**PROCESS ENGINEERING ORDER**

**DOUGLAS AIRCRAFT COMPANY**
**LONG BEACH, CA**

**TITLE**
BAR CODING - SHIPPING LABELS

**DATE**
1-6-98

**RELEASE APPROVALS**

<table>
<thead>
<tr>
<th>PARA.</th>
<th>MODEL</th>
<th>HI. NO.</th>
<th>EFFECTIVITY</th>
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<tr>
<td>All</td>
<td>Coml &amp; 2</td>
<td>2</td>
<td>On or before May 1, 1998.</td>
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<tr>
<td>Mil</td>
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<td>Existing stock labels may be amended to meet the requirements of this DPS.</td>
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<tr>
<td></td>
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<td></td>
<td>J. Robinson 12-9-97</td>
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<tr>
<td></td>
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<td></td>
<td>M. Coale 12-10-97</td>
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<td>M. Coale 12-10-97</td>
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<td></td>
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<td></td>
<td>W. Van Datta 12-11-97</td>
</tr>
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<td></td>
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<td>A. Amin 12-11-97</td>
</tr>
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**ACTION COPIES**

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<tr>
<th>NAME</th>
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<th>M/C</th>
<th>NAME</th>
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<tr>
<td>J. Canigiani</td>
<td>C1-BDO</td>
<td>D007-0084</td>
<td>F. Young</td>
<td>C1-152</td>
<td>D018-0062</td>
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<td>R. Lafferty</td>
<td>C5-VEG</td>
<td>C078-0043</td>
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This PEO is authority to release DPS 3.301-1, Revision “B”. This revision replaces and includes Revision “A” and PEO “A” R-1 dated 12-15-96.

Summary of Change(s) & Reason(s):

1.6.12  - Added definition of data identifier.
1.6.13  - Added definition of suffix.
2.1    - Changed to delete MRC-3, ANSI MH10.8.2M and ANSI/FACT-1.
2.1    - Changed to add MRC-3.301-1 and ANSI MH10.8.2.
3.1.1.1 - Changed to add type of printers that can be used.
4.1.1  - Changed to add that only new suppliers are required to submit a first sample for approval.
4.1.4  - Changed to delete that periodic verification of data and print quality is required.
4.2.5.3 - Changed to add note.
4.2.6.1 - Changed to delete maximum character length of purchase order number.
4.2.6.1 - Changed to add “if applicable” following suffix.
4.2.6.2 - Changed to add “if applicable” following suffix.
4.2.6.2 - Changed to add that the suffix can be up to five characters long.
4.2.6.3 - Changed to add note.
4.2.6.5 - Added requirement and an example for purchase orders without a suffix.
4.2.8 - Changed the method of describing the number of packages or boxes.
  - Changed to add a new note.
4.2.9 - Changed the description from piece to each.
4.2.11.4 - Added an additional row, “Unique package identification number”.
4.3.1 - Changed the minimum height from 5.5 inches to 6 inches.
4.3.2, 4.4.3 & 4.4.4 - Changed the inch conversion to millimeters.
4.4.4, 4.4.6.3 & 4.4.6.6 - Changed the nanometer measurement from B900 to B660.
4.4.7.2 - Changed the specification number from ANSI/FACT-1 to ANSI MH10.8.2.
4.4.7.4 - Deleted the maximum number of characters after each identifier.
4.4.7.4 - Changed to add a third (not mandatory) data identifier.
(4.4.7.5) - Changed to add data identifier (3S).
  - Changed to add bar code for data identifier (13Q).
  - Changed to correct human readable for data identifiers (12K) and (13Q).
  - Changed to delete maximum character column.
  - Changed to add note.
4.5.3 & 4.5.4 - Changed to add “if applicable” preceding suffix number.
4.5.7 - Changed to add note.
4.6.1 - Changed to specify “box one of n” preceding shipping container.
Figure 1 - Changed to add inch to millimeter conversion.
  - Changed to add bar code and delete “N of X” to row 6.
  - Changed to delete “PC” and add “EA” to row 7.
  - Changed reference in note from ANSI/FACT-1 to ANSI MH10.8.2.
Figure 2 - Changed to add Purchase Order Without Suffix layout.
Figure 3 - Changed reference to ANSI/FACT-1 to ANSI MH10.8.2.
  - Changed inch to millimeter conversion.
Figure 4 - Changed to add bar codes to examples.
  - Changed to add a third (not mandatory) data identifier.
Figure 5 - Changed to delete (under cartons on pallet) “each carton should be individually labeled”.
1.4, 4.1.1, 4.2.1, 4.2.11, 4.5.6, & 4.6.2 - Added instruction for packaging and identification to be done in conjunction
  with applicable material specification (DMS, AMS, Mil Specs, etc.)
  Reason: Recent ACSEP finding #1211A110 dated 3-11-97 required
  clarification of packaging and identification requirements to ensure consistent
  and proper identification of materials.

JR:ps
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1. **SCOPE**

1.1 This Douglas Process Standard (DPS) establishes the requirements and instructions for printing and placement of bar coded shipping labels on all supplier packages for government and commercial programs.

1.2 This requirement applies to all suppliers of aircraft material, supplies or components. These products require specific identification and handling to facilitate correct part usage, traceability and storage.

1.3 All sections of this document define minimum requirements. Any increased supplier controls deemed necessary by a supplier for the successful implementation and control of the process shall be instituted and maintained.

1.4 This DPS shall be used when specified by an authorized purchase document. Raw materials, sheets, plates extrusions, bars, castings, and forgings shall be identified in conjunction with applicable material specifications (DMS, AMS, Mil Specs, etc.).

1.5 Suppliers may use any materials, solutions and instructions that result in meeting the requirements of McDonnell Douglas Corporation and industry documents listed in Section 2.

1.6 **Definitions**


1.6.2 **Shipment** - An incremental delivery for one part number, Purchase Order number (PO), Work Order number (WO), and item number.

1.6.3 **Quiet Zone** - The area before the first character and the area following the last character. A quiet zone is required before and after a bar code.

1.6.4 **Human Readable Characteristics** - A readable interpretation of the bar code label characters without the field identifiers; this interpretation shall appear directly above the bar code.

1.6.5 **Bar Code Character** - A bar code character is composed of nine vertical elements (five bars and four spaces).

1.6.6 **SCAC** - Standard Carrier Alpha Code. All major carriers (land, air, sea) have a SCAC code, which is assigned through the National Motor Freight Traffic Association (Telephone No.: 703-838-1810).
1.6.7 **PRO Number** - A unique tracking number furnished and used by a commercial motor freight carrier. The total number of positions used and the format of the number will vary depending on which carrier is used.

1.6.8 **Airwaybill (AWB) Number** - A unique tracking number furnished and used by a commercial airfreight carrier.

1.6.9 **Electronic Data Interchange (EDI)** - Computer-to-computer communication of data in a standard business format.

1.6.10 **ASN 856** - An aerospace ship notice transmitted via computer-to-computer relating to the specifics of a shipment.

1.6.11 **ANSI** - American National Standards Institute is an organization which creates and maintains industry standards in the United States.

1.6.12 **Data Identifier** - A specified character, or string of characters, that defines the intended use of the data element that follows. The data identifier will be the alphanumeric identifiers as defined in ANSI MH10.8.2.

1.6.13 **Suffix** - Numbers added to the P.O. by the buyer which indicate information about the transaction. The suffix number is only used by MTA and DAC.

2. **APPLICABLE DOCUMENTS**

2.1 Suppliers shall comply with the latest revision of the following documents:

**SPECIFICATIONS**

- **MRC-3.301-1** - Bar Coded Shipping Label Standard For MDC Unit Loads and Transport Packages (Basic Label)
- **ANSI MH10.8M** - Unit Loads and Transport Packages - Bar Code Symbols (Shipping Label)
- **ANSI MH10.8.2** - Data Application Identifier Standard
- **ANSI X3.182** - Bar Code Print Quality - Guidelines
- **ICC NMF101 Series** - Standard Multi-Modal Carrier and Tariff Agents Codes (SCAC-STAC); National Motor Freight Traffic Association, Inc. (NMFTA) and Association of American Railroads, Transportation Division (AAR)

3. **MATERIALS & SPECIAL EQUIPMENT**

3.1 **Producing Bar Code Labels**

3.1.1 Create a bar code label with a personal computer (PC), printer and software.

3.1.1.1 Only thermal transfer label printers, laser printers, or ink jet printers shall be used.

3.1.1.2 When unable to create a label, procure completed labels from an outside source.
4. REQUIREMENTS

4.1 Approvals

4.1.1 For new suppliers, all shipping labels shall require a first sample approval. Raw materials, sheets, plates extrusions, bars, castings, and forgings shall be packaged and identified in conjunction with applicable material specifications (DMS, AMS, Mil Specs, etc.).

4.1.2 After the suppliers bar code labels have been approved, suppliers shall bar code all future shipments to those MDC locations identified on the face of the purchase/work order.

4.1.3 Suppliers shall provide bar coded labels that meet this Process Specification and MDC shall alert suppliers of any label non-conformance. Quality is an important aspect of any bar code system. When labels cannot be decoded quickly and accurately, the advantages of bar coding are lost.

4.1.4 Suppliers shall maintain a review process to ensure that the labels meet the requirements of this DPS.

4.1.5 A quality bar code scan shall be achieved when a bar code is read with three or fewer attempts using a wand-type scanner or two or fewer attempts with a laser scanner. These requirements apply when the scanners are being used in accordance with correct operating procedures as specified by the scanner manufacturer.

4.1.6 Equipment is available to verify that bar code labels meet requirements. It is recommended that suppliers perform verification audits in conjunction with statistical process control to assure label quality.

4.2 Shipping Label Requirements

4.2.1 The basic bar code label is the minimum requirement for a shipping label and shall be used for all shipments from suppliers. Refer to Figures 1, 2, and 3 at the end of this DPS for sample bar code labels. Shipping labels shall meet packaging and identification requirements in conjunction with applicable material specifications (DMS, AMS, Mil Specs, etc.).

4.2.2 Labels shall have black lines, lettering and bar codes printed on a white background.

4.2.3 The label shall contain a minimum of eight rows.

4.2.3.1 Each row shall contain specific information as identified per the following paragraphs.

   NOTE: All readable characters shall be no less than 0.10 inch (2.5 mm) in height and shall be upper case characters.

4.2.4 Rows One and Two

4.2.4.1 The top two rows shall contain only human readable print and shall be full width.

4.2.4.2 The first row shall contain the full name and address of the supplier and the weight of the packages/boxes.
NOTE: The first row shall be divided with a vertical line, to separate the weight of the package from the name and address of the supplier.

4.2.4.3 The second row shall contain the “deliver to” name and address (when shipping to a MDC facility, include the address, building number, floor and column/post location).

4.2.5 Row Three

4.2.5.1 The third row shall contain the commercial carriers preassigned SCAC code and PRO or AWB number (PRO, AWB). If the supplier is delivering the parts via the suppliers truck, then enter “none” and the date the parts will be shipped.

NOTE: Date of shipment entered shall be six characters (i.e., 062196). The first two characters shall be the month, the third and fourth characters shall be the day and the fifth and sixth characters shall be the year.

4.2.5.2 When MDC trucks/vans are used for pickup and delivery the SCAC code shall be “-MDC” and the PRO number shall be the expected date of shipment as specified in paragraph 4.2.5.1, Note.

4.2.5.3 When commercial carriers are used for pickup and delivery, the Standard Carrier Alpha Code (SCAC) for the carrier (see Table 1) and the PRO number used to track the shipment shall be entered.

NOTE: Preassigned freight bills/airway bills can be obtained from the carrier specified on the purchase document.

EXAMPLE: EWCF2473764172

“EWCF” is the SCAC code and “2473764172” is the PRO number; No “space” characters encoded for this bar code.

TABLE 1
COMMONLY USED SCAC CODES

<table>
<thead>
<tr>
<th>Emery Worldwide</th>
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<tbody>
<tr>
<td>Consolidated Freightways</td>
<td>CFWY</td>
</tr>
<tr>
<td>Roadway Express</td>
<td>RDWY</td>
</tr>
<tr>
<td>Roadway Packaging System</td>
<td>RPSI</td>
</tr>
<tr>
<td>Dart International</td>
<td>DINL</td>
</tr>
<tr>
<td>UPS Ground Track</td>
<td>UPSN</td>
</tr>
<tr>
<td>UPS Consignee Billing</td>
<td>UPSN</td>
</tr>
<tr>
<td>Federal Express</td>
<td>-FDE (See Note)</td>
</tr>
<tr>
<td>Viking Freight Systems</td>
<td>VIKG</td>
</tr>
<tr>
<td>McDonnell Douglas Corp.</td>
<td>-MDC (See Note)</td>
</tr>
</tbody>
</table>

NOTE: If a SCAC code is less than four positions, then a hyphen(s) (-) shall be used in the first position(s).
4.2.6 Row Four

4.2.6.1 The fourth row shall contain the purchase order number/work order number, suffix number and item number. The purchase order number shall be a combined total of the purchase order/work order, suffix (if applicable) and item numbers.

EXAMPLE: 5BR123456

4.2.6.2 The suffix (if applicable) shall follow the purchase order/work order number and be separated by a plus sign (+). The hyphen (-) is considered part of the suffix when the order is in the purchase order format.

EXAMPLE: 5BR123456+-9A

“-9A” is the suffix (the suffix can be up to five characters long)

4.2.6.3 The item number that is indicated in the MDC purchase order shall be entered. The item number shall be two or three characters (i.e., 01, 001, etc.).

EXAMPLE: 5BR123456+-9A+01

“01” is the item number

NOTE: If the item number on the order document has four characters, reduce it to three.

4.2.6.4 The plus sign (+) shall be used as a data separator. It is used by the computer to indicate the beginning and ending of data elements and/or fields.

EXAMPLE: 5BR123456+-9A+01

“+” is the data separator

4.2.6.5 For purchase orders without a suffix only a single “+” data separator shall be encoded.

EXAMPLE: 5B123456+01 Only use one data separator “+”

4.2.7 Row Five - The fifth row shall contain the suppliers packing list number or invoice number. If packing sheet forms are not used, then enter the date of shipment as specified in paragraph 4.2.5.1, Note.

4.2.8 Row Six - The sixth row shall contain the number of packages/boxes and the description of the item (e.g., 1/9 FASTENER).

NOTE: 1 = box number 1 of a total of 9 boxes. FASTENER is the description. The “/” is the data separator.

4.2.9 Row Seven - The seventh row shall contain the quantity and unit of measure (UOM) which is always two characters (e.g., each {EA}). The bar code for quantity and UOM shall not contain any data separators.

EXAMPLES: 7Q0EA, 7Q2FT, 7Q125LB
4.2.10 **Row Eight** - The eighth row shall contain the part number that is specified on the Purchase Order.

4.2.11 **Additional Rows** - Additional bar coded rows may be included on (or added to) the Bar Code Label if required for packaging and identification in conjunction with applicable material specifications (DMS, AMS, Mil Specs, etc.). Possible additions could be the following (See Figure 4):

NOTE: Any additional rows must follow ANSI standards MH10.8M and MH10.8.2 and be by mutual agreement between MDC and the Supplier.

4.2.11.1 A Supplier Part Number.
4.2.11.2 A Serial Number.
4.2.11.3 A Lot or Batch Number.
4.2.11.4 Unique Package Identification Number.

4.3 **Label Format**

4.3.1 The label shall have a minimum height of 6.00 inch (152.4 mm) with horizontal lines (rows). The supplier of the label shall determine the height based upon printer technology and the requirements of this document.

4.3.2 The label shall have a minimum width of 4.0 inch (101.6 mm) and be capable of containing all the information in each row. The supplier shall determine the width based upon printer technology and the requirements of this document. (See Figures 1, 2, and 3 at the end of this DPS.)

4.4 **Bar Code Characteristics**

4.4.1 The width of the narrow elements (bars) and the “intercharacter” gaps shall be 0.010 inch to 0.017 inch. The ratio of wide to narrow elements shall be 2.4:1 to 3.2:1.

4.4.2 A quiet zone is required before and after a bar code. The bar code shall not start or stop within 0.25 inch (6.4 mm) of the edge of the label. No other information, lines or marking shall appear within 0.25 inch (6.4 mm) of the bar code.

4.4.3 The minimum height of the bar code shall be 0.4 inch (10.16 mm).

4.4.4 Each label shall contain a title for all of the pieces of data. The title shall be upper case (capitals) and have a height of no less than 0.10 inch (2.54 mm) and shall be in the upper left hand corner of the section containing the data.

4.4.5 The preferred shape of the readable data, including the interpretation of the bar code, is Optical Character Recognition-A (OCR-A), but any font with characters (upper case alpha characters) no less than 0.10 inch (2.5 mm) in height will be acceptable.

4.4.6 Bar code symbols shall comply with ANSI X3.182. They shall be measured at B660 nanometers (nm) and shall meet the following:

4.4.6.1 Print contrast signal greater than 75 percent.

4.4.6.2 Minimum reflectance difference greater than 37.5 percent.

4.4.6.3 Inspection wave length 660 ± 10 nanometers.

4.4.6.5 Aperture measurement 0.010.

4.4.6.6 Minimum print quality grade C/10/660.

4.4.7 Data Identifiers

4.4.7.1 Each bar code shall have a data identifier.

4.4.7.2 The data identifier shall be per ANSI MH10.8.2.

4.4.7.3 The data identifiers (specified in Table 2) shall be used on all shipping labels.

4.4.7.4 Data Identifier (S) and (1T) and (3S) specified in Table 2 are possible (not mandatory) additions to the bar code label.

| TABLE 2
| DATA IDENTIFIERS |
|------------------|------------------|------------------|------------------|
| DATA IDENTIFIER  | TITLE            | BAR CODE         | HUMAN READABLE   |
| (12K)            | SCAC CODE AND PRO NUMBER | 12KCFWY959-219752 | CFWY959-219752  |
| (14K)            | P.O.+SUFFIX+ITEM NO. | 14K5BR123456+-9A+-9A+-01 | 5BR123456+-9A+-01 |
| (11K)            | PACKING LIST NO.   | 11K12345678      | 12345678         |
| (13Q)            | NUMBER OF BOXES    | 13Q1/9           | 1/9              |
| (7Q)             | QTY AND UOM        | 7Q12EA           | 12EA             |
| (P)              | PART NUMBER        | P52(01)(00)-2    | 52(01)(00)-2     |
| (S)              | SERIAL NO. SPLR    | SVC000001        | VC000001         |
| (1T)             | BATCH NO. SPLR     | 1T2178           | 2178             |
| (3S)             | UNIQUE PACKAGE ID  | 3SADC123456      | ADC123456        |

**NOTE:** Do not encode ( ) in bar code.

4.5 Bar Coded Data

4.5.1 When products are being delivered by a commercial carrier, then a PRO number shall be assigned. The PRO number shall be entered on the third row of the shipping label (see paragraph 4.2.5.3).

4.5.2 When MDC trucks/vans are used for pickup and delivery, the SCAC code shall be “MDC” and the PRO number shall be the expected date of shipment (see paragraph 4.2.5.2).
4.5.3 The purchase order (PO) number shall be assigned by entering the purchase order number, suffix (if applicable) and item number as stated on the purchase order. The PO number shall be entered on the fourth row of the shipping label (see paragraph 4.2.6).

EXAMPLE: (14K) 5BR123456+001+01

“5BR123456” is the purchase order number.
“+” is the data separator.
“001” is the suffix number (if applicable).
“01” is the item number.

4.5.4 The work order (WO) number shall be assigned by entering the contract number, suffix (if applicable) and item number as stated on the work order agreement. The WO number shall be entered on the fourth row of the shipping label (see paragraph 4.2.6).

EXAMPLE: (14K) 12345-54321+0001+01

“12345-54321” is the contract number.
“+” is the data separator.
“0001” is the suffix number (if applicable).
“01” is the item number.

4.5.5 The label shall reference the supplier packing sheet number as a record of transaction. If the document number exceeds nine characters, then only the last nine characters shall be included in the bar code. This information shall be entered on the fifth row of the shipping label (see paragraph 4.2.7).

4.5.6 The label shall contain the number of packages/boxes and the description of the item as identified in conjunction with applicable material specifications (DMS, AMS, Mil Specs, etc.). This information shall be entered on the sixth row of the shipping label (see paragraph 4.2.8).

4.5.7 The label shall contain the quantity and the unit of measure (UOM), as defined by the purchase order. The quantity and the UOM shall be combined in a single line item with no data separators. This information shall be entered on the seventh row of the shipping label (see paragraph 4.2.9).

NOTE: The UOM (PC) is acceptable, but (EA) is preferred.

4.5.8 The label shall contain the part number that is specified on the purchase order (see paragraph 4.2.10).

4.5.9 When formatting the data, only zeros, one, etc., shall be entered as numeric numbers and only O’s, I’s, etc., shall be entered as upper case alpha characters. Do not interchange numeric for alpha or alpha for numeric.

NOTE: Numeric zeros shall be entered as “0”.

4.6 Label Location and Protection
4.6.1 A label shall be located and affixed to the outer shipping container (box one of n) and a duplicate shall be packed with the goods and the packing sheet inside the shipping container.

4.6.2 Multiple purchase orders consolidated into one shipping container shall be individually packaged and properly identified in conjunction with applicable material specifications (DMS, AMS, Mil Specs, etc.).

4.6.3 All boxes shall be large enough so that the bar code label can be affixed to the side of the container. The bar code label shall not wrap around the edge of the container.

4.6.4 The label shall be affixed to an upper corner of a container. The leading and trailing edge of the quiet zones shall be at least 0.75 inch (19 mm) away from all edges of the container.

4.6.5 All packaged items shall have the label or tag affixed with the label placed in an easily accessible location with the following consideration (see Figure 5 at the end of this DPS):

4.6.5.1 Survivability of the label or marking.
4.6.5.2 Scanning front/top/side, etc.
4.6.5.3 Label affixing.
4.6.5.4 Container type and multiple labels.

4.6.6 For returnable containers or reused transport packages, care shall be taken that any previous labels have been removed. If removal is not possible, previous labels shall be completely obliterated. Ensure that previous labels do not affect the readability of the new labels.

4.6.7 When shipping more than one container per purchase order, the bar code label shall be applied to the container marked “1” of the total count. For example, if one order consists of three boxes (all the same part numbers), the container shall be marked “1 of 3”, “2 of 3” and “3 of 3” and the bar code label indicating a total quantity of all three boxes shall be applied to the container marked “1 of 3”. The remaining boxes shall be identified in a legible manner with the purchase order number, part number, and packing list number marked on each package or box.

4.6.8 Labels shall be protected against moisture, weathering, abrasion or other harsh environments and remain scannable.

4.6.9 Labels shall be applied wrinkle-free.

5. INSTRUCTIONS/PROCEDURES

This section not applicable.

6. QUALITY ASSURANCE PROVISIONS

6.1 Acceptance Inspection - Inspect as necessary to verify conformance to the requirements of this DPS.

6.2 Nonconformances - Process nonconformances in accordance with standard practice.
FROM:
SUPPLIER'S NAME
ADDRESS

TO:
MCDONNELL DOUGLAS CORP.
3855 LAKewood BLVD. (80 / 601 / 33C)
LONG BEACH, CA 90846

1. PLACE ONE LABEL ON BOX # 1 OF YOUR SHIPMENT.
2. DUPLICATE LABEL GOES WITH YOUR PACKING LIST INSIDE PACKAGE/BOX.

WEIGHT OF 
BOXES/PACKAGES

10 LBS

6.00” MIN
(152.4mm)
8.00” MAX
(203.2mm)

0.75” - 1.00” REF
TYP 8 PLCS

Rows 1 and 2 - Display full name and address in human readable print - include bldg no., floor, and col/post location when shipping to MDC facility.

Row 3 - Display SCAC for the carrier and the carrier's assigned shipment identification no. or PRO no. (no data separator).

Row 4 - Display P.O. / Item. The number of positions and format of P.O. no. varies depending on P.O. type (see Figure 2). The (+) symbol is used as a data separator.

Row 5 - Display packing list no. If the packing list no. exceeds 9 characters, only the last 9 characters shall be bar coded on the label.

Row 6 - Display no. of packages, boxes, or containers used for shipping each item of P.O., i.e., 1 of 9. The "/" is the data separator.

Row 7 - Display quantity and unit of measure. Express UOM in a 2 position code, e.g., 7Q1%=EA; 7Q1%=FT; 7Q1%=LB (no data separator).

Row 8 - Display part no. The part no. shall be same no. specified on P.O. If no part no. exists, leave this field blank. Any questions please contact buyer.

The area referred to as the quiet zone, the bar code's leading and trailing clear area. The quiet zone should be at least 0.25” (6.35 mm).

NOTE: Care must be taken to ensure the bar coded data has the proper data identifier.

Data identifiers shall be in accordance with ANSI MH10.8.2 and incorporated into all bar codes.

SAMPLE BAR CODE LABEL

FIGURE 1
On Service & Supply contracts CONTRACT ITEM # will always be the SUFFIX.

Sometimes Work Orders have more than 1 item. A BAR CODE is required for each ITEM.

Hyphen is part of Work Order No. No SUFFIX on Outside Manufacturing Work Orders.

On Service & Supply contracts ITEM # will always be Ø1.

LAYOUT OF BAR CODED PURCHASE ORDERS AND WORK ORDERS

FIGURE 2
THE HUMAN READABLE CHARACTERS SHALL NOT INCLUDE THE START / STOP CHARACTER SYMBOL (*) OR DATA IDENTIFIER PREFIX.

THE BAR CODE SHALL BE LEFT JUSTIFIED IN THE LOWER HALF OF THE ROW.

EACH ROW SHALL BEGIN WITH A DATA IDENTIFIER, ENCLOSED IN PARENTHESIS, IN ACCORDANCE WITH ANSI MH10.8.2, AND SHALL BE INCORPORATED INTO ALL BAR CODES.

FOR OPTIMUM SCANNING, A SYMBOL'S LEADING AND TRAILING CLEAR AREA KNOWN AS THE QUIET ZONE SHOULD BE AT LEAST 0.25” (6.35 mm).

LAYOUT OF BAR CODED ROWS

FIGURE 3
If it is required to include a Bar Code(s) for a “SUPPLIER PART NO.,” a “SERIAL NO.” and / or a “LOT” or “BATCH NO.” they are to be added at the bottom of (or following) the “Bar Code Label” as shown below.

<table>
<thead>
<tr>
<th>(7Q) QTY &amp; UOM</th>
<th>200EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(P) PART NO.</td>
<td>40021184</td>
</tr>
<tr>
<td>(S) SERIAL NO.</td>
<td>VC001</td>
</tr>
<tr>
<td>(1T) BATCH NO.</td>
<td>2178</td>
</tr>
<tr>
<td>(3S) Unique Pkg. ID.</td>
<td>ABC123456</td>
</tr>
</tbody>
</table>

POSSIBLE ADDITIONS TO THE BAR CODE LABEL

FIGURE 4
BOX OR CARTON
LABEL SHOULD BE LOCATED ON UPPER CORNER.

PALLET BOX
LABEL SHOULD BE LOCATED ON UPPER CORNER.

CARTONS ON PALLET

RACK
TAG WITH LABEL ON ONE VISIBLE PIECE NEAR TOP.

DRUMS, BARRELS, OR CYLINDRICAL CONTAINERS
LABEL SHOULD BE LOCATED NEAR CENTER AS SHOWN.

BUNDLE
TAG WITH LABEL SHOULD BE LOCATED AT ONE END.

BALES
LABEL SHOULD BE LOCATED ON UPPER CORNER.

BAG
PLACE ONE LABEL AT CENTER OF FACE.

BASKET, WIRE MESH CONTAINER
LABEL SHOULD BE LOCATED ON UPPER CORNER.

ROLL
HANG TAG WITH LABEL NEAR END OF MATERIAL AND IF WRAPPED, ON OUTER WRAPPER.

METAL BIN OR TUB
TAG WITH LABEL ATTACHED TO ONE PIECE IN TOP OF BIN.

CABLE REEL
PLACE A LABEL ON A TAG ATTACHED TO THE START END OF THE CABLE AS SHOWN.

LABEL LOCATION
FIGURE 5

JR:ps