sequentially assigned to the cartons);
0000034086000005000*0000034086000006991 is the range of the SSCC-18s assigned to the cartons which each contain a CD player.

HL*7*3*P N/L

7 indicates this is the seventh occurrence of the HL segment in the transaction set; 3 indicates the hierarchical Parent ID Number; P indicates the hierarchical level is Pack.

SLN*4I*2*EA****UP***
034086020218 N/L

4 is the ID number of the SLN segment; I indicates this is included in the set identified in the previous LIN segment; 2 is the quantity of this item in the set; EA is the ID qualifier that indicates the quantity is measured in each; UP is the ID qualifier that indicates the next data element is a U.P.C.-A Consumer Package Code; 0340865020218 is the U.P.C. assigned to the pair of speakers. The speakers are not sold as individual items.

MAN*GM*
0000034086000007004*
00000340860000010998 N/L

GM is the ID qualifier that indicates the next two data elements will contain UCC/EAN-128 Serial Shipping Container Codes (SSCC-18) (for ease of this example the SSCC-18s were sequentially assigned to the cartons);
0000034086000007004*00000340860000010998 is the range of the SSCC-18s assigned to the cartons which each contain a speaker.

CTT*7 N/L

7 indicates the number of HL segments within this transaction set

SE*30*1158 N/L

30 is the number of included segments within this transaction set; 1158 is the transaction set control number.

GLOSSARY

This glossary defines those common words, phrases and concepts encountered during the implementation of the Ship Notice/Manifest Transaction Set (856). The relevant segment/data element is also given wherever a defined item is actually a data item within the 856.

The definitions and explanations discussed in this section do not represent all the possible uses of these terms. Instead, they provide a foundation upon which a more thorough understanding of this document and the Ship Notice implementation process may be built.

ITEM	SEGMENT(S)	DATA ELEMENT(S)
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ASN/Ship Notice Number

BSN

396

A unique control number assigned by the original supplier to identify a specific shipment. In some cases, this may just be a technical transaction control number, not actually related to the physical shipment of goods.

Bill of Lading (B/L)

A legal document generated by a shipper to consign a load to a carrier, or transfer responsibility to a carrier. Generally, a Bill of Lading includes such information as number of cartons, weight, carrier, etc.

Bill of Lading (B/L) Number

REF

127/128

This is the actual number assigned to a Bill of Lading under which the goods are shipped. It is used only for truckload (TL) and less-than-truckload (LTL) shipments. It may be matched to a 214 Motor Carrier Shipment Status transaction set to enable the scheduling of receiving functions by the retailer. Also, it may be used for carrier claims.

Carrier

TD5

387

The organization (company, individual, etc.) physically transporting the goods.

Carrier Assigned Package ID

MAN

88/87

A number assigned by a shipper or carrier to aid in tracking goods handled by small-package carriers (e.g., UPS, RPS, Federal Express, etc.).

Consolidator

A consolidator is an appointed agent which aggregates LTL shipments from shippers located within a defined area.

Container (see Shipping Container)

ITEM	SEGMENT(S)	DATA ELEMENT(S)
Item Case Pack	PO4	356
<p>The number of inner containers or the number of eaches if there are no inner containers per outer container.</p>		
Lading Quantity	TD1	80
<p>The total number of shipping containers consigned to a carrier on a Bill of Lading. This number represents the quantity of containers for which the carrier accepts transportation responsibility.</p>		
Master Bill of Lading (manifest)		
<p>A Master Bill of Lading represents a collection (one or more) of Bills of Lading. It combines supplier orders (logical shipments) into physical shipments (see definition of Shipment).</p>		
Packing List		
<p>This is sometimes referred to as a “picking” list or a packing “ticket”. It is the document that travels with the shipping container indicating the SKU contents. In an automated receiving environment, it provides backup if the ship notice has not been received at the receiving distribution center.</p>		
Pick and Pack		
<p>Many vendors ship goods with several SKUs per shipping container, employing a picking operation to pick goods from cased stock into mixed containers. This is referred to as a Pick and Pack environment, as opposed to a Standard Pack environment.</p>		
PRO Number	REF	127/128
<p>A unique number assigned by an LTL carrier to a single shipment. It is used by the carrier to track the shipment and as a carrier-assigned invoice number. While each carrier in a multi-carrier shipping process will assign its own PRO number, the shipper can request status from the first carrier based on the original PRO number at any time during the transportation process.</p>		
Receiver		
<p>The ultimate destination of a shipment is to the receiver — the buyer of the goods. The receiver may be a store, a distribution center, or even an end-customer.</p>		
SCAC (Standard Carrier Alpha Code)	TD5	66/67
<p>The Standard Carrier Alpha Code is a unique 2 - 4 character (4 for motor carriers) identification assigned to transportation carriers operating in North America. It is controlled by the National Motor Freight Traffic Association, American Trucking Associations.</p>		
Ship Notice Date/Time	BSN	373/337
<p>Vendors should stamp the date and time on the ship notice as it is generated within their system. This helps the receiver monitor the flow of the electronic transmissions at their end.</p>		

ITEM	SEGMENT(S)	DATA ELEMENT(S)
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Shipment

A shipment consists of those goods, item, etc., which have been assigned to a single Bill of Lading or Master Bill of Lading. For small package carriers, a shipment consists of those goods packed inside a single container, e.g., a carton.

Shipper

A shipper is the organization (company, individual, etc.) initiating a shipment. Commonly this is a vendor “shipping” goods to a retailer. Typically, this is not a company providing the actual transportation of the goods (i.e., the carrier).

Shipping Container

A shipping container is any “container” that permits the physical grouping and identification of goods for shipping. It could be a carton, a plastic wrap, a pallet, or a trailer depending upon the industry or goods.

Shipping Container Number	MAN	87
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The Shipping Container Number is the shipper-assigned container ID that serves as a license plate for the contents of the container (pick and pack or standard carton pack). This is the number that is encoded in the bar code placed on the container. Primarily, it is used to facilitate container-level receiving and cross docking at a retailer’s distribution center.

SKU (Stock Keeping Unit)

Though an important and common term, SKU can legitimately mean different things to different industries. In the general merchandise and apparel arena, it is typically the U.P.C. level of an item. Its meaning is clarified by partner/industry.

Standard Carton Pack

Many vendors ship goods with one SKU per container, just as the goods arrived from manufacturing. This is commonly referred to as a Standard Carton Pack environment — as opposed to a Pick and Pack environment.

Status (order/item)	TD5	368
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A code indicating the status of an order or item. It may also refer to the disposition of any difference between the quantity ordered and the quantity of an order or item shipped.

Trailer Number	TD3	40/206/207
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This is the carrier’s trailer ID. For full trailer loads it can be captured and transmitted by the shipper to facilitate tracking of a shipment.

UCC/EAN-128 Serial Shipping

Container Code (SSCC-18)	MAN	88/87
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The SSCC-18 is the “license plate” used on variable content shipping containers, pallets, and shipments. It serves as a reference number linking the physical container to shipment information received in a Ship Notice/Manifest Transaction Set (856).

ITEM	SEGMENT(S)	DATA ELEMENT(S)
U.P.C. Universal Product Code or U.P.C. is a product identifier that indicates the manufacturer and product IDs. Primarily, it is used to facilitate product identification at the point of sale.	MAN	88/87
U.P.C./EAN Shipping Container Code (SCC-14) The SCC-14 is used to identify fixed content intermediate containers, shipping containers and pallets.	MAN	88/87

QUESTIONS AND ANSWERS

Q Can there be more than one Ship Notice/Manifest Transaction Set (856) for a Bill of Lading?

A Yes. You can send several Ship Notice/Manifest Transaction Sets (856) for one Bill of Lading (see Glossary “Bill of Lading”).

Q Can there be several Bills of Lading on just one Ship Notice/Manifest Transaction Set (856)?

A No. A ship notice cannot contain information referencing more than one Bill of Lading or one Master Bill of Lading.

Q Can there be more than one purchase order referenced in an Ship Notice/Manifest Transaction Set (856)?

A Yes. Your Ship Notice/Manifest Transaction Set (856) can cover several purchase orders if they were all shipped under the same Bill of Lading.

Q Can you send more than one Ship Notice/Manifest Transaction Set (856) for one purchase order?

A Yes. If you satisfy a purchase order in more than one supplier order shipment. You may also send several Ship Notice/Manifest Transaction Sets (856) to close one purchase order.

Reference: Introduction to the VICS EDI Ship Notice/Manifest Transaction Set (856) Set Implementation Guidelines.

Q I can't get a carrier's PRO number before the truck arrives, and I need to send the Ship Notice/Manifest Transaction Set (856) as soon as I close the truck's doors.

A According to your trading partner agreement, you probably can send the Bill of Lading number without the PRO number. You can also request a range of PRO numbers (preassigned) from your carrier for your use.

Q In a standard pack structure, is the number of units shipped (SN102) the number of items in a carton or the number of all the items shipped in all of the cartons? For example, if a standard pack contains five items and I am sending four standard packs, is the number five or twenty?

A The number will be twenty, the total number of items shipped.

Q Can I mix standard packs and pick packs (see Glossary “Standard Carton Pack,” “Pick and Pack”) in one Ship Notice/Manifest Transaction Set (856)?

A Yes, provided you use the Pick and Pack data structure.

Q My Ship Notice/Manifest Transaction Sets (856) are created during batch processing at night. If my ship-to location is less than one day away, how can I get the Ship Notice/Manifest Transaction Set (856) to the receiver before the physical receipt of the shipment?

A The first option is to look at your applications to see how you can process and make the Ship Notice/Manifest Transaction Set (856) available to your trading partner closer to the time of trailer closure. The second option is to negotiate the timing difficulties with your trading partner.

Q My distribution center (receiving location) is located only hours from my supplier. Although my supplier can send me the Ship Notice/Manifest Transaction Set (856) before the goods arrive, I cannot use the information until after completing batch processing. What can I do?

A The first option is to look at your applications to see how they can process and make the Ship Notice/Manifest Transaction Set (856) available to your receiving location before the receipt of the goods.

Q Is the Ship Notice/Manifest Transaction Set (856) useful without use of the UCC/EAN-128 Serial Shipping Container Code (SSCC-18)?

A Yes. Receipt of the Ship Notice/Manifest Transaction Set (856) allows the receiving location to prepare their receiving documents in advance.

Q Why is sending an invoice instead of the Ship Notice/Manifest Transaction Set (856) not always sufficient if I'm not using the UCC/EAN-128 Serial Shipping Container Codes (SSCC-18)?

A Many suppliers generate invoices on a schedule different from the timing of the shipment. The receiver may need the shipment information at the receiving location while the invoice goes to a different location or application.

The Invoice Transaction Set (810) and the Ship Notice/Manifest Transaction Set (856) were designed for different functions and application use.

Q Can the Ship Notice/Manifest Transaction Set (856) be used for consolidated shipments?

A Yes.

Q How do I get started with the Ship Notice/Manifest Transaction Set (856)?

A Read this guideline. Obtain the VICS EDI Retail Industry Conventions and Implementation Guidelines for EDI. Attend the Uniform Code Council EDI User Group Meeting. Talk to an experienced user of the Ship Notice/Manifest Transaction Set (856).