Caterpillar Inc.

856 - Advance Ship Notice (ASN)

PREFACE

This writing is intended to give details on how to construct an electronic Advance Ship Notice (ASN) transaction set 856 to satisfy Caterpillar's requirements.

A ZWIP-specific document is available for suppliers sending advance ship notices under the ZWIP program. You can obtain the ZWIP EDI & Bar Code Specification from your Indirect Purchasing contact.

Caterpillar is committed to supporting and using the Automotive Industry Action Group/American National Standards Institute (AIAG/ANSI) X12 national standards. However, the standards are broad in scope and flexible in methods of implementing. These are the Caterpillar specific requirements for the ASN.

Any questions or concerns regarding the Caterpillar ASN system and/or Caterpillar's Electronic Data Interchange (EDI) communication network may be directed to:

        Caterpillar Inc.
        EDI Support Services - AD3321 |
        600 W. Washington Street
        East Peoria, IL 61630
        (800) 435-7334 Ext. 3
        (309) 675-0834

For specific questions regarding Caterpillar's Bar Code labels, contact:

        D.L.(Joe) Burgess
        (309) 675-2360
           or
        800-435-7334, Ext. 4

REQUIRED CHANGES TO YOUR PROCEDURES

An ASN is a logical description of a shipment. It contains both
freight and packing list data. It is intended to speed the receipt of
material by eliminating manual data entry of receipt information.
If Caterpillar requests an ASN with prices, four additional segments
can be used to communicate data relative to prices. They are: 1) SLN
Subline Item Detail segment for pricing quantity, unit of measure, and
item price; 2) PID Item Description segment for item description when
there is no part number on the purchase order; 3) CUR currency segment
to communicate currency other than US dollars; and 4) the ITA
Additional Charge Price segment.

To effectivly use the ASN data, the receiving clerk must
know that ASN data exists. The clerk must also be able to tie the
logical ASN data with the physical shipment. The serial number from
the bar coded label provides the ability to mechanically tie the
shipment with the ASN. In some cases, the two must be "tied" together
before the labels can be scanned.
 TO ALLOW PROPER IDENTIFICATION OF THE SHIPMENT WHEN
 IT ARRIVES AT CATERPILLAR, THE ASN CONTROL NUMBER
 (SUPPLIER CODE AND SHIPMENT IDENTIFICATION NUMBER-SID)
 MUST BE CLEARLY IDENTIFIED WHEN THE SHIPPING DOCUMENTS
 ARRIVE. TO DO THIS, THE ATTACHED SHEET MUST BE
 COMPLETED AND SENT WITH THE SHIPMENT DOCUMENTATION.

 ATTENTION CARRIER/DRIVER:

  THIS SHEET MUST ACCOMPANY THE SHIPMENT
  (FREIGHT BILL) DELIVERED TO CATERPILLAR.
          ASN CONTROL NUMBER

_____   _____
  SUPPLIER CODE   SHIPMENT IDENTIFICATION NUMBER (SID)

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ASN SYSTEM TERMS AND DEFINITIONS

See examples of pallets and cartons on the next page.
(A) SHIPPING PACK. A container used for shipping items from one
     point to another.
(B) MIXED ITEM PACK. A pack containing items with different part/item
     numbers.
(C) MULTIPLE PACK. A pack containing smaller packages (subpacks) of
     items.
(D) SUBPACK   One of the smaller packs within a larger multiple pack.

(E) SHIPPING/PART IDENTIFICATION LABEL. A label used to identify the
     contents of a shipping pack. This label is bar coded per
     Caterpillar Standard Practice 20 (Finished Material) or 21
     (Primary Metals). These Caterpillar practices are based on the
     AIAG bar code standards AIAG-B-3 and AIAG-B-5, respectively. The
     label has a unique number which provides pack traceability. The
     label identifies the supplier, purchase order number, ident number
     and quantity.
(F) MASTER LABEL. A label used to identify and summarize the total
     contents of a multiple pack. This label is bar coded per
     Caterpillar Standard Practice 20 which is based on AIAG bar code
     standard AIAG-B-3. The label has a unique number which provides
     pack traceability. The label identifies the supplier, purchase
     order number, ident number contained in the common item subpacks,
     and the total quantity of that ident number in the multiple pack.

(G) MIXED LOAD LABEL. A label used to designate mixed item shipping
     packs. This label is bar coded per Caterpillar Standard Practice
     20 which is based on AIAG bar code standard AIAG-B-3. The label
     has a unique number which provides pack traceability. The label
     identifies the suplier.

```
         _____
        |       | 7h8872 |
        |       | S26341 |   SHIPPING/PART IDENTIFICATION LABEL
        |       |_____|
        |         (E)    |
        |_____|


 _____
|       | 1A0001 |      | 1A0001 |      | 1A0001 |      | 1A0001 |
|       | S28931 |      | S28932 |      | S28933 |      | S28934 |
|       |_____|      |_____|      |_____|      |_____|
|         (E)    |       _____   |        |      |        |
|      (D)       |      |            |  |        |      |        |
|               |      |MASTER LABEL| (F)        |      |        |
|               |      |   1A0001   |  |        |      |        |
|---------------|-------|  4S678234  |--------|--------------|
|       |       |      | |_____||      |      |        |
|       | 1A0001 |      |            | | 1A0001 |      | 1A0001 |
|       | S28935 |      | S28936 |     | S28937 |      | S28938 |
|       |_____|      |_____|     |_____|      |_____|
|               |       |             |        |      |        |
|_____|_____|_____|_____|
 ====================================================================
```
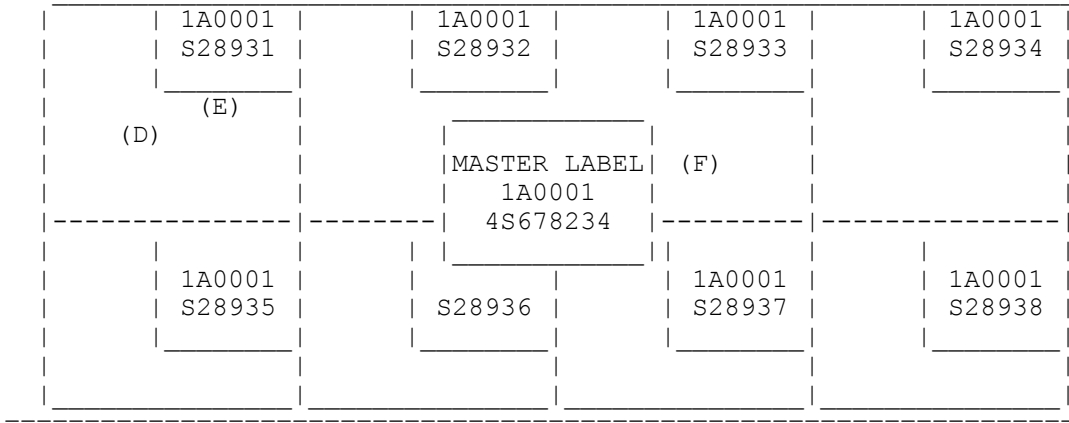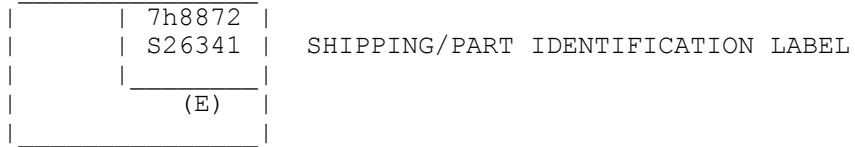
```
 _____
|       | 1A0002 |       | 1A0002 |       | 3P3492 |       | 3P3492 |
|       | S28781 |       | S28782 |       | S28883 |       | S28884 |
|       |_____|       |_____|       |_____|       |_____|
|          (E)  |                |                |                |
|      (D)      |            ____|____  (G)       |                |
|               |           |         |           |                |
|               |           |MIXED LOAD|          |                |
|---------------|---------| 5S993454 |----------|----------------|
|       | 8M1948 |       | 8|_____|       | 7Z0023 |       | 3P3492 |
|       | S28964 |       | S28963 |       | S28882 |       | S28794 |
|       |_____|       |_____|       |_____|       |_____|
|               |                |                |                |
|_____|_____|_____|_____|
========================================================================
```

BAR CODE SERIAL NOS. AND RELATED QTYS

In order for Caterpillar to efficiently receive material, the ASN shipment data must be "tied" to the physical material. This is done through the use of Caterpillar bar coded shipping labels. By passing the unique serial number from the bar code label with the ASN part number data, the Caterpillar receiving system can find the corresponding ASN data when that label is physically scanned.
The receiving system is designed to only scan the "high level" shipping labels. That means when an item is shipped on a container with a mixed or master label, the serial numbers from the subpacks should not be sent.

Caterpillar also needs to know the quantity of items associated with the bar code label serial number. This information is passed in the ASN by using a CLD segment. The serial number is then passed in the REF segment in the CLD loop (after the CLD segment). The following rules are used to determine when a CLD segment is required.
1. A "CLD" customer load detail segment is required for each load that varies by quantity. This means a shipment containing two pallets of the same item, one pallet containing three cartons for a total quantity on the pallet of 150 pieces and the other pallet containing two cartons with a total quantity of 100 pieces, requires two "CLD" segments even though they are both pallets. (See example #3 on the next page.)
2. If a shipment contains multiple shipping containers of the same item with the same total quantity, the "CLD" data can be combined in a single "CLD" segment. (See example #2)
3. The "CLD" segment is always passed at the ITEM level.

4. The accumulated "CLD" quantity for an item (QUANTITY PER LOAD times NUMBER OF LOADS) must equal the accumulated "SN1" QUANTITY SHIPPED.
The following examples show the LIN, SN1, CLD, and REF segments that would be used to describe the shipment. In these examples, each box contains 50 pieces.

```
                                      SEGMENT DATA

 _____  _____  _____
|1A1  | |1A1  | |1A1  |                         LIN**BP*1A0001*EC*02@
|_____| |_____| |_____|    EXAMPLE #1           SN1**300*PC@
|1A1  | |1A1  | |1A1  |                         CLD*1*300@
|_____| |_____| |_____|                         REF*LS*MSTR-1@
=======================
                          EXAMPLE #2
                                               LIN**BP*1A0001*EC*02@
 _____  _____    _____  _____              SN1**200*PC@
|1A1  | |1A1  |   |1A1  | |1A1  |               CLD*2*100@
|_____| |_____|   |_____| |_____|               REF*LS*MSTR-2@
===============   ===============               REF*LS*MSTR-3@


                          EXAMPLE #3            LIN**BP*1A0001*EC*02@
                                               SN1**250*PC@
 _____  _____  _____    _____  _____      CLD*1*150@
|1A1  | |1A1  | |1A1  |   |1A1  | |1A1  |       REF*LS*MSTR-4@
|_____| |_____| |_____|   |_____| |_____|       CLD*1*100@
=======================   ==============        REF*LS*MSTR-5@
```

```
 _____   _____   _____                    EXAMPLE #4        LIN**BP*1A0001*EC*02@
|2A1   | |2A1   | |3A1   |                                         SN1**150*PC@
|_____| |_____| |_____|                                            CLD*1*150@
|1A1   | |1A1   | |1A1   |                                         REF*LS*MIXED1@
|_____| |_____| |_____|                                            LIN**BP*2A0001*EC*02@
======================                                            SN1**100*PC@
                                                                  CLD*1*100@
                                                                  REF*LS*MIXED1@
                                                                  LIN**BP*3A0001*EC*02@
                                                                  SN1**50*PC@
                                                                  CLD*1*50@
                                                                  REF*LS*MIXED1@


                                                 EXAMPLE #5        LIN**BP*1A0001*EC*02@
 _____   _____   _____      _____     _____            SN1**250*PC@
|1A1   | |1A1   | |1A1   |    |1A1   |     |1A1   |              CLD*1*150@
|_____| |_____| |_____|    |_____|     |_____|              REF*LS*MSTR-6@
======================  ========  ========            CLD*2*50@
                                                                  REF*LS*SERL-1@
                                                                  REF*LS*SERL-2@
```

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USE OF INDUSTRY IDENTIFICATION VALUES

In an attempt to standardize as much as possible with the automotive industry, Caterpillar will use industry standard identification conventions, whenever possible. This includes use of ZIP codes to identify "ship from" locations, and use of the SCAC code (Standard Carrier Alphabetic Code) for identifying the carrier. A list of commonly used carriers is included in APPENDIX. Other carrier codes may be obtained from Caterpillar.
DUNS numbers must be used in the ISA record to identify the receiver. With the DUNS number, all hyphens must be eliminated The two digit Caterpillar facility code must also be included as a suffix to the DUNS number to identify the receiving facility, again with no hyphens.

GENERAL COMMUNICATION FORMAT

A COMMUNICATION SESSION is the uninterrupted flow of data transferred between two independent computer systems. Transaction data that is transferred during a communication session is contained in disciplined data segments as defined by the ANSI standard. Each segment has a specific function. Some provide controls in the form of header and trailer records while others pass the actual data.
There are three levels of control used in electronic transmissions as defined by ANSI. They are:

    1. INTERCHANGE CONTROL. These segments define the electronic envelope. They identify the sender and the receiver of the data. For outgoing transmissions, there is one set of interchange control records ('ISA' and 'IEA') for each Caterpillar facility to which you are sending data. For incoming data, there will be one set of interchange control records for each transmission sent to you. Multiple INTERCHANGE CONTROL records may exist in the same transmission if you are communicating to more than one Caterpillar facility or if data has been sent to your mailbox more than once.

    2. FUNCTIONAL GROUPS. These separate documents in the envelope by function. You might think of a functional group as a subgrouping within the envelope. All purchase order documents are in one group (purchase orders, releases, acknowledgments, etc.), invoice data is in another group, and ship notice data in still another group. There are plans to send various documents to you and receive data from you via the EDI network. The different types of documents can be grouped within the same electronic envelope by using multiple functional groups. Normally, however, there will be only one functional group ('GS' and 'GE') per envelope.
TRANSACTION SETS. These define the electronic document, being communicated. There is a transaction set header and trailer segment ('ST' and 'SE') for each document controlled by a unique control number. There may be multiple transaction sets within the same functional group.

The following examples show how these levels of control are applied in a normal communication session.
A communication session sending data to TWO facilities is pictured below. In this session TWO documents are being transferred to the first facility and ONE document to the second.

```
    -------->INTERCHANGE CONTROL HEADER (ISA)
    |
    |              --------->FUNCTIONAL GROUP HEADER (GS)
F   |              |
A   |              |                --------->TRANSACTION SET HEADER (ST)
C   |              |                | TRANS.
I   |              |                | SET     DOCUMENT DATA (...)
L   |              |                |
I   | INTERCHANGE  | FUNCTIONAL   --------->TRANSACTION SET TRAILER (SE)
T   | ENVELOPE     | GROUP
Y   |              |                --------->TRANSACTION SET HEADER (ST)
    |              |                | TRANS.
    |              |                | SET     DOCUMENT DATA (...)
```

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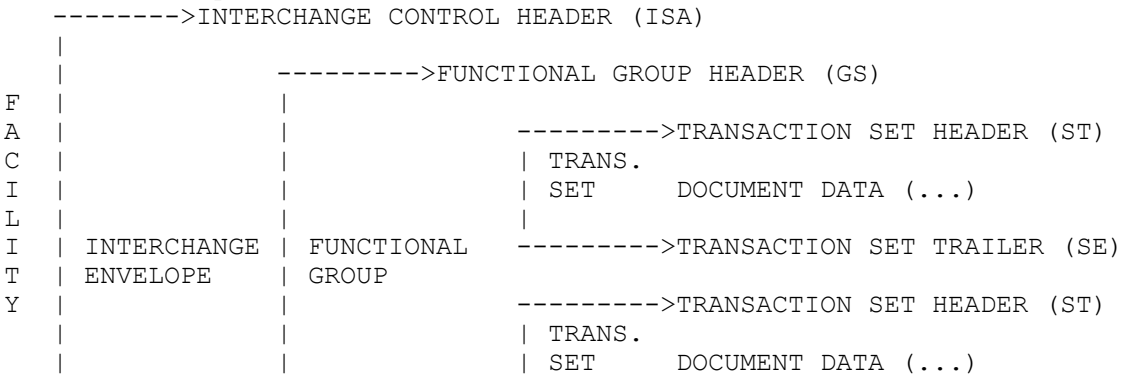
```
O   |                 |                    |
N   |                 |               --------->TRANSACTION SET TRAILER (SE)
E   |                 |
    |               --------->FUNCTIONAL GROUP TRAILER (GE)
    |
    -------->INTERCHANGE CONTROL TRAILER (IEA)

    -------->INTERCHANGE CONTROL HEADER (ISA)
F   |
A   |
C   |               --------->FUNCTIONAL GROUP HEADER (GS)
I   |                 |
L   |                 |            --------->TRANSACTION SET HEADER (ST)
I   | INTERCHANGE | FUNCTIONAL   | TRANS.
T   | ENVELOPE    | GROUP        | SET    DOCUMENT DATA (...)
Y   |                 |              |
    |                 |            --------->TRANSACTION SET TRAILER (SE)
T   |                 |
W   |               --------->FUNCTIONAL GROUP TRAILER (GE)
O   |
    -------->INTERCHANGE CONTROL TRAILER (IEA)
```

SEGMENT FUNCTIONS AND ARRANGEMENTS

Various records are used to communicate ship notices. Following are explanations of these records in the order they are sent in a communication session.

The INTERCHANGE CONTROL HEADER consists of one segment labeled with the identifier 'ISA'. This is the first record in the electronic envelope. The purpose of this segment is to identify and start an interchange of one or more types of information. When we encounter this segment, it is like opening an envelope. The envelope identifies the sender and receiver of the data as well as information needed in order to mechanically interrogate the data being sent (data element separators and segment terminators). If you are sending data to more than one Caterpillar facility, you must create an interchange control header for each facility to which you are sending ship notice information.

The FUNCTIONAL GROUP HEADER consists of one segment labeled with identifier 'GS'. The purpose of this segment is to subdivide the contents of the interchange (envelope) into related groups (types of documents). It allows the sender and receiver to be further defined, as these may vary within the sending and receiving locations by the different types of documents. In addition, it defines the documents that are grouped together. Each type of document being communicated, such as ship notices or invoices, has its own functional group header segment. In most cases you only send one type of document and therefore only use one 'GS' per envelope.

The TRANSACTION SET HEADER consists of one segment labeled with the identifier 'ST'. The purpose of this segment is to identify the start of a document contained in a functional group. In this case that document is a ship notice. You must send a transaction set header with each document being communicated. For example, if you are communicating information about three different shipments to the same Caterpillar facility, all would be in the same envelope but each would have its own 'ST'.

The DOCUMENT DATA consists of several different segments labeled with various identifiers. These segments contain specific information about the document being communicated, the ship notice. Examples of information included in these segments are the supplier code, shipment identification number (SID), part number, ship date, arrival date, shipment quantities, and summary counts. Each of these segments is described in detail in the "Segment Layout/Data Element Definition" section of this document.

The TRANSACTION SET TRAILER consists of one segment labeled with the identifier 'SE'. You must provide one of these segments for each corresponding transaction set header segment 'ST'. The trailer segment contains control information pertaining to the transaction set. It also indicates the end of the transaction set (ship notice document) for which information is being transmitted. We will use data in this segment to verify that no data pertaining to a document was dropped during a transmission. See "Controls Required by ANSI" in this document to determine how the controls work.

The FUNCTIONAL GROUP TRAILER consists of one segment labeled with the identifier 'GE'. You must provide one of these segments for each corresponding functional group header segment 'GS'. The trailer segment contains control information pertaining to the functional group as well as indicating the end of a group of documents. Data in this

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segment is used by us to verify that we received all documents you transmitted. See "Controls Required by ANSI" in this document to determine how the controls work.
The INTERCHANGE CONTROL TRAILER consists of one segment labeled with the identifier 'IEA'. There is one for each interchange control header segment 'ISA'. This segment contains control information about the interchange as well as indicating the end (bottom) of the envelope. We use data in this segment to verify that all functional groups were received. See "Controls required by ANSI" in this document to determine how the controls work.

Within the ship notice transaction set are several segments which contain the ship notice data. These segments were earlier referred to as DOCUMENT DATA. When looking at a shipment of material, data may apply to the entire shipment (such as the shipment arrival date), or a single packing list entry (such as the quantity of a given item being sent). Sometimes the same type of data applies differently to different shipments. For example, a purchase order number may apply to an entire shipment or to only one item within the packing list.

EXPLANATION OF ANSI LEVELS

In order to keep track of where ship notice data applies, ANSI
developed a hierarchical level concept for passing data. The
hierarchical levels that have been defined by ANSI are as follows:

SHIPMENT   This includes data that applies to the total shipment,
            such as the shipment identification number (SID), number of
            shipping containers, and supplier code. There is only one
            shipment level per transaction set ('ST'-'SE').
EQUIPMENT   This includes data that is unique to the delivery
            equipment. It is not used by Caterpillar.

ORDER   This includes data that applies to all shipments for a
            particular order.
                          - OR -
TARE   This level is used to describe the physical configuration
            of the shipment. The TARE level includes data unique to a
            multiple pack such as the master label number and container
            description. Caterpillar does not require configuration
            data and therefore does not recommend using the TARE level.
KIT   This includes data that is unique to a kit where the items
            within the kit are identified. The kit level is not used
            by Caterpillar.
ITEM   This includes data that is unique to the item such as item
            identification (part number), quantity shipped, and
            purchase order number. There is an item level for each item
            contained in the shipment.

            Multiple item levels for the same part may be required if:
              - the part is being shipped against multiple purchase
                orders (An item level is required for each P/O)
              - an item is being shipped on multiple packing lists and
                the unique packing list number is identified on the
                invoice sent to Caterpillar (This may be required for
                invoice matching)

PACK   This includes data that is unique to the pack (carton).
            The PACK level, like the TARE level, is used to convey
            configuration data. Caterpillar does not require
            configuration data and therefore does not recommend using
            a PACK level.
SUBPACK   This includes data that is unique to the subpack. A
            subpack is a grouping within the pack. (For example, a
            pack of cigarettes is a subpack of a carton of cigarettes.)
            An example of this type of data is package quantity if it
            varies by subpack. Caterpillar has not identified a need
            for the subpack level.

All of the levels have a definite hierarchical sequence. This sequence
is: SHIPMENT, EQUIPMENT, ORDER, TARE, KIT, ITEM, PACK, SUBPACK.
Not all these levels apply to Caterpillar shipments. The levels
recommended for use by Caterpillar are: SHIPMENT and ITEM.
There are other rules regarding the arrangement of the various levels.
They are: there must be only one shipment level; it must be the

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highest level; and an item level is required for each packing list entry. (A packing list entry represents a unique part number/purchase order/packing list number combination.)

The following sequence of levels applies to Caterpillar shipments:
    SHIPMENT. Always the first segment.
    ITEM. An item level must be passed for every packing list line
        item, even if there is only one item in the shipment.

TRANSACTION SEQUENCE WITHIN THE LEVEL

The transaction set has been broken down into three different areas: header data, detail data, and summary data. The header data identifies the transaction set being passed and gives the shipment control number. The detail data identifies data related to the shipment by level. The summary data provides control information to insure all data was successfully received.

As stated earlier, the detail data is made up of several hierarchical levels of data related to a specific aspect of the shipment. In the case of Caterpillar these levels will normally be: SHIPMENT and ITEM Within each level of detail data there is also a sequence of segments. In order to make the ship notice standard meet everyone's needs, ANSI included some segments not used by everyone. In this document we are only concerned with the segments required by Caterpillar. The sequence of the segments within each level appear on the next page. Not all segments apply to each level.

```
------------------------HEADER DATA --------------------------
ST  TRANSACTION SET HEADER
BSN BEGINNING SEGMENT (SHIP NOTICE)
DTM DATE/TIME REFERENCE


------------------ LEVEL DATA (DETAIL DATA) -------------------
HL  HIERARCHICAL LEVEL SPECIFICATION
LIN LINE ITEM DETAIL
SN1 ITEM SHIPMENT DETAIL
SLN SUBLINE ITEM DETAIL (PRICES)
PID ITEM DESCRIPTION
PRF PURCHASE ORDER REFERENCE
MEA MEASUREMENTS
REF REFERENCE NUMBERS (PACKING LIST NUMBER)
TD1 CARRIER DETAILS
TD5 CARRIER DETAIL (ROUTING  -------------- LOOP --------
                                                      |
TD3 CARRIER DETAIL (EQUIPMENT) -------------------------
REF REFERENCE NUMBERS
CLD CUSTOMER'S LOAD DETAIL ---------------- LOOP --------
                                                      |
REF REFERENCE NUMBERS ----------------------------------
FOB FOB RELATED INSTRUCTIONS
N1  NAME
CUR CURRENCY
ITA ADDITIONAL CHARGES


------------------ SUMMARY DATA -------------------------------
CTT TRANSACTION TOTALS
SE  TRANSACTION SET TRAILER
```

Following are the segments used by Caterpillar and the levels where these segments normally apply. Some data, such as packing list data and some reference data, may apply at other levels even though it is shown here under the item level.

```
 LEVEL      TYPE   DATA CONTAINED IN THE SEGMENT
HEADER     ST     CONTROL DATA
```

```
            BSN    ASN CONTROL NUMBER AND DOCUMENT CREATION DATE/TIME
            DTM    SHIP AND ARRIVAL DATES AND TIME
-----------------------------------------------------------------
SHIPMENT   HL     LEVEL INDICATION DATA
            MEA    TRAFFIC WEIGHTS
       __   TD1    SHIPPING CONTAINER DESCRIPTIONS AND QUANTITIES
      |  CARRIER DETAILS LOOP
      |     TD5    CARRIER CODE, SEQUENCE AND METHOD OF SHIPMENT
      |_____TD3    CARRIER VEHICLE NUMBER
            REF    CARRIER'S PRO NUMBER, AUTHORIZATION, INVOICE NUMBERS,
            FOB    METHOD OF PAYING FOR SHIPMENT
            N1     CATERPILLAR ASSIGNED SUPPLIER CODE
            N1     SUPPLIER COUNTRY CODE
            N1     ASN FACILITY
            N1     SHIPPING POINTS POSTAL ZIP CODE
ITEM       HL     LEVEL INDICATION DATA
            LIN    IDENTIFICATION CODES (PART NO., ENGRG CHG NO.,
                                        VENDER'S CATALOG NO. ETC.)
            SN1    UNITS SHIPPED
            SLN    PRICE PER UNIT
            PRF    PURCHASE ORDER DATA
            PID    ITEM DESCRIPTION
       __   REF    PACKING LIST NUMBER, FORGER CODE, HEAT CODE
      |  CATERPILLAR'S STORAGE LOAD INFORMATION LOOP
      |     CLD    NUMBER OF STORAGE LOADS AND QUANTITY PER LOAD
      |            TYPE OF CONTAINER AND SUBPACK QUANTITY
      |     REF    PRODUCT SERIAL NUMBER OR SHIPPING LABEL NUMBER AND/OR
      |_____      NEXT LOAD'S FORGER AND/OR NEXT LOAD'S HEAT CODE
            CUR    CURRENCY FOR PAYMENT OF ITEM
            ITA    ADDITIONAL CHARGES RELATING TO ITEM
-----------------------------------------------------------------
CONTROL    CTT    TRANSACTION HASH TOTALS AND ITEM COUNTS
            SE     TRANSACTION SET TRAILER
```

CONTROLS REQUIRED BY ANSI

SEGMENT SEQUENCE REQUIREMENTS
1. 'ISA' must be the first record or preceded by 'IEA'.
2. 'IEA' must be the last record for each facility receiving data.
3. 'GS' must be preceded by 'ISA' or 'GE'.
4. 'ST' must be preceded by 'GS' or 'SE'.
5. 'GE' must be preceded by 'SE'.
6. 'IEA' must be preceded by 'GE'.
7. The interchange control number in 'IEA' (field IEA02) must be the
   same as the previous 'ISA' (field ISA13).
8. The data interchange control number in 'GE' (field GE02) must be the
   same as the previous 'GS' (field GS06).
9. The transaction set control number in 'SE' (field SE02) must be the
   same as the previous 'ST' (field ST02).
REQUIRED CONTROL COUNTS
1. The 'number of included functional groups' in 'IEA' (field IEA01)
   must equal the number of 'GS' records since the previous 'ISA'.
2. The 'number of included transaction sets' in 'GE' (field GE01)
   must equal the number of 'ST' records since the previous 'GS'.
3. The 'number of included segments' in 'SE' (field SE01) must equal
   the number of records read since the previous 'ST'. The 'ST' and
   'SE' records are included in this count.
4. The 'quantity hash total' in 'CTT' (field CTT02) must equal the
   sum of the 'number of units shipped' field in the 'SN1' records
   (field SN102). Only 'SN1' records since the previous 'ST' are to
   be included in the summarization.

EXPLANATION ON DATA SEGMENT LAYOUTS

The following pages give a layout of all the ANSI records Caterpillar
uses in transferring ship notice data. They are in alphabetic sequence
by transaction type.
The '@' at the end of each record represents the segment terminator.
This segment terminator is defined in the 'ISA' record. EDI*EXPRESS
requires the terminator to be a hexadecimal '0D'.
The '*' between each field represents the field separator. The field
separator is defined in the 'ISA' record. As with the segment
terminator, any character may be used as a separator unless it is also
contained in the data being sent.
The next page shows an explanation of the data segment layouts
containing ship notice data to be sent to Caterpillar.


```
                  (1)                          (2)
            NOTES SEGMENT (SHIPMENT AND/OR ITEM LEVELS)
              (3)                                        (4)
NTE*ZZZ*ANY NOTES PERTINENT TO THE PACKING LIST ITEMS@  (ITEM LEVEL)
A    B   C
 _____
|          IDENTIFIES 'NOTE' TYPE DATA PERTAINING TO THE PURCHASE      |
|  (5)    ORDER.   THERE ARE SEVERAL TYPES OF DATA CAN BE CONVEYED     |
|         BY THIS TRANSACTION WHICH IS IDENTIFIED BY THE REFERENCE     |
|         CODE.                                                        |
|                                                                     |
|        ANSI           FIELD                                         |
|     REFERENCE    CHARACTERISTICS      DESCRIPTION                    |
|                                                                     |
|  A. NTE          (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER        |
|                                                                     |
|     (6)   (7)     (8)        (9)          (10)                       |
|  B. NTE01 363   (ID-3)    REQUIRE    NOTE REFERENCE CODE             |
|                                      ZZZ = MUTUALLY DEFINED          |
|                              (11)                                    |
|  C. NTE02 3     (AN-60)  REQUIRED   FREE FORM NOTES                  |
|                                                                     |
| NOTE: THE NTE SEGMENT IS USED TO PASS DATA THAT IS INTENDED TO BE    |
|       READ BY HUMANS.  IN A MECHANIZED ENVIRONMENT, SUCH AS         |
|  (12) CATERPILLAR'S ASN, THIS DATA MAY NEVER BE SEEN.  ITS USE      |
|       SHOULD BE AVOIDED IF AT ALL POSSIBLE.                          |
|_____|
```


DESCRIPTION OF NOTES
(1)   ANSI segment name
(2)   Levels to which this segment can apply
(3)   Layout of the segment fields
(4)   When a segment can apply to multiple levels, this data is used
      to identify to which level this type of segment applies.
(5)   Description of purpose and use of the segment
(6)   ANSI data element reference number
(7)   ANSI data dictionary reference number

```
(8)  Type and size of field (size may be a range)
         ID = identification data
         AN = alphanumeric
         NUM = numeric
         DATE = date in YYMMDD format
         TIME = time in HHMM format
(9)  Indication if segment is required, optional, or not used
(10) ANSI data element title
(11) Explanation of what the field contains
(12) Notes pertaining to use of the segment.
```

BSN-BEGINNING SEGMENT (HEADER DATA)

```
BSN*00*SHIP IDENT NO*920701*1015@
A   B  C               D      E
```

```
 _____
|          IDENTIFIES SHIPMENT CONTROL NUMBER                       |
|            (ONE "BSN" SEGMENT PER SHIPMENT IS REQUIRED)            |
|                                                                   |
|          ANSI           FIELD                                     |
|       REFERENCE     CHARACTERISTICS       DESCRIPTION              |
|                                                                   |
|  A. BSN          (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER     |
|                                                                   |
|  B. BSN01 353   (ID-2)     REQUIRED    TRANSACTION SET PURPOSE     |
|                                        00 = ORIGINAL              |
|                                        01 = CANCEL                |
|                                        02 = ADD                   |
|                                        03 = DELETE                |
|                                        04 = CHANGE                |
|                                        05 = REPLACE               |
|                                                                   |
|  C. BSN02 396   (AN-14)   REQUIRED    SHIPMENT IDENTIFICATION     |
|                                        NUMBER (POSITIONS 1-14)    |
|                                        SOMETIMES REFERRED TO AS   |
|                                        S.I.D                      |
|      **** EACH ASN MUST BE UNIQUE NUMBER FOR ONE YEAR****         |    |
|                                                                   |
|  D. BSN03 373   (DATE-6) REQUIRED    SHIP NOTICE DATE            |
|                                        ASN CREATION DATE          |
|                                                                   |
|  E. BSN04 337   (TIME-4) REQUIRED    SHIP NOTICE TIME            |
|                                        ASN CREATION TIME          |
|                                                                   |
| NOTE: CATERPILLAR INTERPRETS THE BSN01 TRANSACTION SET PURPOSE AS |
|       FOLLOWS:                                                     |
|        "00" ORIGINAL & "02" ADD - NEW DATA TO BE ADDED           |
|        "01" CANCEL & "03" DELETE - EXISTING DATA TO BE DELETED   |
|        "04" CHANGE - EXISTING DATA TO BE UPDATED                 |
|        "05" REPLACE - EXISTING DATA TO BE DELETED AND REPLACED   |
|                       WITH NEW DATA                               |
|_____|
```

CLD-CUSTOMER LOAD DETAIL (ITEM LEVEL)
```
CLD*1*300*PLT71*5.0*PC@
A  B C D      E   F
```

```
 _____
|         IDENTIFIES THE CUSTOMER'S (CATERPILLAR'S) STORAGE LOAD  |
|         INFORMATION REQUIRED TO TAG AND STORE THE PART.  THIS   |
|         INCLUDES THE CONTAINER TYPE AND QUANTITY, QUANTITY PER  |
|         CONTAINER, AND QUANTITY PER PACK WITHIN THE CONTAINER.  |
|         (MULTIPLE "CLD" SEGMENTS PER PACKING LIST/P.O./IDENT NUMBER) |
|                                                                |
|         ANSI          FIELD                                    |
|      REFERENCE     CHARACTERISTICS       DESCRIPTION           |
|                                                                |
| A. CLD          (AN-3)   REQUIRED   DATA SEGMENT IDENTIFIER    |
|                                                                |
| B. CLD01 622   (NUM-3)  REQUIRED   NUMBER OF CUSTOMER LOADS    |
|                                    NUMBER OF STORAGE LOADS SENT|
|                                    CONTAINING THE SAME QUANTITY.|
| C. CLD02 382   (NUM-7)  REQUIRED   UNITS SHIPPED              |
|                                    QUANTITY OF ITEMS CONTAINED IN|
|                                    THIS STORAGE LOAD.          |
| D. CLD03 103   (ID-5)   OPTIONAL   PACKAGING CODE             |
|                                    ABBREVIATED DESCRIPTION OF THE|
|                                    TYPE OF CATERPILLAR STORAGE |
|                                    CONTAINER BEING SENT.       |
|                                    (SEE APPENDIX.)          |  |
| E. CLD04 357   (NUM-8)  OPTIONAL   SIZE                       |
|                                    SUBPACK QUANTITY           |
|                                    FORMAT 9(5).99             |
| F. CLD05 355   (ID-2)   OPTIONAL   UNIT OF MEASURE            |
|                                    UOM FOR THE SUBPACK QUANTITY.|
|                                    (SEE APPENDIX.)           |
|_____|
```

CTT-TRANSACTION TOTALS SEGMENT

```
CTT*2*1100@
A   B C
```

```
 _____
|         IDENTIFIES THE RECORD COUNTS AND HASH TOTALS, WHICH    |
|         ARE USED TO INSURE NO RECORDS ARE LOST OR INADVERTENTLY |
|         TRANSMITTED (ONE "CTT" SEGMENT PER "ST"-"SE" TRANSACTION |
|         SET)                                                    |
|                                                                |
|        ANSI            FIELD                                   |
|      REFERENCE     CHARACTERISTICS      DESCRIPTION            |
|                                                                |
| A. CTT            (AN-3)   REQUIRED   DATA SEGMENT IDENTIFIER  |
|                                                                |
| B. CTT01 354     (NUM-4)   REQUIRED   NUMBER OF LINE ITEMS     |
|                                       ACCUMULATED TOTAL NUMBER OF |
|                                       "HL" HIERARCHICAL LEVEL  |
|                                       SEGMENTS CONTAINED IN THIS |
|                                       "ST"-"SE" TRANSACTION SET. |
| C. CTT02 347     (NUM-10) REQUIRED    HASH TOTALS             |
|                                       ACCUMULATED  QUANTITY OF ALL |
|                                       SN102 NUMBER OF UNITS SHIPPED |
|                                       CONTAINED IN THIS "ST"-"SE" |
|                                       TRANSACTION SET.        |
|                                                                |
|_____|
```

CUR-CURRENCY SEGMENT

```
CUR*SE*DEM@
 A  B   C
```

```
 _____
|          SPECIFIES THE CURENCY, OTHER THAN U. S. DOLLARS, IN WHICH |
|          THE INVOICE IS TO BE PAID.  THIS SEGMENT SHOULD NOT BE USED |
|          WHEN INVOICE AMOUNT IS IN U.S. DOLLARS.                 |
|                                                                 |
|          ANSI            FIELD                                  |
|       REFERENCE    CHARACTERISTICS       DESCRIPTION            |
|                                                                 |
| A. CUR          (AN-3)   REQUIRED    DATA SEGMENT IDENTIFIER    |
|                                                                 |
| B. CUR01  98    (AN-2)   REQUIRED    ENTITY ID CODE            |
|                                      ALWAYS USE "SE" (SELLING PARTY)|
|                                                                 |
| C. CUR02 100    (AN-3)   REQUIRED    CURRENCY CODE             |
|                                      NON-US CURRENCY INVOICES ONLY. |
|                                      (SEE APPENDIX)            |
|                                                                 |
|                                                                 |
|                                                                 |
|                                                                 |
|                                                                 |
|                                                                 |
|_____|
NOTE:  If the ASN is resent, we overlay old price data with new.  Be    |
       sure the data on the SLN, CUR, and ITA is what you want sent     |
       to Caterpillar because we delete the old data and load the new.
```

DTM-DATE/TIME REFERENCE SEGMENT

```
DTM*011*920701*1201@
DTM*017*920703*1155@
A   B   C       D
```

```
 _____
|              IDENTIFIES SHIPMENT ARRIVAL DATE AND TIME              |
|                     (MULTIPLE "DTM" SEGMENTS PER SHIPMENT)          |
|                                                                     |
|         ANSI          FIELD                                         |
|       REFERENCE    CHARACTERISTICS      DESCRIPTION                 |
|                                                                     |
|  A. DTM           (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER      |
|                                                                     |
|  B. DTM01 374    (ID-3)    REQUIRED   DATE/TIME QUALIFIER           |
|                                       011 = SUPPLIER SHIP DATE      |
|                                       017 = SHIPMENT ARRIVAL DATE   |
|  C. DTM02 373    (DATE-6) REQUIRED    DATE                          |
|                                       IF DTM01 = 011               |
|                                          SUPPLIER SHIP DATE         |
|                                       IF DTM01 = 017               |
|                                          SHIPMENT ARRIVAL DATE      |
|                                       (YYMMDD FORMAT)              |
|  D. DTM03 337    (TIME-4) OPTIONAL    TIME                          |
|                                       IF DTM01 = 017               |
|                                          SHIPMENT ARRIVAL TIME      |
|                                       (HHMM FORMAT)               |
|                                                                     |
| NOTE:  IF THE ACTUAL ARRIVAL DATE IS NOT KNOW, THE ARRIVAL DATE    |
|        MUST BE ESTIMATED.                                           |
|_____|
```

FOB-F.O.B.RELATED INSTRUCTIONS SEGMENT

```
FOB*CC@
 A   B
```

```
 _____
|           SPECIFIES TRANSPORTATION INSTRUCTIONS RELATING TO    |
|         SHIPMENT                                               |
|                              (ONE "FOB" SEGMENT PER SHIPMENT)  |
|                                                               |
|                                                               |
|         ANSI           FIELD                                  |
|      REFERENCE      CHARACTERISTICS      DESCRIPTION           |
|                                                               |
|                                                               |
|  A. FOB          (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER |
|                                                               |
|  B. FOB01 146    (ID-2)    REQUIRED    SHIPMENT METHOD OF PAYMENT |
|                                        CC = COLLECT           |
|                                        PP = PREPAID           |
|                                        DF = OTHER             |
|                                        PO = FREE ASTRAY       |
|_____|
```

GE - FUNCTIONAL GROUP TRAILER SEGMENT

```
GE*1*852751201@
A  B C
```

```
 _____
|        IDENTIFIES THE END OF A FUNCTIONAL GROUP.  THIS SEGMENT  |
|        CONTAINS THE COUNT OF INCLUDED TRANSACTION SETS AND THE  |
|        DATA INTERCHANGE CONTROL NUMBER USED TO INSURE ALL       |
|        FUNCTIONAL GROUPS HAVE BEEN CORRECTLY PROCESSED.         |
|        (ONE "GE" SEGMENT PER "GS" SEGMENT PROCESSED)            |
|                                                                |
|        ANSI           FIELD                                    |
|     REFERENCE    CHARACTERISTICS      DESCRIPTION              |
|                                                                |
|  A. GE           (AN-2)   REQUIRED   DATA SEGMENT IDENTIFIER   |
|                                                                |
|  B. GE01   97    (NUM-6)  REQUIRED   NUMBER OF INCLUDED TRANSACTIONS|
|                                      ACCUMULATED TOTAL NUMBER OF|
|                                      "ST" SEGMENTS INCLUDED IN |
|                                      THIS FUNCTIONAL GROUP     |
|  C. GE02   28    (NUM-9)  REQUIRED   INTERCHANGE CONTROL NUMBER|
|                                      SAME CONTROL NUMBER USED  |
|                                      IN THE PREVIOUS "GS"      |
|                                      SEGMENT                   |
|_____|
```

GS -FUNCTIONAL GROUP HEADER SEGMENT

```
GS*SH*A0095D0*12    *920701*1123*852751201*X*003020@
A B C       D       E      F    G         H I
```

```
 _____
|        IDENTIFIES THE FUNCTIONAL GROUP OF THE TRANSACTION SET BEING |
|        TRANSMITTED AS WELL AS ADDITIONAL INTERCHANGE CONTROL DATA   |
|        USED IN THE TRANSMISSION.   (ONE "GS" SEGMENT PER "ISA")     |
|                                                                     |
|        ANSI            FIELD                                        |
|     REFERENCE      CHARACTERISTICS      DESCRIPTION                 |
|                                                                     |
| A. GS          (AN-2)   REQUIRED   DATA SEGMENT IDENTIFIER          |
|                                                                     |
| B. GS01  479   (ID-2)   REQUIRED   FUNCTIONAL ID                    |
|                                    SH = ADVANCE SHIP NOTICE         |
| C. GS02  142   (AN-12)  REQUIRED   APPLICATION SENDER'S CODE        |
|                                    CATERPILLAR ASSIGNED             |
|                                    SUPPLIER CODE                    |
| D. GS03  124   (AN-12)  REQUIRED   APPLICATION RECEIVER'S CODE      |
|                                    FACILITY CODE FOR RECEIVING      |
|                                    CATERPILLAR FACILITY             |
| E. GS04  373   (DATE-6) REQUIRED   DATA INTERCHANGE DATE            |
|                                    TRANSMISSION DATE IN             |
|                                    YYMMDD FORMAT                    |
| F. GS05  337   (TIME-4) REQUIRED   DATA INTERCHANGE TIME            |
|                                    TRANSMISSION TIME IN             |
|                                    HHMM FORMAT                      |
| G. GS06  28    (NUM-9)  REQUIRED   DATA INTERCHANGE CONTROL         |
|                                    NUMBER ASSIGNED TO CONTROL       |
|                                    TRANSMISSION, ALSO USED          |
|                                    IN "GE" SEGMENT                  |
| H. GS07  455   (ID-2)   REQUIRED   RESPONSIBLE AGENCY CODE          |
|                                    X = AIAG CONVENTION/ANSI STD.    |
| I. GS08  480   (AN-6)   REQUIRED   VERSION                          |
|                                    "003020"                        |
|_____|
```

HL -HIERARCHICAL LEVEL IDENTIFIER SEGMENt

```
HL*1**S@
HL*2*1*I@
A  B C D
```

```
 _____
|            IDENTIFIES THE LEVEL TO WHICH THE FOLLOWING DATA APPLIES |
|                   (ONE OR MORE "HL" SEGMENT PER SHIPMENT)           |
|                                                                     |
|         ANSI            FIELD                                       |
|      REFERENCE      CHARACTERISTICS        DESCRIPTION              |
|                                                                     |
|  A. HL          (AN-3)   REQUIRED   DATA SEGMENT IDENTIFIER         |
|                                                                     |
|  B. HL01 628    (AN-12)  REQUIRED   HIERARCHICAL ID NUMBER          |
|                                                                     |
|  C. HL02 734    (AN-12)             HIERARCHICAL PARENT ID NUMBER   |
|                          OPTIONAL   AT SHIPMENT LEVEL              |  |
|                          REQUIRED   AT ITEM LEVEL                   |
|                                                                     |
|  D. HL03 735    (ID-1)   REQUIRED   HIERARCHICAL LEVEL              |
|                                     S = SHIPMENT                    |
|                                     I = ITEM                        |
|                                                                     |
|                                 *   E = EQUIPMENT                   |
|                                ##   O = ORDER                       |
|                                ##   T = TARE                        |
|                                 *   K = KIT                         |
|                                 *   P = PACK                        |
|                                 *   Q = SUBPACK                     |
|                                                                     |
|                                 * = (NOT USED BY CATERPILLAR)       |
|                                ## = (CAN BE USED IN SPECIAL CASES)  |
|                                                                     |
| NOTE:  BY CONVENTION, THE HIERARCHICAL ID NUMBER FOR A SHIPMENT     |
|        STARTS WITH "1" AND IS INCREMENTED BY +1.                    |
|_____|
```

IEA-INTERCHANGE CONTROL TRAILER SEGMENT

```
IEA*1*128528701@
A   B C
```

```
 _____
|   IDENTIFIES THE END OF THE INTERCHANGE FOR A GIVEN SENDING   |
|   FACILITY.  THIS SEGMENT CONTAINS THE COUNT OF INCLUDED      |
|   FUNCTIONAL GROUPS AND THE INTERCHANGE CONTROL NUMBER USED   |
|   TO INSURE THE TOTAL INTERCHANGE HAS BEEN CORRECTLY PROCESSED|
|   (ONE "IEA" SEGMENT PER "ISA" SEGMENT PROCESSED)             |
|                                                               |
|       ANSI           FIELD                                    |
|     REFERENCE    CHARACTERISTICS      DESCRIPTION             |
|                                                               |
|  A. IEA          (AN-3)   REQUIRED   DATA SEGMENT IDENTIFIER  |
|                                                               |
|  B. IEA01 I16    (NUM-5)  REQUIRED   NUMBER OF INCLUDED GROUPS|
|                                      ACCUMULATED TOTAL NUMBER OF |
|                                      "GS" SEGMENTS INCLUDED IN THIS |
|                                      INTERCHANGE (SINCE THE LAST |
|                                      "ISA" SEGMENT)          |
|  C. IEA02 I12    (NUM-9)  REQUIRED   INTERCHANGE CONTROL NUMBER |
|                                      SAME CONTROL NUMBER AS USED |
|                                      IN THE PREVIOUS "ISA"    |
|_____|
```

ISA-INTERCHANGE CONTROL HEADER SEGMENT

```
ISA*00*          *00*          *ZZ*X0000X0          *09*005070479ff    *
A   B   C            D  E              F  G                  H  I
920701*1204*U*00200*890751204*0*P*\@                                           |
J      K    L M     N         O P QR                                           |
_____
|    THIS IS THE START OF THE INTERCHANGE ENVELOPE.  IT IDENTIFIES   |
|    THE SOURCE (SUPPLIER) AND RECEIVER (CATERPILLAR) OF THE DATA.   |
|    IT IDENTIFIES SEPARATORS AND TERMINATORS TO BE USED IN THE      |
|    TRANSMISSION.  THIS IS DATA REQUIRED BY ANSI TO CONTROL THE     |
|    THE INTERCHANGE OF DATA BETWEEN THE SENDER AND RECEIVER.  ALL   |
|    DATA IS IN A FIXED POSITION.  (THERE WILL BE ONE 'ISA' SEGMENT  |
|    FOR EACH CATERPILLAR LOCATION SENDING TEXTS)                    |
|                                                                   |
|       ANSI            FIELD                                        |
|    REFERENCE     CHARACTERISTICS       DESCRIPTION                 |
|                                                                   |
| A. ISA         (AN-3)   REQUIRED   DATA SEGMENT IDENTIFIER         |
|                                    ISA = INTERCHANGE CONTROL       |
|                                          HEADER                    |
| B. ISA01 I01   (AN-2)   REQUIRED   AUTHORIZED INFORMATION          |
|                                    QUALIFIER                       |
|                                     USE '00'                       |
| C. ISA02 I02   (AN-10)  REQUIRED   AUTHORIZED INFORMATION          |
|                                     USE 10 SPACES                  |
| D. ISA03 I03   (AN-2)   REQUIRED   SECURITY INFORMATION            |
|                                    QUALIFIER                       |
|                                     USE '00'                       |
| E. ISA04 I04   (AN-10)  REQUIRED   SECURITY INFORMATION            |
|                                     USE 10 SPACES                  |
| F. ISA05 I05   (ID-2)   REQUIRED   SENDER ID QUALIFIER             |
|                                    ZZ = MUTUALLY DEFINED           |
| G. ISA06 I06   (AN-15)  REQUIRED   SENDER ID                       |
|                                    CATERPILLAR ASSIGNED SUPPLIER   |
|                                    CODE                            |
| H. ISA07 I05   (ID-2)   REQUIRED   RECEIVER ID QUALIFIER           |
|                                    09 = DUNS NUMBER                |
|                                                                   |
|                                                                   |
| I. ISA08 I07   (AN-15)  REQUIRED   RECEIVER ID                     |
|                                    005070479 = CATERPILLAR DUNS    |
|                                                CODE +              |
|                                    FF = CATERPILLAR FACILITY CODE  |
|                                         (see APPENDIX)             |
| J. ISA09 I08   (NUM-6)  REQUIRED   SUBMIT DATE                     |
|                                    YYMMDD FORMAT                   |
| K. ISA10 I09   (NUM-4)  REQUIRED   SUBMIT TIME                     |
|                                    HHMM FORMAT                     |
| L. ISA11 I10   (AN-1)   REQUIRED   INTERCHANGE STANDARD ID         |
|                                    U = USA                         |
| M. ISA12 I11   (AN-5)   REQUIRED   INTERCHANGE VERSION ID          |
|                                    USE "00200"                     |
| N. ISA13 I12   (NUM-9)  REQUIRED   INTERCHANGE CONTROL NUMBER      |
|                                    UNIQUE NUMBER ASSIGNED TO       |
|                                    CONTROL TRANSMISSION,           |
|                                    ALSO USED IN IEA SEGMENT(IEA02)|
```

```
| O. ISA14 I13  (AN-1)     REQUIRED   ACKNOWLEDGE REQUESTED         |
|                                     USE "0" = NO ACKNOWLEDGE      |
|                                     REQUESTED                     |
| P. ISA15 I14  (AN-1)     REQUIRED   TEST INDICATOR                |
|                                     USE "P" = PRODUCTION          |
| Q. ISA16 I15  (AN-1)     REQUIRED   SUB ELEMENT SEPERATOR         |
|                                     ALWAYS "\".                   |  |
| R. ISA17      (AN-1)     REQUIRED   SEGMENT TERMINATOR.           |
|                                     ALWAYS HEX'0D'.               |
|_____|
```

ITA ADDITIONAL CHARGES SEGMENT

```
ITA*C**C0090*06**59.7****77*PC**CUTTING CHG@                                    |
A   B   C    D   E      F  G      H
```

```
 _____
|    SPECIFIES ADDITIONAL CHARGES.  SHOULD REFLECT CHARGES            |
|    AUTHORIZED ON PURCHASE ORDER.                                    |
|                                                                    |
|                                                                    |
|     ASC X12        ELEMENT                                         |
|     REFERENCE    CHARACTERISTICS      DESCRIPTION                   |
|                                                                    |
| A. ITA          (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER.       |
|                                                                    |
| B. ITA01 248    (AN-1)    REQUIRED   ALLOWANCE/CHARGE INDICATOR.    |  |
|                                      A = ALLOWANCE.                 |  |
|                                      C = CHARGE.                    |  |
| C. ITA03 560    (AN-5)    REQUIRED   SPECIAL SERVICES CODE.         |
|                                      (IDENTIFIES ADDITIONAL CHARGE).|
|                                      (SEE APPENDIX).                |
|                                                                    |
| D. ITA04 331    (AN-2)    REQUIRED   METHOD OF HANDLING CODE.       |
|                                      ALWAYS USE "06".               |
|                                                                    |
| E. ITA06 359    (NUM-13)  REQUIRED   CHARGE RATE PER UNIT.          |
|                                      FORMAT = 9(7).99999 *          |
|                                                                    |
| F. ITA10 339    (NUM-13)  REQUIRED   CHARGE QUANTITY.               |
|                                      FORMAT = 9(8).9999  *          |
|                                                                    |
| G. ITA11 355    (AN-2)    REQUIRED   BILLING UNIT OF MEASURE CODE.  |
|                                      (SEE APPENDIX).                |
|                                                                    |
| H. ITA13 352    (AN-15)   REQUIRED   ADDITIONAL CHARGE DESCRIPTION. |
|                                                                    |
| *THE DECIMAL POINT SHOULD BE TRANSMITTED IF THE QUANTITY OR PRICE  |
|  IS LESS THAN A WHOLE NUMBER.                                      |
|_____|
NOTE:  MAXIMUM ADDITIONAL CHARGES PER ITEM ON PURCHASE ORDER IS TEN.
       If the ASN is resent, we overlay old price data with new.  Be
       sure the data on the SLN, CUR, and ITA is what you want sent
       to Caterpillar because we delete the old data and load the new.
```

LIN-LINE ITEM DETAIL SEGMENT (ITEM LVL)

```
LIN*1*SI*ASN@
LIN*1*BP*1A-0001*VC*VENDER IDENT NUMBER1*EC*0001@
A   B C D       C D                       C D
```

```
 _____
|       IDENTIFIES A PARTICULAR IDENT NUMBER AND ITS IDENTIFICATION  |
|       CODES (BOTH CATERPILLAR'S AND THE SUPPLIER'S)                |
|          (ONE "LIN" SEGMENT PER PACKING LIST/P.O./IDENT NUMBER)    |
|                                                                   |
|         ANSI          FIELD                                       |
|      REFERENCE    CHARACTERISTICS     DESCRIPTION                  |
|                                                                   |
|  A. LIN         (AN-3)   REQUIRED   DATA SEGMENT IDENTIFIER        |
|                                                                   |
|  B. LIN01 350   (AN-6)   REQUIRED   LINE NUMBER                    |
|                                                                   |
|  C. LIN02 235 * (ID-2)   REQUIRED   PRODUCT/SERVICE ID QUALIFIER   |
|                                     BP = BUYER IDENTIFICATION NUMB |
|                                     CH = COUNTRY OF ORIGIN.        |
|                                     VC = VENDOR IDENTIFICATION NUMB|
|                                     VP = VENDOR PART NUMBER        |
|                                     EC = ENGINEERING CHANGE NUMBER |
|                                     GC = 1E SPEC                   |
|                                     SI = STANDARD INDUSTRIAL       |
|                                          CLASSIFICATION CODE       |
|                                     CO = CUSTOMER ORDER NUMBER     |  |
|  D. LIN03 234 * (AN-30)  REQUIRED   PRODUCT/ID                     |
|                                     AS PER VALUE IN PREV ELEMENT   |
|                                     IF LIN02 = 'SI', LIN03 SHOULD  |
|                                     = 'ASN'.                       |
|                                                                   |
| *NOTE: THE LIN02 AND LIN03 CAN OCCUR 15 TIMES IN ANY ONE LIN      |
|        SEGMENT IN ANY OF THE OCCURRENCES, HOWEVER, IF THE PURCHASE |
|        ORDER IS SENT TO THE SUPPLIER WITHOUT A BUYER IDENTIFICATION|
|        NUMBER, ENGINEERING CHANGE NUMBER OR 1E SPEC NUMBER, AND THE|
|        SUPPLIER DOES NOT HAVE A VENDOR IDENTIFICATION NUMBER, THE  |
|        LIN SEGMENT SHOULD BE SENT TO CATERPILLAR WITH "SI" IN      |
|        LIN02 AND "ASN" IN LIN03.  THIS IS A MANDATORY SEGMENT.     |
|_____|
```

MEA-MEASUREMENTS SEGMENT (SHIP/ITEM LVL)

```
MEA*PD*G*1250*LB@         (SHIPMENT LEVEL AND/OR ITEM LEVEL)
A   B  C D    E
```

```
_____
|         IDENTIFIES THE "GROSS" WEIGHT OF THE ENTIRE SHIPMENT AND THE |
|      "NET" WEIGHT FOR EACH PACKING LIST.                     |
|                         (MULTIPLE "MEA" SEGMENTS PER SHIPMENT)   |
|                                                             |
|         ANSI            FIELD                               |
|      REFERENCE    CHARACTERISTICS      DESCRIPTION          |
|                                                             |
|  A. MEA          (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER |
|                                                             |
|  B. MEA01 737    (ID-2)    REQUIRED   MEASUREMENT REFERENCE ID |
|                                       PD = PHYSICAL DIMENSIONS |
|                                       CH = CHEMICALS         |
|  C. MEA02 738    (ID-3)    REQUIRED   MEASURED DIMENSION QUALIFIER |
|                                       G = GROSS (FREIGHT BILL) WEIGHT|
|                                           ENTERED AT SHIPMENT LEVEL |
|                                       N = NET (PACKING LIST) WEIGHT |
|                                       WT = WEIGHT (PACKING LIST)  |
|                                       TH = THICKNESS (PACKING LIST) |
|                                       WD = WIDTH (PACKING LIST)   |
|                                       LN = LENGTH (PACKING LIST)  |
|  D. MEA03 739    (NUM-10) REQUIRED    MEASURED VALUE         |
|                                       WEIGHT AS PER MEA02    |
|  E. MEA04 355    (ID-2)    REQUIRED   UNIT OF MEASURE        |
|                                        (SEE APPENDIX)        |
|                                                             |
| NOTE: NET WEIGHT IS ONLY USED WHEN MATERIAL IS PAID FOR BY WEIGHT. |
|       THIS NORMALLY IS ONLY USED FOR UNFORMED STEEL CODES.   |
|_____|
```

NTE-NOTES SEGMENT (SHIP AND/OR ITEM LVL)
```
NTE*ZZZ*ANY NOTES PERTINENT TO THE SHIPMENT      @      (SHIPMENT LEVEL)
                                                        (ITEM LEVEL)
NTE*ZZZ*ANY NOTES PERTINENT TO THE PACKING LIST ITEMS@
A    B    C
```

```
 _____
|        IDENTIFIES 'NOTE' TYPE DATA PERTAINING TO THE PURCHASE  |
|        ORDER.  THERE ARE SEVERAL TYPES OF DATA THAT CAN BE CONVEYED |
|        BY THIS TRANSACTION WHICH IS IDENTIFIED BY THE REFERENCE |
|        CODE.                                                    |
|                                                                |
|        ANSI          FIELD                                     |
|     REFERENCE    CHARACTERISTICS      DESCRIPTION              |
|                                                                |
|  A. NTE          (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER  |
|                                                                |
|  B. NTE01 363   (ID-3)    REQUIRED    NOTE REFERENCE CODE       |
|                                       ZZZ = MUTUALLY DEFINED    |
|  C. NTE02 3     (AN-60)   REQUIRED    FREE FORM NOTES           |
|                                                                |
|                                                                |
| NOTE: THE NTE SEGMENT IS USED TO PASS DATA THAT IS INTENDED TO BE |
|       READ BY HUMANS.  IN A MECHANIZED ENVIRONMENT, SUCH AS    |
|       CATERPILLAR'S ASN, THIS DATA MAY NEVER BE SEEN.  ITS USE |
|       SHOULD BE AVOIDED IF AT ALL POSSIBLE.                    |
|_____|
```

N1 -NAME SEGMENT (SHIPMENT LEVEL)

```
N1*SF**16*61604@
A  B   C  D
N1*SF**92*X0000X0@
A  B   C  D
N1*SF**91*120010@
A  B   C  D
N1*SU**91*BE@
A  B   C  D
```

```
 _____
|        THIS SEGMENT IDENTIFIES THE POINT OF ORIGIN OF THE       |
|        SHIPMENT (ONE "N1*SF*16" PER SHIPMENT)                   |
|                                                                 |
|      ANSI            FIELD                                       |
|    REFERENCE     CHARACTERISTICS       DESCRIPTION               |
|                                                                 |
| A. N1            (AN-2)   REQUIRED   DATA SEGMENT IDENTIFIER     |
|                                                                 |
| B. N101  98     (ID-2)   REQUIRED   ORGANIZATION IDENTIFIER      |
|                                     SF = SHIP FROM               |
|                                     SU = SUPPLIER               |
|                                                                 |
| C. N103  66     (ID-2)(*)REQUIRED   IDENTIFICATION CODE QUALIFIER|
|                                     IF N101 = SF                 |
|                                        16 = POSTAL ZIP CODE      |
|                                        92 = CATERPILLAR DEFINED  |
|                                             SUPPLIER CODE        |
|                                        91 = CATERPILLAR SHIP POINT|
|                                     IF N101 = SU                 |
|                                        91 = COUNTRY CODE         |
|                                                                 |
| D. N104  67 (AN 2-17)(*)REQUIRED    IDENTIFICATION CODE          |
|                                     ZIP CODE OF ORIGIN           |
|                                     CATERPILLAR SUPPLIED         |
|                                     SUPPLIER CODE                |
|                                (**) CATERPILLAR SUPPLIED         |
|                                     SHIP POINT CODE              |
|                               (***) COUNTRY CODE                 |
|                                                                 |
|    (*)  If N103 or N104 is present, the other is required.       |
|    (**) Only needed if no zip code can be provided.             |
|   (***) US or 2 position Foreign Country Code                   |
|_____|
```

PID-ITEM DESCRIPTION SEGMENT

```
PID*F****DRILL 6;00MM 502 W/HP TANG@
A   B            C
```

```
 _____
|           IDENTIFIES PRODUCT/ITEM DESCRIPTION                   |
|          (ONE "PID" SEGMENT PER PACKING LIST/P.O./IDENT NUMBER) |
|                                                                 |
|      ANSI           FIELD                                       |
|    REFERENCE    CHARACTERISTICS      DESCRIPTION                |
|                                                                 |
| A. PID          (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER   |
|                                                                 |
| B. PID01 349    (AN-1)    REQUIRED    ITEM DESCRIPTION TYPE     |
|                                       F = FREE-FORM             |
|                                                                 |
| C. PID05 352    (AN 1/40) REQUIRED    ITEM DESCRIPTION          |
|                                                                 |
|                                                                 |
| NOTE: IF THE PURCHASE ORDER WAS SENT TO THE SUPPLIER WITHOUT A  |
|       BUYER IDENTIFICATION NUMBER, THE PID SEGMENT CAN BE USED  |
|       AS DESCRIPTION TO DEFINE THE ITEM ON THE ASN.             |
|                                                                 |
|                                                                 |
|_____|
```

PRF-PURCHASE ORDER REFERENCE SEGMENT

```
PRF*DAN 51245*001***02@
A   B           C   D
```

```
 _____
|          IDENTIFIES PURCHASE ORDER DATA.                       |
|          (ONE "PRF" SEGMENT PER PACKING LIST/P.O./IDENT NUMBER) |
|                                                                |
|      ANSI            FIELD                                     |
|    REFERENCE    CHARACTERISTICS      DESCRIPTION               |
|                                                                |
| A. PRF          (AN-3)   REQUIRED    DATA SEGMENT IDENTIFIER   |
|                                                                |
| B. PRF01 324    (AN-9)   REQUIRED    PURCHASE ORDER NUMBER     |
|                                                                |
| C. PRF02 328    (AN-3)   OPTIONAL    RELEASE NUMBER            |
|                                                                |
| D. PRF05 350    (NUM-2)  OPTIONAL    PURCHASE ORDER LINE NUMBER|
|                                      REQUIRED FOR ITEMS NOT "01".|
|                                      VALID ENTRIES ARE 01-99.  |
|                                                                |
|                                                                |
|  NOTE:  RELEASE NUMBERS ARE ONLY USED WITH "OPEN END" TYPE     |
|         PURCHASE ORDERS.                                       |
|_____|
```

REF-REFERENCE NUMBERS SEGMENT

```
REF*CN*PRO/NUMBER00001@
A    B    C
```

```
 _____
|          PROVIDES REFERENCE TYPE DATA THAT APPLIES TO THE ENTIRE  |
|          SHIPMENT, ITEMS WITHIN THE SHIPMENT, OR STORAGE LOADS    |
|          WITHIN THE ITEM LEVEL.                                   |
|             (MAY BE MULTIPLE "REF" SEGMENTS PER LEVEL)            |
|                                                                   |
|          ANSI             FIELD                                   |
|        REFERENCE    CHARACTERISTICS      DESCRIPTION              |
|                                                                   |
|  A. REF            (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER   |
|                                                                   |
|  B. REF01 128   (ID-2)    REQUIRED    REFERENCE NUMBER QUALIFIER  |
|                                          CN = CARRIER'S PRO NO. (HEADER)|
|                                          CO = CUSTOMER ORDER NUMBER   |
|                                          HC = HEAT CODE              |
|                                         *LS = LABEL SERIAL NUMBER    |
|                                          LT = FORGER CODE            |
|                                         *PK = PACKING LIST/INVOICE NO. |
|                                          SE = PRODUCT SERIAL NUMBER  |
|                                          TN = SHIPMENT AUTH. NO. (HEADER)|
|                                                                   |
|  C. REF02 127   (AN-21)   REQUIRED    REFERENCE NUMBER            |
|                                          PER VALUE IN REF01        |
|                                                                   |
| *NOTE: PACKING LIST NUMBER AND, IF BAR CODE SERIAL LABELS ARE     |
|        USED, THE LABEL SERIAL NUMBER ARE REQUIRED.                |
|                                                                   |
|        PACKING LIST NUMBER, INVOICE NUMBER, CATERPILLAR SHIPMENT  |
|        AUTHORIZATION NUMBER, HEAT CODE, AND/OR SUPPLIER'S LOT      |
|        NUMBER MAY BE PASSED AT EITHER THE SHIPMENT LEVEL OR THE   |
|        ITEM LEVEL.  IF THE DATA APPLIES TO ALL ITEMS IN THE       |
|        SHIPMENT (AND THE SHIPMENT CONTAINS MULTIPLE ITEMS), THIS  |
|        DATA SHOULD BE PASSED IN A "REF" SEGMENT AT THE SHIPMENT   |
|        LEVEL.  OTHERWISE, IT SHOULD BE PASSED AT THE ITEM LEVEL.  |
|_____|
```

SE -TRANSACTION SET TRAILER SEGMENT

```
SE*78*0001@
A  B  C
```

```
 _____
|        IDENTIFIES THE END OF A TRANSACTION SET.  THIS SEGMENT |
|     CONTAINS THE SEGMENT COUNTS AND INTERCHANGE CONTROL NUMBER |
|     USED TO INSURE ALL RECORDS HAVE BEEN CORRECTLY PROCESSED.  |
|     (ONE "SE" SEGMENT PER "ST" SEGMENT PROCESSED)              |
|                                                               |
|        ANSI            FIELD                                  |
|     REFERENCE      CHARACTERISTICS     DESCRIPTION            |
|                                                               |
| A.  SE           (AN-2)   REQUIRED   DATA SEGMENT IDENTIFIER  |
|                                                               |
| B.  SE01   96    (NUM-6)  REQUIRED   NUMBER OF INCLUDED SEGMENTS |
|                                      ACCUMULATED TOTAL NUMBER OF |
|                                      SEGMENTS FROM LAST "ST"   |
|                                      SEGMENT, INCLUDING THE "ST" |
|                                      AND "SE" SEGMENTS         |
| C.  SE02  329    (AN-9)   REQUIRED   TRANSACTION SET CONTROL NUMBER |
|                                      SAME CONTROL NUMBER AS THE ONE |
|                                      USED IN THE PREVIOUS "ST" |
|                                      SEGMENT                   |
|_____|
```

SLN-SUBLINE ITEM DETAIL SEGMENT (PRICES)

```
SLN*1**A*955*PC*97.22@
SLN*1**A*100*PC*25@
A   B  C  D  E  F
```

```
 _____
|           IDENTIFIES THE PRICING QUANTITY, UNIT OF MEASURE, AND      |
|           PRICE OF ITEM.  (ONE "SN1" SEGMENT PER "LIN" SEGMENT).     |
|                                                                     |
|         ANSI            FIELD                                        |
|       REFERENCE    CHARACTERISTICS      DESCRIPTION                  |
|                                                                     |
|  A. SLN           (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER      |
|                                                                     |
|  B. SLN01 350     (AN-1)    REQUIRED    ASSIGNED IDENTIFICATION NUMBER |
|                                         ALWAYS USE '1'.             |
|                                                                     |
|  C. SLN03 661     (AN-1)    REQUIRED    CONFIGURATION CODE           |
|                                         ALWAYS USE 'A'.             |
|                                                                     |
|  D. SLN04 380     (NUM-13)  REQUIRED    QUANTITY INVOICED.           |
|                                         FORMAT = 9(8).9999 *        |
|                                                                     |
|  E. SLN05 355     (AN-2)    REQUIRED    BILLING UNIT OF MEASURE      |
|                                         (SEE APPENDIX)              |
|                                                                     |
|  F. SLN06 212     (NUM-13)  REQUIRED    ITEM UNIT PRICE              |
|                                         FORMAT = 9(7).99999 *       |
|                                                                     |
|  * THE DECIMAL POINT SHOULD BE TRANSMITTED IF PRICE OR QUANTITY      |
|    IS LESS THAN A WHOLE NUMBER.                                      |
|_____|
NOTE: If the ASN is resent, we overlay the old price data with new.      |
      Therefore, when resending an ASN be sure the data on the SLN,      |
      CUR, and ITA is what you want to be sent to Caterpillar.
```

SN1-ITEM DETAIL (SHIPMENT) SEG (ITEM LVL)

```
SN1**1000*PC@
A    B    C
```

```
 _____
|          IDENTIFIES THE QUANTITY BEING SHIPPED OF THIS ITEM   |
|                      (ONE "SN1" SEGMENT PER "LIN" SEGMENT)     |
|                                                               |
|        ANSI           FIELD                                   |
|     REFERENCE    CHARACTERISTICS      DESCRIPTION             |
|                                                               |
|  A. SN1          (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER |
|                                                               |
|  B. SN102 382    (NUM-7)   REQUIRED   NUMBER OF UNITS SHIPPED |
|                                                               |
|  C. SN103 355    (AN-2)    REQUIRED   UNIT OF MEASURE         |
|                                       UOM FOR THE QUANTITY SHIPPED |
|                                       (SEE APPENDIX)          |
|                                                               |
| NOTE: TO DELETE A PACKING LIST ITEM THAT WAS EITHER SENT IN ERROR |
|       BY A PREVIOUS TRANSMISSION OR WHICH IS NO LONGER VALID, |
|       SEND THE IDENT NUMBER (LIN SEGMENT), THE P.O. NUMBER    |
|       (PRF SEG), AND THE PACKING LIST NUMBER (REF SEGMENT) ALONG |
|       WITH AN SN1 SEGMENT WITH A NUMBER OF UNITS SHIPPED (SN102) |
|       EQUAL TO ZERO.  THE TRANSACTION SET PURPOSE (BSN02)     |
|       MUST BE A VALUE OF 04 (CHANGE) TO DELETE THE PACKING LIST |
|       ITEM.                                                   |
|                                                               |
|   EFFECTIVE WITH VERSION 3020, IT IS POSSIBLE TO TRANSMIT CHANGES |
|   TO PREVIOUSLY SENT 856 TRANSACTIONS.  SEE BSN SEGMENT FOR   |
|   VALID CODES.  THE ONLY TIME A SHIPMENT NOTICE NUMBER (S.I.D.) |
|   SHOULD BE USED TWICE IN ONE YEAR IS WHEN YOU ARE CHANGING A |
|   PREVIOUSLY SENT S.I.D. NUMBER.                              |
|_____|
```

ST -TRANSACTION SET HEADER SEGMENT

```
ST*856*0001@
A  B   C
```

```
 _____
|        IDENTIFIES START OF A TRANSACTION SET FOR A SHIP NOTICE.  |
|                                                                 |
|       ANSI            FIELD                                     |
|    REFERENCE      CHARACTERISTICS      DESCRIPTION              |
|                                                                 |
| A. ST            (AN-2)    REQUIRED   DATA SEGMENT IDENTIFIER   |
|                                                                 |
| B. ST01  143   (ID-3)    REQUIRED   TRANSACTION SET IDENTIFIER  |
|                                     856 = ADVANCE SHIP NOTICE   |
| C. ST02  329   (AN-9)    REQUIRED   TRANSACTION SET CONTROL NUMBER |
|                                     INCREMENTED BY 1 WITH EACH  |
|                                     SHIPMENT WITHIN THE         |
|                                     TRANSMISSION                |
|_____|
```

TD1-CARRIER DETAILS (QTY AND WEIGHTS)

```
TD1*PLT71*1@
A   B     C
```

```
 _____
|        THIS SEGMENT IS USED TO DESCRIBE THE CONTAINERS USED IN A  |
|        SHIPMENT.  THIS DATA WILL BE USED TO DETERMINE THE NUMBER   |
|        OF SHIPPING CONTAINERS (CARTONS, TUBS, PALLETS, RACKS, etc.).|
|        SEE THE SECTION ON THE RULES USED TO DETERMINE HOW TO PASS  |
|        CONTAINER DESCRIPTION DATA TO DETERMINE HOW MANY "TD1"      |
|        SEGMENTS THERE WILL BE.                                     |
|                                                                   |
|        ANSI            FIELD                                       |
|     REFERENCE     CHARACTERISTICS      DESCRIPTION                 |
|                                                                   |
| A. TD1           (AN-3)    REQUIRED    DATA SEGMENT IDENTIFIER     |
|                                                                   |
| B. TD101 103     (ID-5)    REQUIRED    PACKAGING CODE             |
|                                        ANSI DESCRIPTION OF THE    |
|                                        SHIPPING CONTAINER         |
|                                        (SEE APPENDIX)            |
| C. TD102 80      (NUM-5)   REQUIRED    SID QUANTITY              |
|                                        NUMBER OF CONTAINERS OF THIS|
|                                        TYPE IN THE SHIPMENT       |
|_____|
```

TD3-CARRIER DETAIL (EQUIP) SEG (SHIP LVL)

```
TD3*CN*VEH#*1234567@
A    B   C       D
```

```
 _____
|             IDENTIFIES METHOD OF SHIPMENT AND VEHICLE USED FOR SHIPMENT |
|                  (MAY BE MULTIPLE "TD3" SEGMENTS PER SHIPMENT)   |
|                                                                 |
|         ANSI            FIELD                                   |
|      REFERENCE    CHARACTERISTICS       DESCRIPTION             |
|                                                                 |
|  A. TD3          (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER   |
|                                                                 |
|  B. TD301  40    (AN-2)    REQUIRED   EQUIPMENT DESCRIPTION CODE |
|                                       ALWAYS USE "CN" (CONTAINER). |
|                                                                 |
|  C. TD302 206    (AN-4)    OPTIONAL   EQUIPMENT INITIAL         |
|                                       FIRST FOUR POSITIONS OF   |
|                                       "DELIVERY" VEHICLE        |
|                                       IDENTIFICATION NO.        |
|                                                                 |
|  D. TD303 207    (AN-10)   OPTIONAL   EQUIPMENT NUMBER          |
|                                       LAST TEN POSITIONS OF     |
|                                       "DELIVERY" VEHICLE        |
|                                       IDENTIFICATION NO.        |
|                                                                 |
| NOTE: THE VEHICLE NUMBER IS REQUIRED FOR FULL TRUCK LOAD SHIPMENTS.|
|       WHEN THE VEHICLE NUMBER IS LESS THAN EIGHT CHARACTERS LONG, |
|       PASS THE SCAC CODE (SEE TD503) IN TD302 AND VEHICLE NUMBER |
|       IN TD303.                                                 |
|_____|
```

TD5-CARRIER DETAIL (ROUTING) SEG (SHIP)

```
TD5*B*92*9800*P @
TD5*B*2*CETR*T @
A   B C  D     E
```

```
 _____
|          IDENTIFIES CARRIER AND SEQUENCE OF HANDLING SHIPMENT |
|               (MAY BE MULTIPLE "TD5" SEGMENTS PER SHIPMENT)    |
|                                                               |
|       ANSI          FIELD                                     |
|     REFERENCE   CHARACTERISTICS     DESCRIPTION                |
|                                                               |
|  A. TD5         (AN-3)    REQUIRED   DATA SEGMENT IDENTIFIER   |
|                                                               |
|  B. TD501 133  (ID-1)     REQUIRED   ROUTING SEQUENCE CODE     |
|                                      CODE DESCRIBING THE       |
|                                      RELATIONSHIP OF A CARRIER TO A |
|                                      SPECIFIC SHIPMENT        ||
|                                      B = ORIGINAL CARRIER      |
|                                      1 = 1st AFTER ORIGINAL    |
|                                      2 = 2nd AFTER ORIGINAL, ETC. |
|  C. TD502 66  (ID 1-2)    REQUIRED   ID CODE QUALIFIER         |
|                                      2  = SCAC CODE            |
|                                      92 = ASSIGNED BY BUYER    |
|  D. TD503 67    (AN-4)    REQUIRED   ID CODE (CARRIER CODE)    |
|                                      IF TD502 = 2              |
|                                        STANDARD CARRIER ALPHABETIC |
|                                        CODE FOR CARRIER        |
|                                      IF TD502 = 92             |
|                                        CATERPILLAR ASSIGNED CARRIER |
|                                        CODE FOR CARRIER        |
|  E. TD504 91    (ID-2)    REQUIRED   MODE CODE (METHOD OF SHIPMENT) |
|                                                               |
|  NOTE:  ID CODE QUALIFIER FOR SCAC CODE SHOULD BE A 2.  02     |
|         IS NOT VALID ANY MORE.                                |
|                                                               |
|_____|
```
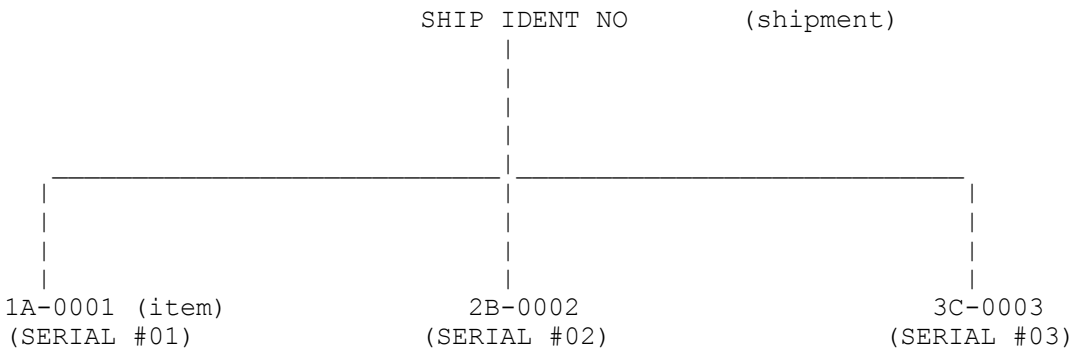
INTRODUCTION

The following examples are intended to help explain how data is
normally sent for various conditions. The example is explained and
followed by a chart depicting the level "parentage." Finally, the
segments used to send the data are shown. All AIAG label serial
numbers are displayed in the example, even though that data is not
always passed in the ASN data.

EXAMPLE NO. 1
The first example is a shipment which is from a U.S. supplier and
contains three different item numbers. All three items are being
shipped on a common packing list. One shipment authorization number
applies to the entire shipment. Carrier information is also being
passed by the supplier.
The packing list number is repeated for each item in the
shipment even though it does not change. The packing list number
could have been passed at the SHIPMENT level.

```
                     SHIP IDENT NO        (shipment)
                          |
                          |
                          |
                          |
                          |
         _____|_____
        |                 |                                 |
        |                 |                                 |
        |                 |                                 |
 1A-0001 (item)          2B-0002                        3C-0003
 (SERIAL #01)         (SERIAL #02)                   (SERIAL #03)
```

```
     SEGMENT                        DESCRIPTION
ISA*00*          *00*          *ZZ*SUPPLCD       *09*005070479ff    *
920701*1204*U*00200*000000001*0*P*\@
GS*SH*SUPPLCD*ff      *920701*1123*853121201*X*003020@
ST*856*0001@
BSN*00*SHIP IDENT NO*920701*1023@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                   SHIP DATE
DTM*017*920703@                   ARRIVAL DATE
HL*1**S@                          SHIPMENT LEVEL DATA
MEA*PD*G*250*LB@                  TRAFFIC WEIGHT ON STD
TD1*CTN71*3@                      SHIPPING CONTAINER DESCRIPTION & QTY
TD5*B*2*PRES*T@                   ORIGINAL COMMON CARRIER CODE
TD3*CN*VEH#*1234567@              VEHICLE IDENTIFICATION NUMBER
REF*CN*CARRIER PRO NUM@           CARRIER'S PRO NUMBER
REF*TN*AUTHORIZTN@                SHIPMENT AUTHORIZATION NUMBER
FOB*PP@                           METHOD OF PAYING FOR SHIPMENT (PREPAID)
N1*SF**16*92634@                  POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                     COUNTRY CODE
HL*2*1*I@                         ITEM LEVEL DATA (PARENT IS SHIPMENT)
```

```
LIN*1*SI*ASN*BP*1A-0001*VC*VENDER IDENT NUMBER1*EC*0002@
SN1**1000*PC@                       UNITS SHIPPED
PRF*DAN 51245@                       PURCHASE ORDER DATA
REF*PK*PACK LIST #1@                 PACKING LIST NUMBER
CLD*1*1000*CTN71@                    SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #01@                   HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
HL*3*1*I@                            ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*2*SI*ASN*BP*2B-0002*VC*VENDER IDENT NUMBER1*EC*0001@
SN1**100*PC@                         UNITS SHIPPED
PRF*DAN 51244@                       PURCHASE ORDER DATA
REF*PK*PACK LIST #1@                 PACKING LIST NUMBER
CLD*1*100*CTN71@                     SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #02@                   HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
HL*4*1*I@                            ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*3*SI*ASN*BP*3C-0003*VC*VENDER IDENT NUMBER3*EC*0001@
SN1**200*PC@                         UNITS SHIPPED
PRF*DAN 76234@                       PURCHASE ORDER DATA
REF*PK*PACK LIST #1@                 PACKING LIST NUMBER
CLD*1*200*CTN71@                     SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #03@                   HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CTT*4*1300@                          SUMMARY COUNTS
SE*36*0001@
GE*1*853121201@
IEA*1*000000001@
                     NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```
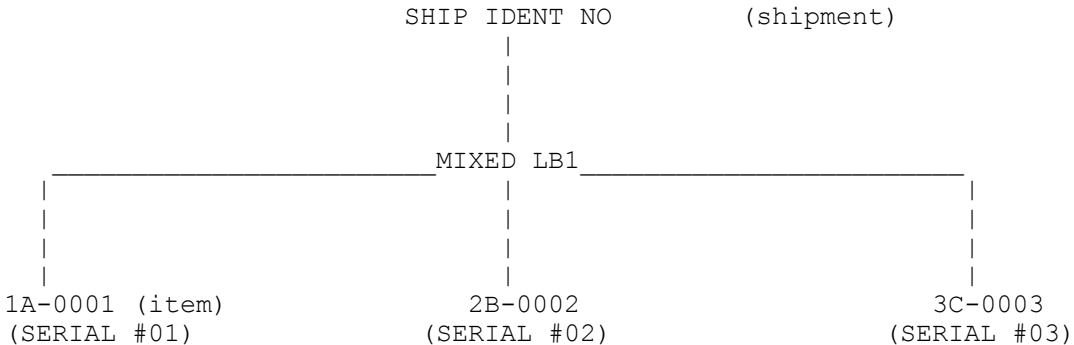
```
EXAMPLE NO. 2
This example is identical to example #1 with the exception that all
three items are combined on a mixed load pallet.  Because of the
mixed label, the serial number from the mixed load label is passed
with all three items in the shipment.




                        SHIP IDENT NO        (shipment)
                             |
                             |
                             |
                             |
        _____MIXED LB1_____
        |                        |                          |
        |                        |                          |
        |                        |                          |
        |                        |                          |
    1A-0001 (item)           2B-0002                     3C-0003
    (SERIAL #01)            (SERIAL #02)               (SERIAL #03)


      SEGMENT                          DESCRIPTION
ISA*00*          *00*          *ZZ*SUPPLCD        *09*005070479ff    *
920701*1204*U*00200*000000001*0**\*@                                      |
GS*SH*SUPPLCD*ff     *920701*1123*853121202*X*003020@
ST*856*0001@
BSN*00*SHIP IDENT NO*920701*1023@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                   SHIP DATE
DTM*017*920703*1300@              ARRIVAL DATE AND TIME
HL*1**S@                          SHIPMENT LEVEL DATA
MEA*PD*G*250*LB@                  TRAFFIC WEIGHT ON SID
TD1*PLT71*1@                      SHIPPING CONTAINER DESCRIPTION & QTY
TD5*B*2*AUFF*T@                   ORIGINAL COMMON CARRIER CODE
TD3*CN*VEH#*1234567@              THAN FULL LOAD ON TRUCK VEH#1234567
REF*CN*CARRIER PRO NUM@           CARRIER'S PRO NUMBER
REF*TN*AUTHORIZTN@                SHIPMENT AUTHORIZATION NUMBER
FOB*PP@                           METHOD OF PAYING FOR SHIPMENT
                                  (PREPAID)
N1*SF**16*61604@                  US POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                     COUNTRY CODE
HL*2*1*I@                         ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*1A-0001*VC*VENDER IDENT NUMBER1*EC*0002@
SN1**1000*PC@                     UNITS SHIPPED
PRF*AAB 98345@                    PURCHASE ORDER DATA
REF*PK*PACK LIST #1@              PACKING LIST NUMBER
CLD*1*1000*CTN71@                 SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB1@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
HL*3*1*I@                         ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*2*SI*ASN*BP*2B-0002*VC*VENDER IDENT NUMBER2*EC*0001@
SN1**100*PC@                      UNITS SHIPPED
PRF*AAB 88734@                    PURCHASE ORDER DATA
REF*PK*PACK LIST #1@              PACKING LIST NUMBER
```

```
CLD*1*100*CTN71@                         SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB1@                        HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
HL*4*1*I@                                ITEM LEVEL DATA (PARENT IS SHIPMENT
LIN*3*SI*ASN*BP*3C-0003*VC*VENDER IDENT NUMBER3*EC*0001@
SN1**200*PC@                             UNITS SHIPPED
PRF*AAB 99823@                           PURCHASE ORDER DATA
REF*PK*PACK LIST #1@                     PACKING LIST NUMBER
CLD*1*200*CTN71@                         SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB1@                        HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CTT*4*1300@                              SUMMARY COUNTS
SE*37*0001@
GE*1*853121202@
IEA*1*000000001@
                          NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```
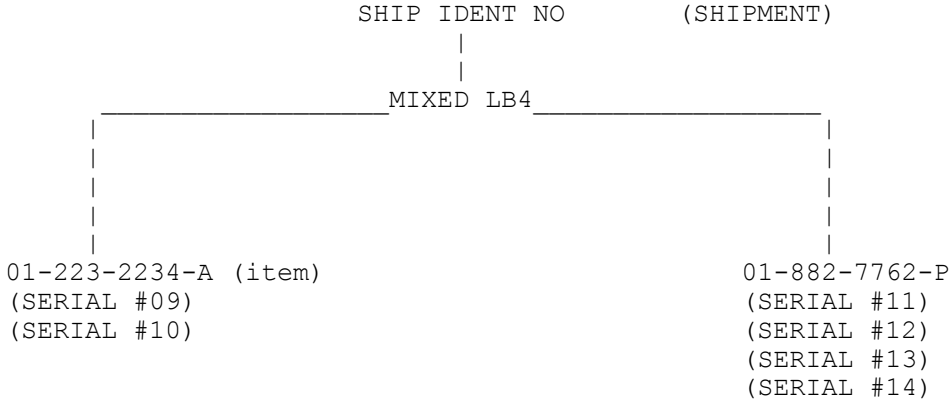
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EXAMPLE NO. 3
A shipment with multiple packing lists, each containing multiple
items, is shown here. There are no special reference numbers.
Carrier information is not being sent by the supplier.
The material is being shipped on two mixed load pallets, each
containing two different part numbers. Note that the serial number
from the mixed load label is used.
Net weights are shown at the packing list (part number) level because
this material is paid for by weight.

```
                        SHIP IDENT NO
                                        (shipment)
                             |
                             |
                             |
                _____|_____
               |                                   |
               |                                   |
               |                                   |
               |                                   |
          _____MIXED LB2_____              _____MIXED LB3_____
         |                    |            |                    |
         |                    |            |                    |
         |                    |            |                    |
         |                    |            |                    |
    4D-0004 (item)       5E-0005         6F-0006            7G-0007
    (SERIAL #04)       (SERIAL #06)    (SERIAL #07)       (SERIAL #08)
    (SERIAL #05)            :               :                 :
      :                     :               :                 :
      :                     :               :                 :
      :                     :               :                 :
      :                     :               :                 :
      :....PACK LIST #2....:                :....PACK LIST #3....:
```

       SEGMENT   DESCRIPTION
ISA*00*   *00*   *ZZ*SUPPLCD   *09*005070479ff   *
920701*1204*U*00200*000000001*0*P*\@ |
GS*SH*SUPPLCD*ff   *920701*1123*128512301*X*003020@
ST*856*0002@
BSN*00*SHIP IDENT NO*920701*1015@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@   SHIP DATE
DTM*017*920703@   ARRIVAL DATE
HL*1**S*1@   SHIPMENT LEVEL DATA
MEA*PD*G*1880*LB@   TRAFFIC WEIGHT ON SID
TD1*PLT71*2@   SHIPPING CONTAINER DESCRIPTION & QTY
TD5*B*2*AUFF*t@   ORIGINAL COMMON CARRIER CODE
FOB*PP@   METHOD OF PAYING FOR SHIPMENT
                                   (PREPAID)
N1*SF**16*54283@   POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@   CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@   COUNTRY CODE
HL*2*1*I*0@   ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN**SI*ASN*BP*4D-0004*VC*VENDER IDENT NUMBER4*EC*0002@
SN1**1000*PC@   UNITS SHIPPED

```
PRF*EAV 88734@                        PURCHASE ORDER DATA
REF*PK*PACK LIST #2@                  PACKING LIST NUMBER
CLD*1*1000*CTN71@                     SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB2@                     HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
HL*3*1*I*0@                           ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN**SI*ASN*BP*5E-0005*VC*VENDER IDENT NUMBER5*EC*0002@
SN1**2000*PC@                         UNITS SHIPPED
PRF*EAV 87389@                        PURCHASE ORDER DATA
MEA*PD*N*250*LB@                      PACKING LIST WEIGHT OF THIS ITEM
REF*PK*PACK LIST #2@                  PACKING LIST NUMBER
CLD*1*2000*CTN71@                     SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB2@                     HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
HL*4*1*I*0@                           ITEM LEVEL DATA )PARENT IS SHIPMENT)
LIN**SI*ASN*BP*6F-0006*VC*VENDER IDENT NUMBER6*EC*0001@
SN1**100*PC@                          UNITS SHIPPED
PRF*EAV 88324@                        PURCHASE ORDER DATA
MEA*PD*N*1000*LB@                     PACKING LIST WEIGHT OF THIS ITEM
REF*PK*PACK LIST #3@                  PACKING LIST NUMBER
CLD*1*100*CTN71@                      SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB3@                     SHIPPING LABEL SERIAL NUMBER
HL*5*1*I*0@                           ITEM LEVEL DATA (PARENT IS SHIPMENT
LIN**SI*ASN*BP*7G-0007*VC*VENDER IDENT NUMBER7*EC*0001@
SN1**200*PC@                          UNITS SHIPPED
PRF*EAV 23997@                        PURCHASE ORDER DATA
MEA*PD*N*300*LB@                      PACKING LIST WEIGHT OF THIS ITEM
REF*PK*PACK LIST #3@                  PACKING LIST NUMBER
CLD*1*200*CTN71@                      SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB3@                     SHIPPING LABEL SERIAL NUMBER
CTT*5*3300@                           SUMMARY COUNTS
SE*43*0002@
GE*1*128512301@
IEA*1*000000001@
                        NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```

EXAMPLE NO. 4
This is an example of a shipment of material that is not controlled
by Caterpillar identification codes (part numbers). Instead, the
receipt is controlled by the item number of the purchase order.
In this shipment, two sales manuals are being sent on a mixed pallet
from the supplier. The pallet contains two cases of the first manual
and four cases of the other manual.

```
                         SHIP IDENT NO      (SHIPMENT)
                              |
                              |
                    _____MIXED LB4_____
           |                                           |
           |                                           |
           |                                           |
           |                                           |
           |                                           |
     01-223-2234-A (item)                        01-882-7762-P
     (SERIAL #09)                                (SERIAL #11)
     (SERIAL #10)                                (SERIAL #12)
                                                 (SERIAL #13)
                                                 (SERIAL #14)
```

```
     SEGMENT                        DESCRIPTION
ISA*00*          *00*              *ZZ*SUPPLCD        *09*005070479ff    *
920701*1204*U*00200*000000001*0*P*\@                                           |
GS*SH*SUPPLCD*ff     *920701*1123*128512300*X*003020@
ST*856*0004@
BSN*00*SHIP IDENT NO*920701*1015@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                   SHIP DATE
DTM*017*920703@                   ARRIVAL DATE
-----------------------------------------------------------------------

HL*1**S*1@                        SHIPMENT LEVEL DATA
MEA*PD*G*150*LB@                  TRAFFIC WEIGHT ON SID
TD1*PLT71*1@                      SHIPPING CONTAINER DESCRIPTION
TD5*B*2*AUFF*t@                   ORIGINAL COMMON CARRIER CODE
FOB*PP@                           METHOD OF PAYING FOR SHIPMENT
                                  (PREPAID)
N1*SF**16*61639@                  US POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                     COUNTRY CODE
.......................................................................

     SEGMENT                        DESCRIPTION
HL*2*1*I*1@                       ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*01-223-2234-A@    IDENTIFICATION CODES
SN1**80*PC@                       UNITS SHIPPED
PRF*JEAC54329***860602*05@        PURCHASE ORDER NUMBER AND LINE NUMBER
REF*PK*PACK LIST #1@              PACKING LIST WEIGHT OF THIS ITEM
CLD*1*80@                         SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB4@                 SHIPPING/PART IDENTIFICATION NUMBER
.......................................................................

HL*3*1*I*1@                       ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*01-882-7762-P@    IDENTIFICATION CODES
```

```
SN1**300*PC@                          UNITS SHIPPED
PRF*JEAC54329***860602*12@            PURCHASE ORDER NUMBER AND LINE NUMBER
REF*PK*PACK LIST #2@                  PACKING LIST WEIGHT OF THIS ITEM
CLD*1*300@                            SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB4@                     SHIPPING/PART IDENTIFICATION NUMBER
--------------------------------------------------------------------

CTT*3*380@                            SUMMARY COUNTS
SE*24*0004@
GE*1*128512300@
IEA*1*000000001@
                        NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```
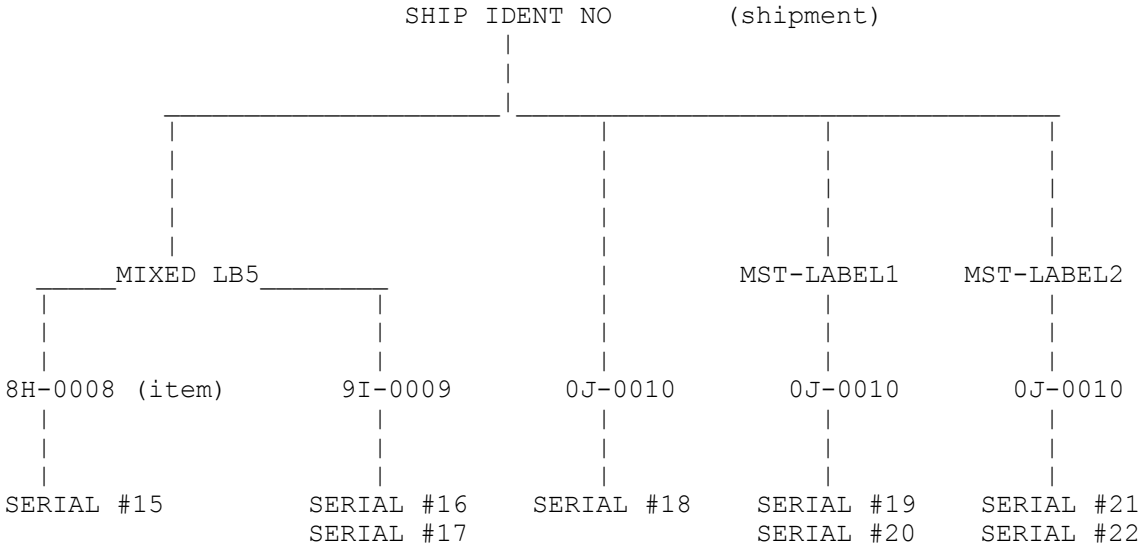
EXAMPLE NO. 5
This is an example of a shipment containing three different items.
Two of the items (8H-0008 and 9I-0009) are being shipped on a "mixed
load" pallet controlled by a common packing list. The other item
(0J-0010) is being shipped both as a loose pack and on two multiple
common item packs. Each of the multiple common item packs for 0J-0010
contain two subpacks. 0J-0010 is controlled by its own packing list.
Carrier related data is being communicated by the supplier.
This example points out the way the serial numbers from the CAT bar
coded label should be passed. That is:
   1) All label information is passed at the ITEM level.
   2) When shipping mixed loads, serial numbers from the mixed load
      label is to be used for all associated items.

   3) When shipping with multiple, common item packs, only the serial
      number from the master label is sent. The subpack serial
      numbers are not to be sent.
   4) The serial number of the label of all packs not combined to
      form a multiple pack (either mixed item or common item) are to
      be sent.
Shipping/Part Identification Label serial numbers are displayed in
this example for master labels 1 & 2, even though they are not passed
with the ASN data.

```
                      SHIP IDENT NO        (shipment)
                           |
                           |
         _____|_____
         |                     |              |                 |
         |                     |              |                 |
         |                     |              |                 |
         |                     |              |                 |
     _____MIXED LB5_____     |          MST-LABEL1       MST-LABEL2
     |               |     |    |              |                 |
     |               |     |    |              |                 |
     |               |     |    |              |                 |
 8H-0008 (item)    9I-0009    0J-0010        0J-0010           0J-0010
     |               |          |              |                 |
     |               |          |              |                 |
     |               |          |              |                 |
 SERIAL #15       SERIAL #16  SERIAL #18     SERIAL #19        SERIAL #21
                  SERIAL #17                 SERIAL #20        SERIAL #22
```

       SEGMENT   DESCRIPTION
ISA*00*   *00*   *ZZ*SUPPLCD   *09*005070479ff   *
920701*1204*U*00200*000000001*0*P*\@ |
GS*SH*SUPPLCD*ff   *920701*1123*128512300*X*003020@
ST*856*0008@
BSN*00*SHIP IDENT NO*920701*1015@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@   SHIP DATE
DTM*017*920703@   ARRIVAL DATE

HL*1**S@   SHIPMENT LEVEL DATA
MEA*PD*G*2550*LB@   TRAFFIC WEIGHT ON SID

```
TD1*PLT71*3@                            SHIPPING CONTAINER DESCRIPTION
TD1*CTN71*1@
TD5*B*2*9800*t@                         SUPPLIER ROUTING
TD5*1*2*CETR*t@                         CARRIER CODE OF ZONE CARRIER (FULL LOAD)
TD3*CN*VEH#*1234567@                    VEGICLE NUMBER
REF*CN*CARRIER PRO NUM@                 CARRIER'S PRO NUMBER
REF*TN*AUTHOR NO.@                      SHIPMENT AUTHORIZATION NUMBER
FOB*PP@                                 METHOD OF PAYING FOR SHIPMENT
                                        (PREPAID)
N1*SF**16*52239@                        US POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                      CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                           COUNTRY CODE
.................................................................

      SEGMENT                           DESCRIPTION
HL*2*1*I@                               ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*8H-0008*VC*VENDER IDENT NUMBR08*EC*0004@
SN1**1000*PC@                           UNITS SHIPPED
PRF*DAN 76249@                          PURCHASE ORDER DATA
REF*PK*PACK LIST #1@                    PACKING LIST WEIGHT OF THIS ITEM
CLD*1*1000*BOX71@                       SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB5@                       HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
.................................................................

HL*3*1*I
                                        ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*2*SI*ASN*BP*9I-0009*VC*VENDER IDENT NUMBR09*EC*0001@
                                                  IDENTIFICATION CODES
SN1**200*PC@
                                        UNITS SHIPPED
PRF*DAN 76245@
                                        PURCHASE ORDER DATA
REF*PK*PACK LIST #2@
                                        PACKING LIST WEIGHT OF THIS ITEM
CLD*1*200*BOX71@                        SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MIXED LB5@                       HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
.................................................................

      SEGMENT                           DESCRIPTION
HL*4*1*I@                               ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*3*SI*ASN*BP*0J-0010*VC*VENDER IDENT NUMBR10*EC*0001@
SN1**1000*PC@                           UNITS SHIPPED
PRF*DAN 25147@                          PURCHASE ORDER DATA
REF*PK*PACK LIST #3@                    PACKING LIST WEIGHT OF THIS ITEM
CLD*2*400*PLT71@                        SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*MST-LABEL1@                      HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
REF*LS*MST-LABEL2@                      HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CLD*1*200*BOX71@                        SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #18@                      HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
-----------------------------------------------------------------------

CTT*4*2200@                             SUMMARY COUNTS
SE*38*0008@
GE*1*128512300@
IEA*1*000000001@
```

NOTE: @ = TERMINATION CHARACTER   (Hex '0D')

EXAMPLE NO. 6
This example shows a shipment with one item (1K-0011) being shipped in
two different types of containers (tub and basket).


```
                        SHIP IDENT NO      (shipment)
                              |
                              |
                              |
                          1K-0011 (item)
                              (SERIAL #23 - tub)
                              (SERIAL #24 - basket)
```

```
     SEGMENT                         DESCRIPTION
ISA*00*          *00*       *ZZ*SUPPLCD        *09*005070479ff    *
920701*1204*U*00200*000000001*0*P*\@                                     |
GS*SH*SUPPLCD*ff    *920701*1123*128512300*X*003020@
ST*856*0006@
BSN*00*SHIP IDENT NO*920701*1345@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                   SHIP DATE
DTM*017*920703@                   ARRIVAL DATE
----------------------------------------------------------------------

HL*1**S@                          SHIPMENT LEVEL DATA
MEA*PD*G*1520*LB@                 TRAFFIC WEIGHT ON SID
TD1*BSK71*1@                      SHIPPING CONTAINER DESCRIPTION
TD5*B*2*AUFF*T@                   ORIGINAL COMMON CARRIER CODE
FOB*PP@                           METHOD OF PAYING FOR SHIPMENT
                                  (PREPAID)
N1*SF**16*44529@                  POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                     COUNTRY CODE
.........................................................................


     SEGMENT                         DESCRIPTION
HL*2*1*I@                         ITEM LEVEL DATA (PARENT IS SHIPMENT
LIN**SI*ASN*BP*1K-0011*EC*0001@   IDENTIFICATION CODES
SN1**90*PC@                       UNITS SHIPPED
PRF*AAB 88723@                    PURCHASE ORDER DATA
REF*PK*PACK LIST #1@              PACKING LIST WEIGHT OF THIS ITEM
CLD*1*50*TUB71@                   SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #23@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CLD*1*40*BSK71@                   SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #24@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
----------------------------------------------------------------------

CTT*2*90@                         SUMMARY COUNTS
SE*20*0006@
GE*1*128512300@
IEA*1*000000001@
                        NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```

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EXAMPLE NO. 7
This is an example of a shipment of one item being shipped in
Caterpillar returnable tubs. Three of the tubs have the same
quantity of items, the the other two containers both contain unique
quantities.

```
                        SHIP IDENT NO        (shipment)
                             |
                             |
                             |
                             |
                             |
                          2L-0012 (item)
                        (SERIAL #25)
                        (SERIAL #26)
                        (SERIAL #27)
                        (SERIAL #28)
                        (SERIAL #29)
```


      SEGMENT   DESCRIPTION
```
ISA*00*          *00*          *ZZ*SUPPLCD        *09*005070479ff    *
920701*1204*U*00200*000000001*0*P*\@                                    |
GS*SH*SUPPLCD*ff     *920701*1123*128512300*X*003020@
ST*856*0005@
BSN*00*SHIP IDENT NO*920701*1015@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                   SHIP DATE
DTM*017*920703@                   ARRIVAL DATE AND TIME
------------------------------------------------------------------

HL*1**S@                          SHIPMENT LEVEL DATA
MEA*PD*G*3350*LB@                 TRAFFIC WEIGHT ON SID
TD1*TUB52*5@                      SHIPPING CONTAINER DESCRIPTION
TD5*B*2*AUFF*T@                   ORIGINAL COMMON CARRIER CODE
FOB*CC@                           METHOD OF PAYING FOR SHIPMENT
                                  (PREPAID
N1*SF**16*92438@                  US POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                     COUNTRY CODE
..................................................................
```


      SEGMENT   DESCRIPTION
```
HL*2*1*I@                         ITEM LEVEL DATA (PARINT IS SHIPMENT)
LIN*1*SI*ASN*BP*2L-0012@          IDENTIFICATION CODES
SN1**4071*PC@                     UNITS SHIPPED
PRF*AAB 75564@                    PURCHASE ORDER DATA
REF*PK*PACK LIST #1@              PACKING LIST WEIGHT OF THE ITEM
CLD*3*1000*TUB52@                 SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #25@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
REF*LS*SERIAL #26@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
REF*LS*SERIAL #27@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CLD*1*800*TUB52@                  SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #28@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CLD*1*271*TUB52@                  SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #29@                HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
..................................................................
```

```
CTT*2*4071@                          SUMMARY COUNTS
SE*24*0005@
GE*1*128512300@
IEA*1*000000001@
                          NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```

```
EXAMPLE NO. 8 - ARRANGEMENTS FOR FORGER
     SEGMENT                              DESCRIPTION
ISA*00*          *00*          *ZZ*SUPPLCD         *09*005070479ff    *
920701*1204*U*00200*000000001*0*P*\@                                        |
GS*SH*SUPPLCD*ff    *920701*1123*128512300*X*003020@
ST*856*0005@
BSN*00*SHIP IDENT NO*920701*1015@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                    SHIP DATE
DTM*017*920703@                    ARRIVAL DATE AND TIME
----------------------------------------------------------------------

HL*1**S@                           SHIPMENT LEVEL DATA
MEA*PD*G*3350*LB@                   TRAFFIC WEIGHT ON SID
TD1*TUB52*5@                        SHIPPING CONTAINER DESCRIPTION
TD5*B*2*AUFF*T@                     ORIGINAL COMMON CARRIER CODE
FOB*CC@                             METHOD OF PAYING FOR SHIPMENT
                                   (PREPAID)
N1*SF**16*92438@                   US POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                 CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                      COUNTRY CODE
......................................................................


     SEGMENT                              DESCRIPTION
HL*2*1*I@                          ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*2L-0012*EC*12*GC*1E456@
SN1**2271*PC@                      UNITS SHIPPED
PRF*AAB 75564@                     PURCHASE ORDER DATA
REF*PK*PACK LIST #1@               PACKING LIST WEIGHT OF THIS ITEM
REF*LT*VWE@                        ASSIGNED FORGER CODE
REF*HC*HEATA@                      HEAT CODE "HEATA"
CLD*2*1000*TUB52@                  SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #25@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
REF*LS*SERIAL #26@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CLD*1*271*TUB52@                   SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #29@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
......................................................................
HL*3*1*I@                          ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*2L-0012*EC*12*GC*1E234@ - PART NUMBER IS REPEATED BUT
                                   DIFFERENT HEAT CODE
SN1**200*PC@                       UNITS SHIPPED
PRF*AAB 75564@                     PURCHASE ORDER DATA
REF*PK*PACK LIST #2@               PACKING LIST WEIGHT OF THIS ITEM
REF*LT*VWE@                        ASSIGNED FORGER CODE
REF*HC*HEATB@                      HEAT CODE "HEATB"
CLD*2*100*TUB52@                   SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #35@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
REF*LS*SERIAL #36@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
----------------------------------------------------------------------

     SEGMENT                              DESCRIPTION
CTT*3*2471@                        SUMMARY COUNTS
SE*33*0005@
GE*1*128512300@
IEA*1*000000001@
                    NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```

```
EXAMPLE NO. 9 - ASN WITH PRICE DATA
     SEGMENT                           DESCRIPTION
ISA*00*          *00*          *ZZ*SUPPLCD         *09*005070479ff    *
920701*1204*U*00200*000000001*0*P/*@
GS*SH*SUPPLCD*ff     *920701*1123*128512300*X*003020@
ST*856*0005@
BSN*00*SHIP IDENT NO*920701*1015@ ASN CONTROL NUMBER AND CREATION DATE
DTM*011*920701@                    SHIP DATE
DTM*017*920701@                    ARRIVAL DATE AND TIME
------------------------------------------------------------------

HL*1**S@                           SHIPMENT LEVEL DATA
MEA*PD*G*3350*LB@                  TRAFFIC WEIGHT ON SID
TD1*TUB52*5@                       SHIPPING CONTAINER DESCRIPTION
TD5*B*2*AUFF*T@                    ORIGINAL COMMON CARRIER CODE
FOB*CC@                            METHOD OF PAYING FOR SHIPMENT
                                   (PREPAID)
N1*SF**16*92438@                   US POSTAL ZIP CODE OF SUPPLIER
N1*SF**92*X0000X0@                 CATERPILLAR ASSIGNED SUPPLIER CODE
N1*SU**91*BE@                      COUNTRY CODE
.................................................................


     SEGMENT                           DESCRIPTION
HL*2*1*I@                          ITEM LEVEL DATA (PARENT IS SHIPMENT)
LIN*1*SI*ASN*BP*1A-0001*VP*041855*EC*0002*GC*1E456@ IDENTIFICATION CODES
SN1**2271*PC@                      UNITS SHIPPED
SLN*1**A*2271*PC*12.50@            UNIT PRICE
PRF*AAB 75564@                     PURCHASE ORDER DATA
PID*F****PUMP@                     ITEM DESCRIPTION
REF*PK*PACK LIST #1@               PACKING LIST WEIGHT OF THIS ITEM
CLD*2*1000*TUB52@                  SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #25@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
REF*LS*SERIAL #26@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CLD*1*271*TUB52@                   SHIPPING LABELS/QUANTITY DESCRIPTION
REF*LS*SERIAL #29@                 HIGH LEVEL SHIPPING LABEL SERIAL NUMBER
CUR*SE*DEM@                        CURRENCY CODE
ITA*C**C0090*06**59.7****77*pc**CUTTING CHG@   ADDITIONAL CHARGES      |
ITA*C**D0020*06**10****1*DR**DEPOSIT@                                  |
------------------------------------------------------------------
CTT*2*2271@                        SUMMARY COUNTS
SE*27*0005@
GE*1*128512300@
IEA*1*000000001@
                    NOTE: @ = TERMINATION CHARACTER  (Hex '0D')
```

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