NOTE: These Guidelines include both a Unitized and a Bulk section. The Bulk section starts on page 63. There are links in both sections, suppliers are required to check periodically the Guidelines in www.gmsupplypower.com to get the most up to date links.
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INTRODUCTION

• The purpose of this guide is to provide an overview of General Motors Service Parts Operations (this includes SPO Springhill) packaging requirements.

• Suppliers should familiarize themselves with these specifications and guidelines and use them as an aid to interpreting and executing our specifications. Establishing and maintaining two-way communication is encouraged and will benefit both supplier and General Motors Service Parts Operations in alleviating misunderstandings.

• Please contact the Package Engineering Department if any area of this manual requires further clarification or explanation. Correspondence should be directed to:

Mailing Address:
General Motors-Service Parts Operations
Attention: Package Engineering Department
Mail Code 484-393-023
3023 Airpark Drive North
Flint, MI 48507
Fax: (810) 606-4008

Email: spopackaging@gm.com

Environmental Statement

• The world has entered an age of environmental concern. General Motors shares this concern and wishes to comply with all local, state, federal and international regulations and laws that impact the packaging of our service parts.

• Laws and regulations are being proposed and passed at a very rapid pace. This demands a constant awareness of not only the effect of laws on your business but also how these laws affect GM’s business. This rapid rate of change will cause all of us to continuously review our packaging materials and methods for compliance. Certain packaging may no longer be used. Any materials that contain heavy metals in their composition are being banned in many states. We caution all of our suppliers to be aware of the materials they are using and being supplied.

• GM supports the recyclability of packaging materials. Materials readily recyclable in the majority of communities is desirable. Materials such as plastics should be identified with standard symbols that indicate recyclability and content. Corrugated containers should be identified as recyclable. Other materials should be identified in a standard manner consistent with existing laws and regulations.
SUPPLYING PARTS TO GMSPO: UNITIZED

General Motors Service & Parts Operations (GMSPO) has launched a new website on Friday, January 15, 2010 that contains detailed packaging information. The website includes part specific packaging information, including SPI’s and Packaging material specifications. GMSPO suppliers receiving packaging specifications through the Electronic Request For Quote (E-RFQ) process will be directed to use this site for quoting packaging costs.


Please note the new website is independent of the www.gmsupplypower.com website.

If assistance is required with the new website, please send an e-mail to spopackaging@gm.com

Logging into the GM GlobalPKG packaging web site

To initialize your account, enter your email address, click submit. If the email address is found by our system, you will receive a temporary password via email. If no match is found, please e-mail questions to SPOPACKAGING@GM.COM
The GlobalPKG dashboard will have up to four sections depending on the users role.

- Workspaces – view part and packaging data and create reports
- Settings – update user contact information and change password
- Support – help and other support files
- Administrator – (only available to administrators) Create users and assign roles
Use the standard workspace to find packaging requirements for a part

- Enter the part number in the find field
- Double Click on the part number to open the part data
- Click on the active BOM (highlighted in bold) to select
Create a BOM report to get the latest packaging specifications for the part.

- Be sure the BOM is highlighted then select BOM Report from the tools menu.
- Select the type of report (PDF or Zip – the zip report includes all original packaging material specification files - preferred) and download.
GENERAL INFORMATION:

There are two ways to supply unitized parts to GMSPO. They are:

1. **Unitized** – parts are packaged to GMSPO packaging specifications. Sourced package material must arrive damage free with full container integrity to the GMSPO receiving point and the GMSPO customer. To unitize for GMSPO, suppliers should first have the GMSPO packaging specification for a part.

   Unitizing for GMSPO involves several key concepts:
   a.) barcodes  
   b.) graphics  
   c.) product identification (labeling)  
   d.) merchandise packaging  
   e.) distribution packaging  
   f.) palletizing

2. **Ship Direct Unitized** - A Ship Direct Supplier is a supplier who ships unitized material directly to GMSPO customers, dealers and/or ACDelco customers. Ship direct suppliers do not ship to GMSPO facilities but are held to the same packaging standards detailed within this manual. Refer to the Outbound Requirements and Palletization Requirements section for additional information.

BAR CODES:

Bar codes are required on all packages, see section titled “Bar Codes” in this manual. We use three bar code symbologies depending on our customer requirements:
1.) ACDelco product line-UPC Version A bar code is required on the merchandise package.
2.) ACDelco product line-The UCC-14 (I 2 of 5) bar code is required for the distribution packages and pallet loads.
3.) GM product line-Code 39 bar code is used for the merchandise and distribution packages.

The UPC Version A and UCC-14 are required when specified by GMSPO packaging specifications, the default is Code 39 barcode.

GRAPHICS:

GMSPO’s customers require use of several different graphics on our labels and packages. The most common are GM and the ACDelco line of products. GM Accessories, GM Vehicle Care, and GM Performance Parts are also valid types of graphics. Graphics are controlled by the GMSPO Packaging Specifications.

Supplier graphics are not acceptable unless indicated on the GMSPO Packaging Specification. Artwork, if required should be coordinated with the GMSPO Packaging Engineering Department.

GENERAL LABEL REQUIREMENTS:

Product identification labels must be printed with a high quality logo, offset printed. The logo is to be of the approved and specified colors. Logos used on labels and packaging must be obtained from GMSPO Packaging Engineering. Scanning is not acceptable. Laser and dot matrix printing of logos is not permitted. See www.gmsupplypower.com, Material Power, Library, Service Parts Operations (SPO), North America, GMSPO Packaging Engineering for a list of approved label suppliers.
Warning labels with verbiage should be at minimum English (French and Spanish also can be shown on these labels).

**MERCANDISE PACKAGE:**
The merchandise package (also called the unitizing package or unit package) is the lowest level of packaging associated with a part. Product identification is either applied with a label or printed directly onto a package. An example is for GM Parts, the label most likely to be used is the 1207 or 1216, see “Label Design Elements” in this manual.

**DISTRIBUTION PACKAGE:**
The second level of package is called the distribution package or some may know it as a master pack or a shipping container. The level of package may or may not be specified by GMSPO. If GMSPO does not specify the container, the unitizer has the flexibility to choose one of their own standard containers. The proper label to identify this level of package is the GM Corporate GM 1724-A label (see section “Distribution Containers-GM 1724-A in this manual). If the product is an ACDelco product it may also require a UCC-14 bar code in addition to the bar codes on the GM 1724-A label. If orders are not rounded to the distribution quantity the supplier does not need to ship using the distribution package specified, i.e. use a smaller shipping carton. The weight of the distribution container + parts should be 20 pounds or less, unless specified by GMSPO Packaging Engineering.

**UNIT LOAD:**
Unit load or pallet load is the highest level of package in the GMSPO system. This level of package my or may not be specified by GMSPO. When GMSPO does not specify the pallet, the required size is the 48” x 40” GMA style pallet. The unit load should not exceed 45” in total height unless the size of the product so dictates a larger or higher unit load. The proper label to identify this level is the GM Corporate GM 1724-B or C label (see “Palletizing for GMSPO-GM1724-B in this manual). The product requirements are the same as described above under “Distribution Package”.

NOTE: For SPO Springhill’s shipping labels (Kanban/B-10) are different from GM’s shipping labels (GM-1724). Each overpack/pallet load requires 2 kanban labels placed on adjacent sides. Questions regarding kanban labels can be addressed through Covisint at 313-227-3342.

**OVERPACK PACKAGING:**
Bulk and unitized parts that are shipping using over pack cartons should be shipped in packages that are proportionally sized to the part(s) being shipped. Minimize void space within containers to maximize cube utilization of containers.

*Refer to the GMSPO Overpack Guidelines for requirements on handling ship direct less than pallet load shipments and for packages that require overpacking. Log onto www.gmsupplypower.com for the latest edition of the GMSPO Overpack Guidelines manual.
Inbound Shipping Requirements for GM Aftersales Suppliers

All GM Aftersales suppliers are required to adhere to inbound shipping requirements shown on GM Supply Power in the Material Library, Service Parts Operations (SPO) folder. The following Supply Power link is provided for the SPO folder: https://www.gmsupplypower.com/apps/supplypower/NASApp/spcds/CDSRetrieval?lob=material&subnav=library&togglefolder=647

Within the Service Parts Operations (SPO) folder, suppliers will find the following requirements for inbound shipment preparation pertaining to North America Aftersales warehouse and ship direct shipments, as well as Saturn Service Parts Operations:

In the North America folder:
1) Click on the GMSPO Supplier Info subfolder to find the following:
   • Advanced Shipping Notification (ASN) Information.doc
   • Charge Back For Not Meeting North American Shipping Guidelines
   • Country of Origin Requirements Bulletin and Attachments
   • Directory – SPO Canada
   • Directory – SPO U.S.
   • EDI Overview
   • EDIFACT Help Guide
   • GM Supply Power (GMSP) Overview
   • General Ship Direct Guidelines
   • Generic Domestic Launch Timing Chart
   • Initial Order (IO) Label Letter
   • Material Release Information
   • Multi-Lingual Requirements Bulletin
   • North American Shipping Guidelines
   • Packaging Standards & Guidelines Letter (Includes Country of Origin & Overpack Labeling)
   • Purchasing Phone List
   • Readiness Overview
   • Receipt Payment Process
   • SPO Ship To Addresses
   • Service Strategy Guide
   • Ship Direct Window Shipping Requirements
   • Shipping To GMSPO Menlo Logistics Whse. Located in Mexico
   • Supplier Roles and Responsibilities
   • Transportation Requirements for Shipments from Mexico to US – Canada
   • Transportation Requirements for Shipments to US & Canada from Suppliers with FOB Mexico

2) Click on the Ship Direct Folder to find the following:
   • Packing Slip Requirements

3) Click on the SPO Ship Direct Statement of Requirements (SOR) Folder to find the following:
   • SPO NA Accessories Statement of Requirements (SOR)
   • SPO NA GM Parts / AC Delco Statement of Requirements (SOR)

4) Click on the SPO – Saturn Operations Folder for:
   • Saturn SPO Ship to Addresses
   • Saturn SPO Supplier Info Manual
   • Saturn SPO Supplier Management Manual
SUPPLIER STANDARD REQUIREMENTS FOR RETURNABLE CONTAINERS

GENERAL INFORMATION:

- The storage space for the GM Containers must be secure. All lost or stolen GM equipment will be replaced/re-paid by the supplier site where it was deemed to have been lost or stolen at.

- All container scrap forms (GM 1120) can be found at:

  http://www.gmcontainers.com/PDF/supplierforms/NLOC1120_Scrap-Recycling-Form.dot

  These must be filled out by the supplier and sent into GM NAO or GM SPO Containerization. All material that is in the scrap process should be kept at the supplier’s facility to be scrapped unless specified differently by the GM Containerization Group.

- Suppliers with excess returnable containers should contact SPO Containerization for disposition. Call Mike Cicalo (810-287-1367) or Gary Atchison (810-656-0707).
Accessing the GMSPO Packaging Website

Log into www.gmsupplypower.com to access the website. You will need to register if not already registered.

1.) Log into GMSupplyPower

2.) In the Document section select “Material”

3.) Select the folder “Service Parts Operations (SPO)”

4.) Select the folder “North America”

5.) Select the folder “GMSPO Packaging Engineering”

6.) You will be able to select one of six folders

   a.) GM Accessories Packaging SOR
   b.) GMSPO Label Supplier’s List
   c.) GMSPO Packaging Information-this section contains:
      • Engineer Code-Packaging Engineer contact information
      • Overpack Guidelines
      • General Packaging Specifications
      • Packaging Label Information-You can obtain label information that is required to be printed onto the GM or ACDelco labels from this file.
      • ISPM #15 Question and Answers
   d.) Michigan Cross Dock_MCDACC
   e.) Packaging Standards and Guidelines
   f.) GM Supplier Rollout-refers to Global Packaging website

Special Packaging Instructions (PD 1130)

• The Special Packaging Instructions illustrate the assembly of complex packages or define other critical packaging instructions.
The container to be used to contain the packaged material. The pallet or rack used to accomplish the unit load or source pallet quantity.

Special Instructions

The label to be used on the distribution container to show part numbers (AC Delco and GM) and distribution quantity.

Distribution Label

The unit of measure of the packaging material to be used. This is the GM part number to be preprinted or imprinted on the merchandising container or product ID label. Part numbers are the standard for use in computer systems and are unique numbers assigned to each individual part. They are used by all departments of the company for all purposes. A good example is ACDelco Number. The correct graphic type and layout must be used on corrugated cartons. Printing product identification information directly on corrugated cartons is acceptable as outlined in the Packaging Standards and Guidelines Manual.

Package Engineering Department or Quality Assurance Department prior to the first shipment.

NOTE:

The prime paint, surface plating or rust prevention coating.

Paint Code

Add'L

Paints, coatings or rust prevention coatings that are not part of the original order.

Add'L (ADDITIONAL) The code to describe the type of material required to complete the packaging material.

AC-DELCONO.

AC Delco Number

This is the ACDelco line code. This is the GM part number to be preprinted or imprinted on the merchandising container or product ID label. Part numbers are the standard for use in computer systems and are unique numbers assigned to each individual part. They are used by all departments of the company for all purposes. A good example is ACDelco Number. The correct graphic type and layout must be used on corrugated cartons. Printing product identification information directly on corrugated cartons is acceptable as outlined in the Packaging Standards and Guidelines Manual.
Coating/Paint Specifications

- To protect machined parts, exterior sheet metal and other surfaces which may corrode, certain parts require a paint coating or other surface treatment.
- The specification number is indicated in the PAINT CD field.

Valid GMSPO Paint Codes

- 02: Prime paint - meets GM spec 12483006
- 03: Oil coating - used for long term buys
- 12: Aluminum parts - require cathodic elpo
- 22: Prime paint - cathodic elpo meets GM spec 12483001
- 84: Refer to part drawing
SPECIAL PROCESSING INSTRUCTIONS

These instructions appear next to the data field labeled “SPEC PROC”.

AL Aluminum part—requires special paint routing.

AP Always Packaged

BG Bulk Glass program: shipped direct to GM customer by participating supplier.

CG Core group

CV Curved Molding

DM High Damaged part

DQ Distribution Qty

LN To be reviewed by SPO Pkg—to determine if distributable or non-distributable packaging is needed.

PJ J-Car, Toyota part

R Part must be repackaged.

RI Rolled Molding, adhesive rolled inside

RL Rolled Part

RK Unit load is in production container

RO Adhesive rolled outside

SE Saturn Exclusive

SS SSR part

TP Third Party Package

UI Parts arriving Unitized Incorrectly

WD Part is processed on cable winder machine

WP Wrapped part

01 Part number ID on part, not specified by print

02 Part must be contained in a bag or pouch identified with GM product ID

03 Each part to be individually identified with GM product ID label.
General Instructions

Date Codes

Every service part or maintenance and accessory item which is packaged, and/or identified is to have a date code designating the unitizing date (the date the part is packaged or labeled) imprinted or stamped thereof. This date code is included on the product identification label or imprinted package.

NOTE: The date code should be the actual date the part is packaged but can be +/- 2 days of the pack date. Example, part packed out on January 3, 2008, date code can be 08001 to 08005.

- The source code is the GMSPO five digit source code as established by the GMSPO Global Supply Chain Department. The source code is also available in the “Packaging Label Information” file in www.gmsupplypower.com. The source code to be shown on the package is the source that actually packages the part.

- If unitizing is performed at a GMSPO location, the source code is replaced by the plant code (three digit number).

Shown below is the required layout.

The date code includes the source code followed by a space and then the two digit year and then the three digit Julian date.

If packaging is performed at other than a GM Service Parts Operations facility, the processing lot identification will be a source and date coding system in accordance with the following:

Example: These parts were unitized on July 13, 2009. Unitized at ABC Company.

```
<table>
<thead>
<tr>
<th></th>
<th>01234</th>
<th>09</th>
<th>194</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Code</td>
<td>Supplier ABC Company</td>
<td>Year</td>
<td>Julian Date</td>
</tr>
<tr>
<td></td>
<td>(2009)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

To appear on package: 01234 09194

```
<table>
<thead>
<tr>
<th></th>
<th>001</th>
<th>09</th>
<th>194</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Code</td>
<td>Flint Plant</td>
<td>Year</td>
<td>Julian Date</td>
</tr>
<tr>
<td></td>
<td>(2009)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

To appear on package: 001 09194
Type Style Requirements

Acceptable fonts include:

**GM Parts Graphics**
- Arial
- GM Gothic
- Helvetica (except oblique)
- Stone Serif

**ACDelco Graphics**
- Arial
- Eurostile
- Univers 47 Condensed
- Univers 67 Condensed

All in bold type style

- Arial is included with Microsoft Word
- GM Gothic is available from the following sources:

  Derouin & Font  
  27319 Grant St.  
  St. Clair Shores, MI 48081  
  Ph: (810) 779-9288

  Lettergraphics Detroit  
  2000 Porter Street  
  Detroit, MI 48216  
  Ph: (313) 964-2300

  Lettering Inc.  
  26530 W. 8 Mile Road  
  Southfield, MI 48034  
  Ph: (248) 223-9700

- Rest of the fonts are available from Adobe Systems Type On Call (www.adobe.com).
Country of Origin
This section refers to the identification on labels and packages.
For 1724 label information see the “GM 1724 Information” pages in this manual.

Requirement
(For more information see pub. #539, www.customs.gov/xp/cgov/toolbox/publications/trade/)

Federal Law requires that foreign source items must be identified with the Country of Origin as defined in
U. S. Federal Regulations-title 19 U. S. Customs Service Part 134 as revised. The identification is to be the
English name of the country(ies) of origin(s) and may not be abbreviated. Products made in the United States
do not have to contain the country of origin marking. It is the supplier’s responsibility to assure packages
are printed with the notation “MADE IN (COUNTRY)” prior to shipment to comply with this Federal Law and
GMSPO’s requirements. “ASSEMBLED IN”, “PRODUCED IN”, ”PRODUCT OF” etc. are also accepted notations
to appear on the packages. This notation must appear on the container and/or label as indicated in the product
identification layouts.

Note: This requirement may be different than the requirement to ship to production assembly plants.

Placement
When the package graphic contains a General Motors address or other words indicating a
country other than the Country of Origin of the product, the Country of Origin marking must be in
close proximity (i.e.: the same panel), and of comparable size (i.e.: equal or larger) to those
markings.

If the GM address or “other words” are on the bottom of the package (as normally displayed) the
Country of Origin marking can be on the product identification panel or on any panel adjacent to
the product identification panel. However, it must be of comparable size.

If the country of origin information will not fit on the label, use a second label placed in close proximity of the first label.

Kits With Foreign Source Content
Paragraph 134.14 Title 19 U.S. of Customs Regulations contains specific requirements for
Foreign Source markings of articles combined, i.e. kits. Specifically, the regulation requires” ...
words or symbols which shall clearly show that the origin indicated is that of the imported article
only and not that of any other article with which the imported article may be combined after
importation.”

Conformance to this regulation is mandatory to prevent possible marking notices, seizures and/or
penalties by U.S. Customs.

Therefore, the following guidelines have been developed to assist GMSPO processing plants and
unitizing suppliers conform to the intent of the regulation. Any questions regarding foreign source
marking should be directed to the GMSPO Tax Staff Representative.

A. Kits in which all components are made in the same foreign country do not require a kit lot
number (see paragraph B).

Example 1: Kit Contains 100% components made in Japan.

Proper marking:
"MADE IN JAPAN"

B. Kits in which one or more components are made in more than one country must be assigned
a kit lot number in addition to the Foreign Source markings. The kit lot number identifies the
percentage of components made in each country. Note: It is the responsibility of the
unitizer to supply all kit lot numbers and component percentages to:

Sandler & Travis Trade Advisory Services, Inc.
36555 Corporate Drive, Suite 400
Farmington Hills MI 48331
Phone: 248-474-7200 FAX: 248-442-7407
Kits With Foreign Source Content (Continued)

The two (2) position kit lot number will be assigned using the following parameters:

The first position will be alpha and the second numeric, excluding 0, 1, I, and O.

**Example:** A2, A3, A4...B2, B3...Etc...Z9

The original kit lot number assigned to each kit with components made in more than one country will be A2.
Each time the percentage of components made in each country is modified, the kit lot number must be reassigned.
Therefore, the next kit lot number will be A3.

**Example 1:** Kit #12345678 has 25% of the components made in Mexico and 75% of the components made in the United States

Proper marking: “CONTAINS COMPONENTS MADE IN MEXICO A2”

The contents of kit #12345678 change so that 50% of the components are each made in Canada and the United States

Proper marking: “CONTAINS COMPONENT(S) MADE IN CANADA A3”

**Example 2:** Kit #87654321 is comprised of 25% of the components made in Brazil, 25% of the components made in Mexico and 50% of the components made in the United States

Proper marking: “CONTAINS COMPONENT(S) MADE IN BRAZIL, MEXICO A2”

The contents of kit #87654321 change so that 25% of the components are made in Brazil and 75% of the components are made in the United States

Proper marking: “CONTAINS COMPONENT(S) MADE IN BRAZIL A3”

The contents of kit #87654321 then change so that 100% of the components are made in Japan.

Proper marking: “MADE IN JAPAN”

**Placement of D.O.T.**
The Federal Motor Vehicle Safety Standard Certification Requirement (D.O.T.) is mandatory when specified by label 1238. If space limitations exist which prohibit the inclusion of this information with the product identification, alternate provisions must be made to include this information elsewhere on the package; i.e.: Use of GMSPO 1238 Label for D.O.T. identification.

See the Product Identification Section in this manual for placement of D.O.T.

**Core Return Tags**
NOTE: For SPO Spring Hill, core tags can be obtained through the following web site, www.gmdealer.com.
GENERAL REQUIREMENTS FOR RUST FREE SHIPMENTS OF FERROUS PARTS TO GMSPO

• GMSPO requires that supplier deliver ferrous parts “rust free” unless stated on the engineer drawing/print in which case takes precedence.

• All temporary coatings used by suppliers to assure parts remain rust free at the time of delivery to GMSPO facilities or other designated locations must be safe, easy to handle, easy to remove and dispose of easily. Coatings must not affect part appearance or function and must be environmentally friendly.

• GMSPO does not approve thick grease or wax-like coating that require strong solvents, special cleaning equipment or extra labor to remove.

• Suppliers should note that soft coating may harden with time and if not completely removed may block or affect other oils or lubricants when part is in use.

• GMSPO does not approve of high temperature, water displacing and finger print suppressing oil used in combination with vapor corrosion inhibitors and barrier type package.

• GMSPO requires that suppliers implement the following steps to reduce corrosion problems:

  > When preparing a shipment for a GMSPO order, layer parts within a plastic bag, or an enclosed box and use VCI paper or use a VCI impregnated plastic bag. Make sure bag is sealed to prevent rust.

  > Do not leave VCI materials in the open environment, either indoors or outdoors. VCI material (ex. VCI paper, VCI plastic bags) should be kept in original wrapping or equivalent during storage. This will ensure that the vapor remains in the packaging and will not volatize.

  > Keep work/storage area and parts clean.

  > Use first in, first out processing.

  > Expedite and minimize handling and shipping time.

  > Monitor quality of part and do not ship parts that exhibit corrosion.

  > Problem resolution coordination.

  > Use gloves when handling unprotected metal parts.

GMSPO requires all ferrous parts to remain rust free for three years which includes source unitized and the commodities listed below:

- Arms
- Bearings
- Brake shoes
- Bushings
- Crankshafts
- Dampers
- Drums
- Flywheels
- Stamped metal (hinges, brackets, oil pans, struts and straps)

- Frames
- Gears
- Hubs
- Levers
- Manifolds
- Pumps
- Rotors
- Shafts

Exception for sheetmetal parts: 30 days shelf life from date of shipment receipt.
General Imprinting Standard

This standard is intended to establish a base for which the imprinting of product identification information on packages can be held to the quality expectations of GM Service Parts Operations. It is also intended to provide a level of legibility that will eliminate any potential misinterpretation of part number identification.

Product Identification cannot be handwritten onto a label or package with markers, pens, etc.

GM Service Parts Operations product identification standards (or where applicable, individual specifications or special instructions) must be referenced for the exact layout, format and location of imprinted information. Once this has been done the following standards apply to the quality of that imprinting.

Character Clarity

- Characters shall have clear and open center holes.
- Characters cannot have breaks or gaps in their body (X) or missing ends, tails or sections (Y).
- Printing must be free of spotting, streaking, smudging and smearing.
- Marks caused by rubber type base edges are unacceptable.
- Characters shall have crisp, non-jagged inner and outer perimeter edges with no visible wicking or bleeding.

Character Density

Character density must be such that it will pass one of the following tests:

1.) When measured with a X-Rite densitometer, the density value must be greater than 1.00 with a tolerance of -.30.

2.) When measured with a RJS Enterprises Codascan, the print contrast signal (PCS) value must be a minimum of .75.

Ink Color

Labels:

- Imprinting ink color to be black unless specifically excepted by special individual container artwork, or special packaging instruction.

Imprinted chipboard and corrugate containers:

- Ink color can be black or the same color as the printed carton graphics.

Alignment

Vertical

- Characters must be positioned 90° to the horizontal edge of the container graphics, or label graphics or container edge for non-graphics containers) whichever is applicable within ±3°. (See illustration to the right.)

Horizontal

- Characters must be in line with each other on a horizontal line within ±5% of the character height.
- The horizontal line must be parallel to the container graphics or container edge (or non-graphics containers) within ±3°. (See illustration to the right.)
Bar Codes

General Information

• The standard product identification format includes a bar code.

• The standard bar code required is the Uniform Symbology Specification Code 39 as defined by AIM USA and approved by ANSI (American National Standards Institute).

• When specified the UPC Version A bar code is required in place of the Code 39 bar code UPC symbology is administered by the Uniform Code Council.

• A label or product identification panel will have only one bar code on it; it will either be the Code 39 or the UPC Version A.

• The Code 39 bar code is the default standard.

• The standards for the two bar codes may be obtained from the following sources:

  AIM USA - www.aimglobal.org
  Uniform Code Council - www.uc-council.org

• The quality standard for bar codes is ANSI X3.182, Bar Code Print Quality - Guideline. GMSPO requires a quality level of A or B. A quality level of C will require improvement. A quality level of D or F will not be acceptable for sale and will require rework. ANSI X3.182 can be ordered from:

  American National Standards Institute - www.ansi.org

Code 39

• The data encoded in the Code 39 bar code is the GM part number only. No leading zero’s, no asterisks and no data identifiers.

• Symbol size for Code 39 is variable. The height is .2 inches or 15% of length whichever is greater. The length is determined from the number of characters printed and the x and n dimension chosen for a particular piece of printing equipment.

• The Code 39 barcode “field” should be centered on the label.

• For the Code 39, the nominal size of the package or label is 2.25” wide x 1.0” high.

• Packages with panel sizes smaller than 2.25” x 1.0” do not require the code 39 bar code.

UPC Version A

• The data encoded in the Version A bar code is the specified UPC bar code number.

• The UPC bar code is shown on the GMSPO Packaging Specification Form and is different than the GM part number.

• Nominal size is 1.469” wide x 1.020” high, minimum size is 1.175” wide x .816” high (includes human readable characters).

• The UPC bar code may be reduced no more than 80% of nominal.

UCC-14 (I 2 of 5)

• The UCC-14 barcode is shown on the GMSPO Packaging Specification Form and is different than the GM part number.

• Nominal size is 6.0” wide x 1.9” high (includes human readable characters).

• The UCC-14 barcode may be reduced no more than 70% of nominal when printing directly onto corrugated (4.2” x 1.3”).

• The UCC-14 barcode may be reduced no more than 62.5% of nominal when printing directly onto labels (3.75”x 1.0”).
ACDelco Standard Label Design Elements (4” x 2¼” label)

ACDelco Part Number

GM Part Number (no leading zeros)

Package (Container) Quantity

Part Name* (UPPERCASE) (see bottom of this page)

Alignment as shown

*The shaded areas shown above represents the variable imprint area. Information within this area is to be located as shown when specified or required by law.

- Note: If there is not an ACDelco Part Number, the GM Number would be placed in both the GM # and ACD # fields.

- Part Numbers and quantity number to be minimum 18 point size and bold font style.
  Part Numbers and quantity number to be of equal point size.

- All other information (description and variable text) to be minimum 10 point size and regular font style.
  (See the “Type Style Requirements” section for acceptable fonts.)

- The above format represents a 4” x 2¼” label. If using a larger sized label, point sizes to be increased proportionally.

- Alignment of product identification onto label: Left side to be aligned with address line.
  Right side to be minimum 3/16” from edge of label.

- D.O.T. annotation is only required for certain parts and is shown as a 1238 label requirement.

- The Core Group (CG) Number is only required for certain parts and is shown with a number in the Core Group field (CORE GRP).

- Part Name to be CAPITALIZED and trilingual (English, French and Spanish respectively).
  To obtain the part name translation, log onto www.gmsupplypower.com and register if you have not done so.
  Click on “Material”, click on “Service Parts Operations (SPO)”, click on “North America”, click on “GMSPO Packaging Engineering”, click on “GMSPO Packaging Information” and lastly click on the .zip file in the center of the page to launch the access database.

Label information can also be found on http://gm.gpkg.com BOM report.
ACDelco Standard Label Design Elements (2¼” x 1½” label)

- The shaded areas shown above represents the variable imprint area. Information within this area is to be located as shown when specified or required by law.

• **Note:** If there is not an ACDelco Part Number, the GM Number would be placed in both the GM # and ACD # fields.

• Part Numbers and quantity number to be minimum 18 point size and bold font style. Part Numbers and quantity number to be of equal point size.

• All other information and variable text to be minimum 8 point size and regular font style. (See the “Type Style Requirements” section for acceptable fonts.)

• The above format represents a 2¼” x 1½” label. If using a smaller sized label, point sizes to be decreased accordingly. Minimum point size is 8 point. If using a point size below 8 contact GMSPO Packaging Engineering for approval.

• Alignment of product identification onto label: Left side to be aligned with address line. Right side to be minimum 3/16” from edge of label.

• D.O.T. annotation is only required for certain parts and is shown as a 1238 label requirement.

• The Core Group (CG) Number is only required for certain parts and is shown with a number in the Core Group field (CORE GRP).

• Part Name is omitted from the 2¼” x 1½” label.

• To obtain part number information, log onto www.gmsupplypower.com and register if you have not done so. Click on “Material”, click on “Service Parts Operations (SPO)”, click on “North America”, click on “GMSPO Packaging Engineering”, click on “GMSPO Packaging Information” and lastly click on the .zip file in the center of the page to launch the access database.

⇒ Label information can also be found on http://gm.gpkg.com BOM report.
GM Standard Label Design Elements (4” x 2¼” label)

- Part Numbers and quantity number to be minimum **18 point** size and **bold** font style. Part Numbers and quantity number to be of equal point size.

- All other information (description and variable text) to be minimum **10 point** size and **regular** font style. (See the “Type Style Requirements” section for acceptable fonts.)

- The above format represents a 4” x 2¼” label. If using a larger sized label, point sizes to be increased proportionally.

- Alignment of product identification onto label: Left side to be aligned with GM Logo. Right side to be minimum 3/16” from edge of label.

- D.O.T. annotation is only required for certain parts and is shown as a 1238 label requirement.

- The Core Group (CG) Number is only required for certain parts and is shown with a number in the Core Group field (CORE GRP).

- Part Name to be **CAPITALIZED** and trilingual (English, French and Spanish respectively). To obtain the part name translation, log onto www.gmsupplypower.com and register if you have not done so. Click on “Material”, click on “Service Parts Operations (SPO)”, click on “North America”, click on “GMSPO Packaging Engineering”, click on “GMSPO Packaging Information” and lastly click on the .zip file in the center of the page to launch the access database. Label information can also be found on http://gm.gpkg.com BOM report.

  The standard label format is also used for the GM Accessories, GM VehicleCare and GM Performance Parts.
GM Standard Label Design Elements (2¼” x 1½” label)

*The shaded areas shown above represents the variable imprint area. Information within this area is to be located as shown when specified or required by law.

- Part Numbers and quantity number to be minimum 18 point size and bold font style. Part Numbers and quantity number to be of equal point size.

- All other information and variable text to be minimum 8 point size and regular font style. (See the “Type Style Requirements” section for acceptable fonts.)

- The above format represents a 2¼” x 1½” label. If using a larger sized label, point sizes to be increased proportionally.

- Alignment of product identification onto label: Left side to be aligned with GM logo. Right side to be minimum 3/16” from edge of label.

- D.O.T. annotation is only required for certain parts and is shown as a 1238 label requirement.

- The Core Group (CG) Number is only required for certain parts and is shown with a number in the Core Group field (CORE GRP).

- Part Name is omitted from this label.

- To obtain part number information, log onto www.gmsupplypower.com and register if you have not done so. Click on “Material”, click on “Service Parts Operations (SPO)”, click on “North America”, click on “GMSPO Packaging Engineering”, click on “GMSPO Packaging Information” and lastly click on the .zip file in the center of the page to launch the access database. Label information can also be found on http://gm.gpkg.com BOM report.

The standard label format is also used for the GM Accessories, GM VehicleCare and GM Performance Parts.
Label Designs

4" x 2 ¼" Labels

2¼" x 1½" Labels

Label Placement on Non-graphic Merchandising Cartons

The product identification label for non-graphic merchandising cartons is to be on the carton’s smallest (width) panel. This label should be centered if possible.

- Do not staple through the label
- If the width panel is too small to accommodate the label, place label on face panel.
- Do not tape over the label
- Do not place label over the box certification
- When stacking cartons on to a pallet, place the part label (ex: 1216, 0A045038) facing outward when possible.
1203, 1204 & 0A084657 Labels

Imprinting Layouts

Note: When a line is omitted, all information moves up to fill space. All information must be centered and equally spaced.

- ACDelco Part Number: 18 pt. (.167") ± 10%
- GM Part Number: 18 pt. (.167") ± 10%
- Quantity: 18 pt. (.167") ± 10%
- Group Number*: 12 pt. (use periods, no dashes) (.11") ± 10%
- Core Group and D.O.T.: 12 pt. (.11") ± 10%
- Source Code and Date Code: 12 pt. (.11") ± 10%
- Country of Origin: 12 pt. (.11") ± 10%

* Group Number
Three digit group numbers shall have one leading zero (i.e. 0.059). All other group numbers will have no leading zeros (i.e. 1.265, 10.373).

12345678
QTY. 1
GR. 00.000
CG AB123/D.O.T.
12345 08105
MADE IN AUSTRALIA

1203 (""") LABEL

12345678
QTY. 1
GR. 00.000
CG AB123/D.O.T.
12345 08105
MADE IN AUSTRALIA

Example of label placement on label only parts.

Fold label over to adhere backing of label together. Keep barcode as whole.

Fold over

Barcode (Code 39 follow ANSI specifications)

100% UPC Version A Bar Code (Follows ANSI specifications)
Distribution Case Identification - ACDelco

All incoming distribution packages must be identified with certain product information. When UPC bar codes are specified for distribution loads on source unitized material, a UPC Shipping Container Code UCC-14 (I 2 of 5) is required.

ACDelco Identification

See distribution label layout below for parts that require a UCC-14 bar code. Follow same guidelines as shown on the “ACDelco Standard Label” section with two exceptions: Use the UCC-14 bar code, and use distribution case quantities in place of merchandising package quantities.

Note: If shrink filming (stretch wrapping, etc.) ACDelco graphic cartons together to create a distribution package only need to place a UCC-14 barcode label on length side panel of distribution package. The Product Identification and UCC-14 bar code can be printed in the following manners:

a.) plain white label - with graphic label (shown below - Option A)
b.) bottom of graphic product identification label (shown below - Option B)
c.) preprinted directly onto distribution package
d.) imprinted directly onto distribution package

Follow the Uniform Council (UCC) specifications when printing the UCC-14 bar codes. Refer to the Bar Codes page in this manual for barcode sizes.

Note: Placement of the UCC-14 is on the elongated panel, 1.25” from bottom edge of the container and no closer than .75” from the container’s edge.

Minimum barcode size including human readable characters is 3.75” wide x 1.0” high when printing onto a label.

If using scenario “A” below, put both the ACDelco label and UCC-14 label on the same panel if room permits. If not enough room for both labels put the ACDelco label on the end panel.

Scenario A

Note: This is the standard ACDelco label (0A045038. 4” x 2-1/4” shown below.)

<table>
<thead>
<tr>
<th>ACD#</th>
<th>GM#</th>
<th>QTY.</th>
<th>OIL FILTER/FILTRE À HUILE/FILTRO DE ACEITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB123</td>
<td>12345678</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Distribution Case Qty

<table>
<thead>
<tr>
<th>Distribution Case Qty</th>
<th>12345 05123</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCD 40</td>
<td>1.234</td>
</tr>
</tbody>
</table>

NOTE: Made in (country) code is CG 0000/D.O.T.

ACDelco label print examples:

Option A - place UCC-14 on the same panel as the ACDelco label.

Option B - put the ACDelco label on the end panel.

Scenario B

Note: The option “B” label is bigger than the Option “A” label to accommodate the UCC barcode. The size below is 6” x 4”.

<table>
<thead>
<tr>
<th>ACD#</th>
<th>GM#</th>
<th>QTY.</th>
<th>OIL FILTER/FILTRE À HUILE/FILTRO DE ACEITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB123</td>
<td>12345678</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

Note: The clear edge of the symbol must be no closer than 0.75” from the edge of the container.

(1.25” dimension = bottom of vertical symbol bars to bottom of carton.)
Distribution Case Identification - GM

GM Identification - For Retail Parts
See distribution label layout below for GM Retail parts. These usually do not require a UCC-14 bar code (Note: A 1724-A label should be used for non-retail GM Service Parts). Follow same guidelines as shown the “ACDelco Standard Label Design Elements” page with exception of replacing package quantity (usually 1) with distribution case quantity (in this case 12 pieces). Placement of this information is to be centered onto the front end panel.

Note: The data in the Code 39 bar code is the GM part number only.

The format shown is also used for the GM Accessories GM Vehicle Care and GM Performance Parts labels.
Sample Labels

A. 1216 — Code 39 Bar Code

B. 0A045038 — UPC A Bar Code

C.) 0A045775 — Code 39 Bar Code

D.) 1207 — Code 39 Bar Code

E.) 0A045039 — UPC A Bar Code
   (Part made in U.S.A - omit Country of Origin)

F.) 0A044778 — UPC A Bar Code

G.) 0A045436 — Code 39

H.) 0A044779 — UCC-14 barcode (1 of 5)

Note: Shaded fields required when specified.
Placing Product Identification onto a Package

- Certain product information needs to be on the package. This information is:
  - date code/source code
  - country of origin (if not made in the U.S.A.)
  - quantity
  - GM #
  - barcode

If using ACDelco graphics, line code and ACDelco part number are also needed.

Note: If packages are preprinted with the variable data (GM#, ACDelco # and barcode) you do NOT need to print the date code, source code, line code or quantity.

Date codes are required on distribution cartons.

- Product identification can be applied to a package in the following ways:
  1.) imprinted directly onto a graphic package*
  2.) printed onto a white label then applied to a graphic package*
  3.) preprinted directly onto a graphic package
  4.) printed onto a graphic label then applied to a plain (no graphics) package

*Imprinting/labeling product identification directly onto a package is acceptable when:

- The part is specified to be unit packaged and the unit package has all appropriate General Motors graphics, including the address line and the bar code meets quality standards.
- The size and type used must conform to the “Label Design Element Standards” within these Guidelines. Unless otherwise specified by individual special packaging instruction or material specification.

Note: The product identification is to be located onto the package front end panel, see illustrations. If front end panel is too small to accommodate label, place label on non-graphic area or an adjacent side panel of the package. Do NOT imprint or label over any graphics.

Imprinting/Labeling with Limited Space onto a Package

- Product identification format/point size to be adjusted according to package material width and height. Minimum point size is 8 point. If using a point size below 8, contact GMSPO Packaging Engineering.
- Product name and group number can be omitted from the end panel when there is insufficient space.

ACDelco Example

```
12345 05069  LC 42
ACD# AB123  CG1234/D.O.T.
GM# 12345678  MADE IN (COUNTRY)
QTY. 1
```

GM Example

```
GM#12345678  12345 05117
1234 1234/D.O.T.
GM# 12345678  MADE IN (COUNTRY)
QTY. 1
```
Imprinting/Labeling with Limited Space onto a Package (Continued)

- Country of Origin and D.O.T. (when required) to be shown on the bottom or side panel when space does not permit on the front end panel. See example below.
- Bar codes may be placed on adjoining panels when space is limited.
- In all cases, maintain the basic arrangement and size relationship as shown in the “Label Design Element Standards” of this manual. Part name may be omitted if the name cannot fit in three languages.

Imprinting/Labeling ACDelco Graphic Cartons

Cartons that do not contain trilingual part name

**Note:** ACDelco packages that do not contain the trilingual part name needs to contain the product ID layout of the “Label Design Element Standards” of this manual.

If space does not permit to print trilingual part name do not print name at all.

![ACDelco Example](image)

Cartons with preprinted trilingual part name

**Note:** Packages that do contain the trilingual part name only need to have the ACD#, GM#, and barcode printed/labeled onto the package.

![GM Example](image)

Barcode can be placed on end flap or back panel.

Product ID layout to conform to the Design Element Standards of this Manual.

Barcode can be placed on the end flap or back panel.
Imprinting/Labeling GM Graphic Cartons

Product ID layout to conform to the "Design Element Standards" of this Manual.

If space does not permit to print trilingual part name do not print name at all.

Code 3 of 9 can be placed on end flap or back panel.
Polybags

Acceptable types:

- Graphics roll stock + imprinted product id or label
- Graphics autobags + imprinted product id or label
- Graphics individual bags + imprinted product id or label
- Plain roll stock + service parts label
- Plain autobags + service parts label
- Plain individual bags + service parts label
- Plain zip lock bags + service parts label
  * Note: zip lock bags not acceptable for multiple kits and for merchandise quantity parts, etc. 5 /bag,10/bag.
- Plain poly tubing + service parts label
  - Plain means clear with no other logos or printing

Closure:

- All bags must be closed
- Acceptable closure may consist of;
  - Heat seal (preferred)
  - Poly tubing should be heat sealed on at least one end (both ends preferred)
  - Staple
  - Fold over bag and use tape to close (must be clear)
  - Fold over bag and use the label to close (barcode must be able to scan, see the “Barcode” section for quality of the barcode)
  - Zip lock (* see note above)

Product identification:

- Must comply with product identification standards
- Must comply with the label and graphics/brand specified

Bags used in kits:

- Polybags used in within kits (subpacks) can be plain or with graphics (consistent with the graphics on merchandising package) and no product identification.

  Optionally, subpacks can be printed with a correct GM part number only.
Auto Bags Imprinting Layout

Product ID layout to conform to the “Design Element Standards” of this Manual.

Imprinting Layout Detail

Product ID layout to conform to the “Design Element Standards” of this Manual. Bar Codes can be placed horizontally or vertically.
Films/Cohesive Paper Imprinting Layout

Imprinting Layout Detail

Product ID layout to conform to the “Design Element Standards” of this Manual.

Bar codes can be placed horizontally or vertically, and either in front or back of the ID layout.
GM 1724 information

To access 1724 label information via the internet perform the following steps:

1.) Log into www.gmsupplypower.com
2.) Click on “Material” in the Document Center
3.) Click on the “Labels” folder on the left side
4.) Click on the “North America” folder
5.) Click in the middle of the page on the “GM 1724 Shipping Parts Identification Label Standard”
6.) Click the appropriate link to take you to the 1724A, 1724B or 1724C labels

Questions and Answers for the GM 1724 Label

1.) Q: Do I need to use these labels?
   A: YES! This is an integral part of the standard.

2.) Q: Who can supply software that will print the PDF417 2D barcode?
   A: GM cannot recommend specific suppliers, however, Easy Label, Loftware and Label View all are capable to print compliant labels.

3.) Q: Is the REV Date required?
   A: REV Date is the part print revision date. This data is not used or necessary for GMSPO.

4.) Q: I do not receive certain data from GMSPO. What do I do?
   A: The following data is not transmitted by GMSPO and not necessary to print on the labels:
   • Material Handling Code
   • Reference sub-block #1
   • Optional special symbol
   • In reference sub-block #2 the container type will not be submitted

5.) Q: How are dock codes transmitted?
   A: For GMSPO warehoused material, the SPO EDIFACT DELFOR LOC+11 segment will be populated with a numeric character > 0 when the dock is assigned at the SPO destination. When no dock code is assigned by GMSPO, suppliers may leave the dock code segment of the GM1724 label/ barcode blank.

6.) Q: Does the weight have to be in kilograms?
   A: Yes

7.) Q: What is the difference between GM 1724-A, GM 1724-B and GM 1724-C labels?
   A: GM 1724-A This label is used on distribution containers. If you are placing shipping cartons or distribution packs on a pallet then a GM 1724-A should be on adjacent or opposite corners of each carton.
Note: For both ACDelco and GM parts use the label that appears on the specification (e.g. 1216, 0A045038, etc.) and you do not need to use the 1724-A). It is permissible to put both the specified label and the 1724-A label on distribution packages. However, the preferred method is to use the specified label only.

For single packs (unitizing packages), the 1724-A is not to be used, only the label specified on the packaging specification (e.g. 1216, 0A045038, etc.) is to be applied.

A: GM 1724-B This label is used to identify a pallet load when all the parts on the pallet are the same. GM refers to this as the Master Label. This label identifies the quantity of shipping containers (distribution packs) on a pallet as well as total pieces on the pallet.

A: GM 1724-C This label is used to identify a pallet of mixed parts (more than one part number on a pallet).

8.) Q: What do I do when GMSPO orders less than standard pack quantities?
A: For the 1724 B and C labels, add “NON STD PK” verbiage when orders are less than standard pack, see layout example below.

1724-B Layout

1724-C Layout

"NON STD PK" verbiage

"NON STD PK" verbiage
“Ship From” Address on the 1724 Label

IMPORTANT: For ship direct product, do NOT put your supplier’s name in the “FROM:” box on the 1724 labels. In place of your supplier name, put “GMSPO” for the name, however put all other appropriate information in this area (your address, country of origin).

Do NOT put suppliers phone number in the FROM box.

Example of Ship Direct Shipments directly to a customer.

FROM: BOX
FROM: GMSPO
123ABC STREET
ANYWHERE, USA 123456
EMAIL ADDRESS (OPTIONAL)
ASSEMBLED IN USA

Example of LTL and TL Shipments to a GM Facility.

FROM: BOX
FROM: SUPPLIER NAME
123ABC STREET
ANYWHERE, USA 123456
EMAIL ADDRESS (OPTIONAL)
ASSEMBLED IN USA
This is an example of a GM 1724-A label.
Note: If a graphic label (ie. 1216, 0a045038) is specified on a distribution pack then you do not need to use the 1724-A label. You would use the 1724-A label on overpacks.

The UCC-14 barcode (I 2 of 5) is below the GM 1724-A that may be required for ACDelco product. The code 39 is required for GM product.

This example shows the location of the GM 1724-A labels on distribution containers. Place two GM 1724-A labels on adjacent or opposite sides of the distribution container.
It also shows the UCC-14 barcode (I 2 of 5) that may be required for ACDelco parts, use code 39 for GM parts. Place the minimum of one UCC-14 barcode on the length side of the carton.
Note: The UCC-14 or code 39 barcode can be preprinted directly onto the distribution containers.
This is an example of a GM1724-B label. The example also shows a UCC-14 barcode (I 2 of 5) below the GM 1724-B that may be required for ACDelco product. The UCC-14 barcode is not required for GM product.

Note: When UPC bar codes are specified for pallet loads on source unitized material and the pallet loads are full pallet loads of the same GM part number (not partial), then a UPC shipping container code UCC-14 (I 2 of 5) is required. Do not put UCC pallet barcode on pallet on partial loads.

This example shows the location of the GM 1724-B labels used on unit loads. Place two GM 1724-B labels on adjacent or opposite side panels. If using stretch wrap, affix the labels to the outside of the wrap. It also shows the UCC-14 that may be required for ACDelco product.

Note: The UCC-14 for a pallet load will have a different number system character (first digit in the bar code series) than the distribution pack. The check digit will also differ.
Unitizing For GMSPO Mixed Loads
GM 1724-C Label
Shipping/Parts Identification Label

This is an example of a GM 1724-C label.

This example shows the location of the GM 1724-C labels used on mixed loads. Place two GM 1724-C labels on adjacent or opposite side panels. If using stretch wrap, affix the labels to the outside of the wrap.
Kanban Labels-SPO Springhill

These specifications provide guidelines for printing Saturn Service Parts Operations Bar Coded Pull (Kanban) Shipping Labels. These labels shall be affixed to any shipping cartons sent to Saturn or the retailer.

This Saturn Standard was developed in conjunction with and is an extraction of the GM 1724 Shipping/Parts Identification Label Standard (AIAG B -10), developed by the Automotive Industry Action Group (AIAG).

It is the responsibility of the supplier to provide bar coded labels that meet these specifications. Suppliers are encouraged to obtain equipment to verify that bar coded symbols meet these requirements. Use of statistical process control techniques to minimize printing variability is recommended.

The print contrast ratio (PCR) shall be a minimum of 75%.

The information needed to produce the Pull (Kanban) Shipping Label is found in the PCI Segments of the Saturn EDIFACT DELJIT (Delivery Just In Time Message). NOTE: The information in the PCI Segments is not constant and is subject to change without notice. The B-10 Pull (Kanban) label shall be printed with the exact information transmitted in the Saturn EDIFACT DELJIT (Delivery Just In Time Message) for that particular Kanban Plan Code and Serial Number.

Any deviation from these guidelines must be documented and submitted to SPO Springhill Inventory Control for submission of approval.

Label Media Requirements

Specific Criteria for the labels:

- The label dimensions are a nominal 4” high by 6” wide.
- Labels shall be printed with black characters on white background (neither colored paper nor colored ink is allowed).
- Label and bar code measurements are set in accordance with AIAG B-10 Label standards. Reference the AIAG B-10 Label Guidelines for specific information.
- Font style is Sans Serif.
- Labels must be verified as legible by the supplier per B10 and QS9000 standards (note: bar codes must be easy to scan).
- Two copies of the label shall be affixed to the container as agreed upon by Saturn and the supplier. Deviations are at the discretion of the specific Saturn customer. Contact the appropriate Saturn Materials or Service Parts contact for authorization.

Saturn Service Parts suppliers can use the pressure sensitive, removable, peel and stick type or ten point card stock type label material for printing Pull (Kanban) Labels. Service Part labels must be applied directly to the appropriate container surfaces.
SPO Spring Hill Warehouse B10 Pull (Kanban) Label Example
(For supplier shipments to SPO Spring Hill Warehouse, Spring Hill, TN)

SPO Spring Hill’s shipping labels (Kanban/B-10) are different from GM’s shipping labels (GM-1724). Each overpack/pallet load requires two kanban labels placed on adjacent sides. Questions regarding kanban labels can be addressed through Covisint at 313-227-3342.

**Label Purpose/Use:** Customer Segment of a B-10 Label to be used on a single container holding one or more parts with a single part number.

**NOTE:** Illustration is NOT actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Version 01.00, 5/95
Plate Codes General Information

Note: Plate code requirements, where applicable, are indicated on the respective corrugated carton Material Specification Form.

The following plate codes are shown on the following four pages:

ACDelco Codes
GM Codes (2 pages)
Universal Codes

All dimensions are in inches

Master dies for all plates shown are held at:

Container Graphics
305 Ryder Road
P.O. Box 3474
Ste. C
Toledo, OH 43607
(419) 531-5133
www.containergraphics.com

Cosco Graphics
1723 Canton Avenue
P.O. Box 836
Toledo, Ohio 43697
(419) 243-4221

Mark-Maker Company, Inc.
4157 Stafford Ave., S.W.
Wyoming, Michigan 49548
(616) 538-6980
www.mark-makerco.com

Dynamic Dies
1705 Commerce Road
Holland, OH 43538
(419) 865-0249
## ACDelco Plate Codes

<table>
<thead>
<tr>
<th>PLATE CODE</th>
<th>PLATE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACD-1</td>
<td>3(\frac{1}{8}) x (\frac{5}{8})</td>
</tr>
<tr>
<td>ACD-2</td>
<td>6(\frac{5}{16}) x 1(\frac{7}{16})</td>
</tr>
<tr>
<td>ACD-3</td>
<td>1 x (\frac{3}{16})</td>
</tr>
</tbody>
</table>

## Plate Code

<table>
<thead>
<tr>
<th>PLATE CODE</th>
<th>PLATE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACDJ-1/4</td>
<td>1(\frac{7}{16}) x (\frac{5}{16})</td>
</tr>
</tbody>
</table>
GM Plate Codes

**PLATE CODE** | **PLATE SIZE**
--- | ---
RSV 5 | 15½ x 17

**PLATE CODE** | **PLATE SIZE**
--- | ---
RSV 8 | 24½ x 14

**PLATE CODE** | **PLATE SIZE**
--- | ---
RSH 5 | 25¼ x 6½
### GM Plate Codes

#### Genuine

<table>
<thead>
<tr>
<th>PLATE CODE</th>
<th>PLATE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG1</td>
<td>5(\frac{3}{16}) x 15 (\frac{1}{2})</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLATE CODE</th>
<th>PLATE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>F 1</td>
<td>1 x 1</td>
</tr>
<tr>
<td>F 2</td>
<td>2 x 2</td>
</tr>
<tr>
<td>F 3</td>
<td>3 x 3</td>
</tr>
<tr>
<td>F 4</td>
<td>4 x 4</td>
</tr>
<tr>
<td>F 5</td>
<td>5 x 5</td>
</tr>
<tr>
<td>F 6</td>
<td>6 x 6</td>
</tr>
<tr>
<td>F 7</td>
<td>7 x 7</td>
</tr>
<tr>
<td>F 8</td>
<td>8 x 8</td>
</tr>
</tbody>
</table>
### Universal Plate Codes

<table>
<thead>
<tr>
<th>PLATE CODE</th>
<th>PLATE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYM1-4</td>
<td>4&quot; x 1-1/2&quot;</td>
</tr>
<tr>
<td>SYM2-4</td>
<td>4&quot; x 2&quot;</td>
</tr>
<tr>
<td>SYM9-4</td>
<td>4&quot; x 4&quot;</td>
</tr>
<tr>
<td>SYM13-4</td>
<td>4&quot; x 4&quot;</td>
</tr>
<tr>
<td>SYM29-4</td>
<td>4&quot; x 4&quot;</td>
</tr>
</tbody>
</table>

- **Fragile**: Do not drop!
- **Up Arrows**: Do not double stack!
- **Do not cartwheel**: Do not cartwheel!
Additional Plate Codes

STORE THIS SIDE UP

CE CÔTÉ VERS LE HAUT

ALMACENAR CON ESTE LADO HACIA ARriba

<table>
<thead>
<tr>
<th>PLATE CODE</th>
<th>PLATE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSUP</td>
<td>. . . . . . . . . . 3 x 3</td>
</tr>
</tbody>
</table>

This package has passed all FedEx standard testing procedures.

Ce paquet respecte toutes les procédures standard de vérification de FedEx.

Este paquete pasó todos los procedimientos de prueba estándar de FedEx.
Corrugated Container Closure

Requirements

General Information for all Closures
- These general requirements apply to merchandising and distribution containers both for source and in-house processed items.
- These requirements are to be followed for closure material and closure instructions specified for an individual part.
- Boxmaker’s certificate must be visible after closure method is applied.
- For individual parts that have a closure material specified, and no application instructions, these requirements are to be followed for application.
- Any and all deviations from the specifications or requirements must be approved by written authorization issued by the Package Engineering Department prior to processing.
  The Packaging Action Authorization number must appear as part of the load identification.

- In absence of a specified closure code for cartons, the closure must be capable of containing the part within the carton.

Staples

General Information
- Staples shall have a Rockwell hardness of no less than B-90 and comply with individual GMSPO Staple Specifications selected for the application.
- They must be spaced not more than five inches apart along either the center seam or the closure edge as applicable.
- There shall be a minimum of one quarter inch of board showing between the staple and the closure edge.
- Staples used must clinch the inner flap, which means that they must be driven through two thicknesses of corrugated board and clinched on underside.

Minimum staple leg length must be determined from the following formula:

\[
B + \frac{A}{2} = \text{Leg Length}
\]

\[
A = \text{Crown Width}
\]

\[
B = \text{Two thickness of box}
\]

Both legs shall be properly clinched as shown.

End Loading

5” Max. Typ.

Top Loading

5” Max. Typ.

Full Overlap Boxes (FOL)
- Staples shall be parallel to, and not more than one inch from the edge.
- Staples shall be used on ends whose widths are eight inches and over, following the same guidelines for spacing between staples.
- Staples shall extend the entire length of the seam and must be within one inch of each end.
- Box width < 5” require one staple centered along the closure.
Regular Slotted Container (RSC)
- Staples shall be used in pairs with one on each side of center seam, but need only be used in an area where outside flaps overlap inner flaps. Also, they shall be used along outer edge when width is eight inches or greater, as shown in the diagram.

Two Panel Folders (TPF)
- Placement of staples in the folder should be parallel to the three open edges and not more than one inch in from the edge.
- Staples shall be GMSPO #1314, #1315, or #1316, selected by leg length as described above.
- Do not staple in the part.

Five Panel Folders (FPF)
- Placement of staples on long flap are to be in accordance with Full Overlap (FOL) guidelines, and on the end flaps there shall be a minimum of one staple.

Hot Melt Adhesives

General Information
- Glue strips must be applied as shown in the sketches below and extend along their length to fit within one-half inch of the end of the applied flap.
- Glue strips are to be not less than one-quarter inch wide after compression.
- If the box style or size requires alternate patterns, then the adhesive must cover and securely bond not less than 25% of the flap contact area with bonded areas extending to within one-half inch or less of edges or center seam.
- The acceptable closure with hot melt is when the liner paper at glue application will tear when stripped open (50% or more of total area of each glue line).

Full Overlap Boxes (FOL)
- There shall be a minimum of two intermittent strips which are located a minimum of one inch, and a maximum of two inches apart.
- Strips shall be about three inches in length approximately a one inch gap between them or cover approximately 75%.
- The outermost strip shall be a minimum of one-quarter inch and a maximum of three-fourths inch from the outer edge.
Regular Slotted Container (RSC)
• There shall be a minimum of four strips with two on each side of the center line.
• The combined glue strip length(s) shall be a minimum of 75% of total inner flap length.
• The strips shall be a minimum of one inch and a maximum of two inches apart, with the innermost strips being one-half inch maximum from each side of the center seam.

Tape

General Information
• Reinforced tape color shall be clear or match the corrugated color of the outer facing.
• Tape shall be 2” or 50mm wide for clear tape meetings specification #1313 (0A040056) or 3” wide meeting specification #1278 or #1279, bi-directional reinforced paper tape.
• A clear plastic tape meeting specification #1313 (0A040056) is preferred. Paper based tapes meeting specification #1278 or #1279 are allowed. Asphaltic, non-recyclable tapes are not allowed.
• No closure tape shall cover any part of any GM logo or product identification label.

Full Overlap Boxes (FOL)
• Tape shall extend the full length of the flap edge (on two edges as shown in diagram).

Regular Slotted Container (RSC)
• Tape shall extend over ends not less than two and one-half inches (in four places as shown in diagram).

Five Panel Folder (FPF)
• Tape shall extend the full length of the three flaps.
L-CLIP

General Information

- L-Clip closures are strips of pressure sensitive strapping tape running perpendicular to the edge of a container to secure the container flaps. The length of the tape is divided evenly on adjacent panels.
- Strapping tape properties shall be in conformance with specification 0A039446 as shown on 0A010114.
- Tape width shall be minimum 1/2 inch. Length of strips shall be four to five inches.
- No tape shall cover any part of any GM Logo or Product ID Labels.

Full Overlap Boxes (FOL)

<table>
<thead>
<tr>
<th>Size</th>
<th>Edge Space</th>
<th>Min.# Clips</th>
<th>L-Clip Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box length less than or equal to 6&quot;</td>
<td>¼&quot; - ½&quot;</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Box length greater than equal to 6&quot;</td>
<td>¼&quot; - 1&quot;</td>
<td>2</td>
<td>5” Max.</td>
</tr>
<tr>
<td>Box width less than or equal to 8&quot;</td>
<td>N/A</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Box width greater than 8&quot;</td>
<td>5” Max.</td>
<td>1 (centered)</td>
<td>5” Max.</td>
</tr>
</tbody>
</table>

Five Panel Folder (FPF)

<table>
<thead>
<tr>
<th>Size</th>
<th>Edge Space</th>
<th>Min.# Clips</th>
<th>L-Clip Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box length All</td>
<td>¼&quot; - 1&quot;</td>
<td>2</td>
<td>8” Max.</td>
</tr>
<tr>
<td>Box width less than or equal to 6&quot;</td>
<td>¼&quot; - ½&quot;</td>
<td>2</td>
<td>5” Max.</td>
</tr>
<tr>
<td>Box width greater than 6&quot;</td>
<td>¼&quot; - 1&quot;</td>
<td>2</td>
<td>5” Max.</td>
</tr>
</tbody>
</table>

Stitching

Other than Metal Stitches

General

- Stitching for closure has limited applications in several flat glass folders and some off-shore vehicle parts.
- For specific approval contact the Package Engineering Department.
- **Note:** Wire stitching shall comply with the staple closure section.

Banding

General

- **NOTE:** For SPO Spring Hill metal banding to secure pallet loads is prohibited.
- Banding as a closure is only used when specified on an individual part.
- Cartons shall not be handled by the bands.
- Plastic banding must be either polyester or polypropylene.
## Closure Code Specification

<table>
<thead>
<tr>
<th>constant</th>
<th>stapler type</th>
<th>band option</th>
<th>glue option</th>
<th>tape option</th>
<th>band option</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – None</td>
<td>0 – None</td>
<td>0 – None</td>
<td>0 – None</td>
<td>0 – None</td>
<td>Number of Lengthwise Bands</td>
</tr>
<tr>
<td>1 – Clinch Stapler</td>
<td>1 – None</td>
<td>1 – None</td>
<td>2 – #1307</td>
<td>3 – #1278,#1279, #1313 or L-clip #1225</td>
<td></td>
</tr>
<tr>
<td>2 – Stapling Plier</td>
<td>2 – 3/8” (#1222 steel) or 7/16” (#1339 Polyester)</td>
<td>2 – 3/8” (#1320 Polyester)</td>
<td>4 – 3/8” (#9575 Polypropylene)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Staple Option

<table>
<thead>
<tr>
<th>leg length</th>
<th>staple type</th>
<th>spec</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 1/4”</td>
<td>2</td>
<td>9628</td>
</tr>
<tr>
<td>2 – 3/8”</td>
<td>2</td>
<td>1314</td>
</tr>
<tr>
<td>3 – 1/2”</td>
<td>2</td>
<td>1315</td>
</tr>
<tr>
<td>4 – 9/16”</td>
<td>2</td>
<td>1292</td>
</tr>
<tr>
<td>5 – 5/8”</td>
<td>1</td>
<td>1286</td>
</tr>
<tr>
<td>6 – 3/4”</td>
<td>1</td>
<td>1300</td>
</tr>
<tr>
<td>7 – 7/8”</td>
<td>1</td>
<td>9639</td>
</tr>
<tr>
<td>8 – 1-1/4”</td>
<td>1</td>
<td>1338</td>
</tr>
</tbody>
</table>

Note: GMSPO corrugated container requirements are to be followed for closure application as detailed in this unless excepted by Special Packaging Instruction and/or individual specifications.
Palletization Requirements

Palletization of material is a requirement for General Motors Service Parts Operations. This applies to bulk material, packaged (source unitized) material and packaged ship-direct material.

Design Performance Requirements

Pallet and shipping container performance is the responsibility of the supplier. 

NOTE: For SPO Spring Hill all parts must be shipped in expendable packaging (ie, pallets, pallet boxes, overpacks). SPO Springhill does not allow parts to be shipped in rack, baskets, plastic totes or other returnable containers.

In all cases, the pallet and shipping container must:

1. For bulk material: deliver damage - free product with full pallet and container integrity to the GMSPO receiving point.
2. For source packaged material: deliver damage - free product with full pallet and container integrity to the GMSPO receiving point and GMSPO customer.
3. To facilitate the recycling of used, expendable packaging, PALLET CARTONS FASTENED TO THE PALLET MUST BE CONSTRUCTED WITH A “BREAKAWAY” FEATURE OR OTHER METHOD TO ALLOW EASY SEPARATION FROM THE SHIPPING PALLET. The above concept involves simple die-cut areas (generally "U-shaped") perforated properly and spaced along the lower flanges with the open end of the “U” facing the center of the pallet. All pallet cartons must be secured to the pallet using staples. The corrugated-to-pallet staples are placed within these areas. Four hand openings, die-cut flaps in the sleeve, one per side, allow for lifting the sleeve from the pallet when disassembly is required. Printing on two panels is required to identify this feature. Two inch high bold type, for example states “breakaway”, “fast break”, “E-Z Pop”, etc.

Pallet Specifications- Style / Weight / Size

All wood pallets and other packaging material comprised of wood must conform with the International Standards For Phytosanitary Measures No. 15 (ISPM #15), Guidelines For Regulating Wood Packaging Material In International Trade. More information can be found at www.ippc.int or www.nappo.org.

- Use only four-way entry, double-face, non-reversible pallet with 2 1/2" x 9" minimum fork entry openings on 27" centers on each stringer. (Note: Due to size restrictions, smaller size pallets, ie. 32" X 30" may only be two way entry.)
- Winged pallets are not acceptable. Refer to GMSPO Packaging Material Specification No. 0A044898.
- No overhang of product material is allowed.
- Pallet loads must not exceed 3000 pounds. Note: For SPO Canada, pallet loads cannot exceed 1650 pounds (except for batteries).
- Pallet loads less than 500 pounds are acceptable on a corrugated pallet, however these must meet pallet specifications and design performance requirements. Corrugated pallets are NOT recommended for ship-direct shipments.
- The pallet dimensions below are to be used for all shipments made to all GM Service Parts Operations locations.

<table>
<thead>
<tr>
<th>Source Unitized Material</th>
<th>Required Footprint</th>
<th>Import Length</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length</td>
<td>Width</td>
<td>Height</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48&quot;</td>
<td>40&quot;</td>
<td>45&quot;</td>
<td></td>
</tr>
</tbody>
</table>

* Maximum pallet load height + NOTE: For SPO Spring Hill, maximum pallet load height is 38".

<table>
<thead>
<tr>
<th>Imported Source Unitized Material</th>
<th>Optional Footprint</th>
<th>Import Length</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length</td>
<td>Width</td>
<td>Height</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200mm</td>
<td>1140mm</td>
<td>1143mm*</td>
<td></td>
</tr>
</tbody>
</table>
A larger pallet size is permissible only if the part size is greater than the pallet dimensions noted on the previous page. For oversize pallets, if the pallet length is 120” or less, the pallet stringers must be the width (shortest side dimension) of the pallet. If the pallet length is greater than 120”, the pallet stringers must be the length (longest side dimension) of the pallet.

For SPO Spring Hill, the maximum height limit for oversize pallets (pallets >48”) is 64” with one exception. If the individual box height is >30”, the maximum pallet height is 80”. This allows boxed parts such as fascias, fenders and quarter panels to be double stacked on a pallet.

Note: For GMSPO, fascias may be stacked up to 80” high per the packaging specification for the individual part. Cartons CANNOT be stacked on smallest end.

Construction of oversized pallets. If the pallet is >48” in length and also >40” in width, then a minimum of 5/8” actual nominal of a 1” x 4” nominal top boards must be used. No more than seven inches between top boards, minimum of four bottom boards.

Load Arrangements

1. Directional arrows must be followed when cartons are stacked for shipment.

2. Loads stacked must use materials of sufficient strength to double stack similar product to a height of 10 feet when received at GMSPO “Receiving Point” and/or customer. This means if palletized loads are stacked, they must withstand double stacking up to 10 feet high. The pallet must be reinforced with vertical supports at four corners if the shipping container will not support the load when loads are double stacked. Vertical corner supports shall be constructed of solid fiberboard (minimum .2” thickness) or wood and must run the full vertical length of the load. No placards, labels etc. to be used indicating do not double stack.

3. The top surface of the load must be parallel to the pallet base.

4. The load must be secured to the pallet with stretch-wrap, strapping, or both. If using pallet boxes, the lid must be properly secured (ie. stretch wrap, banding, etc.).

5. Loads secured to pallets using shrink or stretch-wrap must use material of sufficient thickness to retain the load and to prevent load shift. Use a minimum of 70-gauge (.0007 inch) stretch wrapping. The stretch wrap can be twisted like rope for greater strength, but only in combination with full stretch wrapping of the load. Securely capture the pallet when wrapping the bottom layer. Wrap the entire pallet load (pallet + product) from top to bottom a minimum of three times, heavier loads may require more. DO NOT ONLY WRAP THE CARTONS.

6. If using stretch-wrap, DO NOT wrap two pallets, racks, pallet boxes together. These units need to handled on a one load each basis.

7. Shrink or stretch material shall allow for labels to be read via bar code scanners. Refer to the Product Identification Section in the GMSPO Packaging Standards and Guidelines manual.
8. Loads secured to pallets with strapping must use edge protectors to prevent straps from cutting into cartons. Draw the strapping tight and keep the strapping as close to the load as possible to avoid strapping damage or breakage. This may require running the strapping between deck boards rather than the edge of the pallet.

9. Interlocking of lightweight cartons is acceptable. However, interlocking of heavy (>25 lbs.) unit packages should be avoided to eliminate container wall crushing. When column stacking is used, layer pads should also be used to eliminate column toppling.

10. A liner sheet must be placed on the top deck of a pallet to prevent small product from coming through top deck boards.

11. When shipping small parts or graphic cartons that are double stacked, a liner sheet must be placed on top layer to prevent damage.

NOTE: For SPO Spring Hill a single wall corrugated liner (slip) sheet is required for pallets >48" X 45", if the individual part weight is >20 pounds. This liner sheet acts as a friction reducer when picking heavy, oversized parts.

12. Product weight should be distributed evenly over the pallet surface.

13. Pallet boxes may be used in place of stretch-wrap or strapping. Refer to the Design Performance Requirements section.

14. When using shipping baskets (ie. 5131, 6154), baskets must be lined if contained material can poke through the sides of the basket.

15. Do not stack cartons laying down if greater than 68", stack only standing up unless approved by GMSPO Pkg Engineering.

Mixed Loads

1. All parts should be shipped in full pallet loads. However, if quantity is not sufficient for one pallet load, more than one part number may be contained in the pallet load. Refer to “Palletizing for GMSPO-GM 1724-C". If shipping to SPO Spring Hill the load must be marked “Mixed Load” on at least two sides of the pallet load.

2. Part numbers are not to be on more than one pallet load or fragmented when quantity is sufficient to make a full pallet load.

3. Individual cartons must be used to segregate each part number if more than one part number is contained in the pallet load.

4. Each container must be identified with part number and quantity. Refer to: Pallet and Shipping Container Identification in this section and/or the “Distribution Containers GM 1724-A" section.

5. Oversized pallets are only permissible for mixed loads if all the part numbers on the pallet require the larger pallet. Parts that will fit on a standard pallet (48" X 40") can not be mixed on an oversized pallet.

6. Part numbers are to be palletized according to the quantity of cartons they are contained in. The largest quantity of cartons containing a single part number will be at the bottom of the pallet load. Subsequent cartons will be stacked in a manner such that the smallest quantity of cartons will be at the top of the pallet load. Part weight, load stability, and carton integrity must be taken into consideration when palletizing (i.e. do not stack excessively heavy parts on top of lighter parts, etc.).

7. If shipping mixed loads, the top layer may not be fully parallel to the base, however the pallet must be able to be double stacked.
Requirements For Overpack Containers

1. Bags, drums, barrels, bales, cans, pails, or wooden kegs are not acceptable shipping containers for other than granular or liquid materials.

2. Manually handled overpacks (both palletized and unpalletized) must meet the following requirements:
   - Minimum of 200 # burst test (32ECT optional)
   - Stitched or glued manufacturers joint.
   - Individual overpacks (unless weight of individual part is over 40 pounds) must not exceed 40 pounds total weight (weight of the part + package).
   - Box maker’s certificate and recyclable symbol must be printed on bottom of the carton, unless approved by GMSPO Packaging Engineering. The certificate must be visible on outside of the carton.

3. Large corrugated pallet packs must meet the following requirements:
   - Stitched manufacturers joint.
   - Use corner posts made of corrugated or solid fiber to give additional stacking strength unless load is self supporting.

4. Refer to the GMSPO Overpack Guidelines for requirements on handling ship direct less than pallet load shipments and for packages that require overpacking. Log onto www.gmsupplypower.com for the latest edition of the GMSPO Overpack Guidelines manual.

5. Do not use loose fill packaging (foam peanuts, shredded paper, etc.).

Additional Minimum Requirements For Unitized Ship Direct Shipments

1. Overpack guidelines must be followed when shipments are less than pallet load. Refer to the GMSPO Overpack Guidelines for Ship Direct parts at www.gmsupplypower.com for requirements.

2. Pallet loads that contain product with full graphic printed cartons must be able to double stack similar product to a height of 10 feet when received at the customer. If this requirement cannot be met, the load arrangement must include vertical corner supports, minimum C-flute corrugated tray top of sufficient size to completely cover the top surface of the pallet load, and sufficient amounts of shrink or stretch film. Vertical corner supports should be of .200” minimum thickness and 2-1/2” x 2-1/2” in size and must run the full vertical length of the load. When applying shrink or stretch film, wrap the entire pallet load, (pallet + product) from top to bottom a minimum of three times, heavier loads may require more. DO NOT ONLY WRAP THE CARTONS.

Additional Requirements for Shipping to GMSPO Processing Centers and Parts Distribution Centers

LTL vs. Small Carrier Shipments
If each parcel is 40 pounds or less, the supplier must first consider shipping small parcel carrier before shipping LTL. To maximize pallet space, GMSPO requires the total package area to occupy at least 75% of the standard 48” x 40” pallet footprint. The exception would be if a single unit piece is greater than 40 pounds.

The intent is to reduce the amount of pallet load handling by utilizing small parcel carriers.
Pallet And Shipping Container Identification

1. All shipping containers which contain material that is a dangerous article as described in Department of Transportation Regulations for Transportation of Hazardous Materials must have the prescribed special label conspicuously applied on the same panel to which the shipping label is applied.

2. All incoming material must be identified with an identification label affixed either on each of two adjacent side panels, or on opposite sides of each shipping container or product load. When using steel returnable baskets, one label must be placed on the gate opening side. When using pallets, one label must be placed on a fork entry side (side with full stringer height opening, not the notched stringer side). If banding loads, put one layer of stretch wrap around top of the pallet load and then affix the appropriate 1724 labels.

The label must meet the Shipping/Parts Identification Label Standard GM 1724-B or GM 1724-C; Reference AIAG-B-14. [See “Palletizing for GMSPO”, GM 1724-B & GM 1724-C]. If using plastic stretch wrap, the labels need to be affixed to the outside of the wrap.

3. When UPC bar codes are specified for pallet loads on source unitized material and the pallet loads are full pallet loads (not partial), then a UPC Shipping Container Code UCC-14 (Interleave 2 of 5) is required. The requirement for the interleave 2 of 5 will be specified on the http://gm.gmpkg.com website. The location for this bar code can be near (immediately to the right, left or below) the required pallet identification label, GM 1724-B.
BULK SECTION
SUPPLYING PARTS TO GMSPO: BULK

General Information:

Definition of Bulk parts:

**Bulk** - not packaged to GMSPO unitizing packaging specifications. GMSPO does not design bulk shipping specifications for each part. It is the supplier’s responsibility to ship these parts to GMSPO, meeting the requirements stated in this bulk section, in a damage-free condition.

If supplier using packaging to protect parts in shipment, supplier’s graphics are not acceptable unless specified. Parts that are comprised of two or more pieces (and is not a kit) must be assembled, attached, combined or put together to form one single unit.

Accessing the GMSPO Packaging Website

Log into www.gmsupplypower.com to access the website.
You will need to register if not already registered.

1.) Log into GMSupplyPower

2.) In the Document section select “Material”

3.) Select the folder “Service Parts Operations (SPO)”

4.) Select the folder “North America”

5.) Select the folder “GMSPO Packaging Engineering”

6.) You will be able to select one of six folders

   a.) GMSPO Label Suppliers
   d.) Accessories Packaging SOR

   b.) GMSPO Packaging Information
   e.) Michigan Cross Dock

   c.) Packaging Standards and Guidelines
   f.) GM Supplier Rollout-refers to Global PKG website

Supplier Standard Requirements for Returnable Containers

- The **storage space** for the GM Containers must be secure. All lost or stolen GM equipment will be replaced/re-paid by the supplier site where it was deemed to have been lost or stolen at.

- All container **scrap forms** (GM 1120) can be found at:

  http://www.gmcontainers.com/PDF/supplierforms/NLOC1120_Scrap-Recycling-Form.dot

  These must be filled out by the supplier and sent into GM NAO or GM SPO Containerization. All material that is in the scrap process should be kept at the supplier’s facility to be scrapped unless specified differently by the GM Containerization Group.

- Suppliers with **excess returnable containers** should contact SPO Containerization for disposition. Call Mike Cicalo (810-287-1367) or Gary Atchison (810-656-0707).

Supplier Standard Requirements for Expendable Packaging

- Bulk shipments, in-bound to a GM facility, from a non-allied source must be in expendable packaging unless approved by GMSPO Containerization.
Inbound Shipping Requirements for GM Aftersales Suppliers

All GM Aftersales suppliers are required to adhere to inbound shipping requirements shown on GM Supply Power in the Material Library, Service Parts Operations (SPO) folder. The following Supply Power link is provided for the SPO folder: https://www.gmsupplypower.com/apps/supplypower/NASApp/spcds/CDSRetrieval?lob=material&subnav=library&togglefolder=647. Within the Service Parts Operations (SPO) folder, suppliers will find the following requirements for inbound shipment preparation pertaining to North America Aftersales warehouse and ship direct shipments, as well as Saturn Service Parts Operations:

In the North America folder:
1) Click on the GMSPO Supplier Info subfolder to find the following:
   • Advanced Shipping Notification (ASN) Information.doc
   • Charge Back For Not Meeting North American Shipping Guidelines
   • Country of Origin Requirements Bulletin and Attachments
   • Directory – SPO Canada
   • Directory – SPO U.S.
   • EDI Overview
   • EDIFACT Help Guide
   • GM Supply Power (GMSP) Overview
   • General Ship Direct Guidelines
   • Generic Domestic Launch Timing Chart
   • Initial Order (IO) Label Letter
   • Material Release Information
   • Multi-Lingual Requirements Bulletin
   • North American Shipping Guidelines
   • Packaging Standards & Guidelines Letter (Includes Country of Origin & Overpack Labeling)
   • Purchasing Phone List
   • Readiness Overview
   • Receipt Payment Process
   • SPO Ship To Addresses
   • Service Strategy Guide
   • Ship Direct Window Shipping Requirements
   • Shipping To GMSPO Menlo Logistics Whse. Located in Mexico
   • Supplier Roles and Responsibilities
   • Transportation Requirements for Shipments from Mexico to US – Canada
   • Transportation Requirements for Shipments to US & Canada from Suppliers with FOB Mexico

2) Click on the Ship Direct Folder to find the following:
   • Packing Slip Requirements

3) Click on the SPO Ship Direct Statement of Requirements (SOR) Folder to find the following:
   • SPO NA Accessories Statement of Requirements (SOR)
   • SPO NA GM Parts / AC Delco Statement of Requirements (SOR)

4) Click on the SPO – Saturn Operations Folder for:
   • Saturn SPO Ship to Addresses
   • Saturn SPO Supplier Info Manual
   • Saturn SPO Supplier Management Manual
Coatings/Paint Codes

Coating/Paint Specifications

- To protect machined parts, exterior sheet metal and other surfaces which may corrode, certain parts require a paint coating or other surface treatment.

- The specification number is indicated in the PAINT CD field.

Valid GMSPO Paint Codes

02 : Prime paint - meets GM spec 12483006
03 : Oil coating - used for long term buys
12 : Aluminum parts - require cathodic elpo
22 : Prime paint - cathodic elpo meets GM spec 12483001
84 : Refer to part drawing

Country of Origin

Requirement

(For more information see pub. #539, www.customs.gov/xp/cgov/toolbox/publications/trade/)

Federal Law requires that foreign source items must be identified with the Country of Origin as defined in U. S. Federal Regulations-title 19 U. S. Customs Service Part 134 as revised. The identification is to be the English name of the country(ies) of origin(s) and may not be abbreviated. Products made in the United States do not have to contain the country of origin marking. It is the supplier’s responsibility to assure packages are printed with the notation “MADE IN (COUNTRY)” prior to shipment to comply with this Federal Law and GMSPO’s requirements. “ASSEMBLED IN”, “PRODUCED IN”, “PRODUCT OF” etc. are also accepted notations to appear on the packages. This notation must appear on the label and/or the part. If using a label, the country of origin must be readable.

Parts shipped in bulk must be identified with the country of origin (if not made in the U.S.A.) on each individual part unless approved by GMSPO. If the country of origin is embossed on the part, the notation “MADE IN “, “ASSEMBLED IN “, etc. does not need to precede the country of origin.

Note: This requirement may be different than the requirement to ship to production assembly plants.
GENERAL REQUIREMENTS FOR RUST FREE SHIPMENTS OF FERROUS PARTS TO GMSPO

• GMSPO requires that supplier deliver ferrous parts “rust free”

• All temporary coatings used by suppliers to assure parts remain rust free at the time of delivery to GMSPO facilities or other designated locations must be safe, easy to handle, easy to remove and dispose of easily. Coatings must not affect part appearance or function and must be environmentally friendly.

• GMSPO does not approve thick grease or wax-like coating that require strong solvents, special cleaning equipment or extra labor to remove.

• Suppliers should note that soft coating may harden with time and if not completely removed may block or affect other oils or lubricants when part is in use.

• GMSPO does not approve of high temperature, water displacing and finger print suppressing oil used in combination with vapor corrosion inhibitors and barrier type package.

• GMSPO requires that suppliers implement the following steps to reduce corrosion problems:

  > When preparing a shipment for a GMSPO order, layer parts within a plastic bag, or an enclosed box and use VCI paper or use a VCI impregnated plastic bag. Make sure bag is sealed to prevent rust.

  > Do not leave VCI materials in the open environment, either indoors or outdoors. VCI material (ex. VCI paper, VCI plastic bags) should be kept in original wrapping or equivalent during storage. This will ensure that the vapor remains in the packaging and will not volatize.

  > Keep work/storage area and parts clean.

  > Use first in, first out processing.

  > Expedite and minimize handling and shipping time.

  > Monitor quality of part and do not ship parts that exhibit corrosion.

  > Problem resolution coordination.

  > Use gloves when handling unprotected metal parts.

GMSPO requires all ferrous parts to remain rust free for three years which includes source unitized and the commodities listed below:

- Arms
- Bearings
- Brake shoes
- Bushings
- Crankshafts
- Dampers
- Drums
- Flywheels
- Stamped metal (hinges, brackets, oil pans, struts and straps)
- Frames
- Gears
- Hubs
- Levers
- Manifolds
- Pumps
- Rotors
- Shafts

Exception for sheetmetal parts: 30 days shelf life from date of shipment receipt.
GM 1724 information

To access 1724 label information via the internet perform the following steps:

1.) Log into www.gmsupplypower.com
2.) Click on “Material” in the Document Center
3.) Click on the “Labels” folder on the left side
4.) Click on the “North America” folder
5.) Click in the middle of the page on the “GM 1724 Shipping Parts Identification Label Standard”
6.) Click the appropriate link to take you to the 1724A, 1724B or 1724C labels

Questions and Answers for the GM 1724 Label

1.) Q: Do I need to use these labels?
   A: YES! This is an integral part of the standard.

2.) Q: Who can supply software that will print the PDF417 2D barcode?
   A: GM cannot recommend specific suppliers, however, Easy Label, Loftware and Label
   View all are capable to print compliant labels.

3.) Q: Is the REV Date required?
   A: REV Date is the part print revision date. This data is not used or necessary for GMSPO.

4.) Q: I do not receive certain data from GMSPO. What do I do?
   A: The following data is not transmitted by GMSPO and not necessary to print on the labels:
   • Material Handling Code
   • Reference sub-block #1
   • Optional special symbol
   • In reference sub-block #2 the container type will not be submitted

5.) Q: How are dock codes transmitted?
   A: For GMSPO warehoused material, the SPO EDIFACT DELFOR LOC+11 segment will be
   populated with a numeric character > 0 when the dock is assigned at the SPO destination.
   When no dock code is assigned by GMSPO, suppliers may leave the dock code segment
   of the GM1724 label/ barcode blank.

6.) Q: Does the weight have to be in kilograms?
   A: Yes

7.) Q: What is the difference between GM 1724-A, GM 1724-B and GM 1724-C labels?
   A: GM 1724-A This label is used on overpack containers. If you are placing overpack cartons onto
   a pallet then a GM 1724-A should be on adjacent or opposite corners of each carton.

   A: GM 1724-B This label is used to identify a pallet load when all the parts on the pallet are the same.
   GM refers to this as the Master Label. This label identifies the quantity of overpack containers
   on a pallet as well as total pieces on the pallet.

   A: GM 1724-C This label is used to identify a pallet of mixed parts (more than one part number
   on a pallet).
Unitizing For GMSPO Individual Containers
GM 1724-A Label
Shipping/Parts Identification Label

This example shows the location of the GM 1724-A labels. Place two GM 1724-A labels on adjacent or opposite sides.
GM1724-B Label
Used for a Unit Load of Same Part Number-Bulk

Shipping/Parts Identification Label

This example shows the location of the GM 1724-B labels used on unit loads. Place two GM 1724-B labels on adjacent or opposite side panels. If using stretch wrap, affix the labels to the outside of the wrap.
This example shows the location of the GM 1724-C labels used on mixed loads. Place two GM 1724-C labels on adjacent or opposite side panels. If using stretch wrap, affix the labels to the outside of the wrap.
Kanban Labels—SPO Spring Hill

These specifications provide guidelines for printing Saturn Service Parts Operations Bar Coded Pull (Kanban) Shipping Labels. These labels shall be affixed to any shipping cartons sent to Saturn or the retailer.

This Saturn Standard was developed in conjunction with and is an extraction of the GM 1724 Shipping/Parts Identification Label Standard (AIAG B-10), developed by the Automotive Industry Action Group (AIAG).

It is the responsibility of the supplier to provide bar coded labels that meet these specifications. Suppliers are encouraged to obtain equipment to verify that bar coded symbols meet these requirements. Use of statistical process control techniques to minimize printing variability is recommended.

The print contrast ratio (PCR) shall be a minimum of 75%.

The information needed to produce the Pull (Kanban) Shipping Label is found in the PCI Segments of the Saturn EDIFACT DELJIT (Delivery Just In Time Message). NOTE: The information in the PCI Segments is not constant and is subject to change without notice. The B-10 Pull (Kanban) label shall be printed with the exact information transmitted in the Saturn EDIFACT DELJIT (Delivery Just In Time Message) for that particular Kanban Plan Code and Serial Number.

Any deviation from these guidelines must be documented and submitted to SPO Springhill Inventory Control for submission of approval.

Label Media Requirements

Specific Criteria for the labels:

• The label dimensions are a nominal 4" high by 6" wide.

• Labels shall be printed with black characters on white background (neither colored paper nor colored ink is allowed).

• Label and bar code measurements are set in accordance with AIAG B-10 Label standards. Reference the AIAG B-10 Label Guidelines for specific information. AIAG B-10 Guidelines can be directly ordered by calling (248) 358-3570.

• Font style is Sans Serif.

• Labels must be verified as legible by the supplier per B10 and QS9000 standards (note: bar codes must be easy to scan).

• Two copies of the label shall be affixed to the container as agreed upon by Saturn and the supplier. Deviations are at the discretion of the specific Saturn customer. Contact the appropriate Saturn Materials or Service Parts contact for authorization.

Saturn Service Parts suppliers can use the pressure sensitive, removable, peel and stick type or ten point card stock type label material for printing Pull (Kanban) Labels. Service Part labels must be applied directly to the appropriate container surfaces.
SPO Spring Hill Warehouse B10 Pull (Kanban) Label Example
(For supplier shipments to SPO Spring Hill Warehouse, Spring Hill, TN)

SPO Spring Hill’s shipping labels (Kanban/B-10) are different from GM’s shipping labels (GM-1724). Each overpack/pallet load requires two kanban labels placed on adjacent sides. Questions regarding kanban labels can be addressed through Covisint at 313-227-3342.

**Label Purpose/Use:** Customer Segment of a B-10 Label to be used on a single container holding one or more parts with a single part number.

**Note:** Illustration is NOT actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10, Version 01.00, 5/95
Palletization Requirements

Palletization of bulk material is a requirement for General Motors Service Parts Operations.

Design Performance Requirements

Pallet and shipping container performance is the responsibility of the supplier.

NOTE: For SPO Springhill all parts must be shipped in expendable packaging (ie, pallets, pallet boxes, overpacks). SPO Springhill does not allow parts to be shipped in rack, baskets, plastic totes or other returnable containers.

In all cases, the pallet and shipping container must:

1. For bulk material: deliver damage-free product with full pallet and container integrity to the GMSPO receiving point.

2. To facilitate the recycling of used, expendable packaging, PALLET CARTONS FASTENED TO THE PALLET MUST BE CONSTRUCTED WITH A “BREAKAWAY” FEATURE OR OTHER METHOD TO ALLOW EASY SEPARATION FROM THE SHIPPING PALLET. The above concept involves simple die-cut areas (generally “U-shaped”) perforated properly and spaced along the lower flanges with the open end of the “U” facing the center of the pallet. All pallet cartons must be secured to the pallet using staples. The corrugated-to-pallet staples are placed within these areas. Four hand openings, die-cut flaps in the sleeve, one per side, allow for lifting the sleeve from the pallet when disassembly is required. Printing on two panels is required to identify this feature. Two inch high bold type, for example states “breakaway”, “fast break”, “E-Z Pop”, etc.

Pallet Specifications- Style / Weight / Size

All wood pallets and other packaging material comprised of wood must conform with the International Standards For Phytosanitary Measures No. 15 (ISPM #15), Guidelines For Regulating Wood Packaging Material In International Trade. More information can be found at www.ippc.int or www.nappo.org.

- Use only pallets with 2 1/2” x 9” minimum fork entry openings on 27” centers on each stringer. (Note: Due to size restrictions, smaller size pallets, ie. 32” X 30” may only be two way entry.)

- Winged pallets are not acceptable. Refer to GMSPO Packaging Material Specification No. 0A044898.

- No overhang of product material is allowed.

- Pallet loads must not exceed 3000 pounds. Note: For SPO Canada, pallet loads cannot exceed 1650 pounds (except for batteries).

- Pallet loads less than 500 pounds are acceptable on a corrugated pallet, however these must meet pallet specifications and design performance requirements. Corrugated pallets are NOT recommended for ship-direct shipments.

- The pallet dimensions below are to be used for all shipments made to all GM Service Parts Operations locations.

<table>
<thead>
<tr>
<th>Bulk Material (not unitized)</th>
<th>Preferred Footprints</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length</td>
</tr>
<tr>
<td></td>
<td>48”</td>
</tr>
<tr>
<td></td>
<td>48”</td>
</tr>
<tr>
<td></td>
<td>32”</td>
</tr>
<tr>
<td>1200mm</td>
<td>1140mm</td>
</tr>
</tbody>
</table>

* Maximum pallet load height
+ NOTE: For SPO Spring Hill, maximum pallet load height is 38”.

GM Service and Parts Operations
Packaging Standards and Guidelines
Rev 3/10
A larger pallet size is permissible only if the part size is greater than the pallet dimensions noted on the previous page. For oversize pallets, if the pallet length is 120” or less, the pallet stringers must be the width (shortest side dimension) of the pallet. If the pallet length is greater than 120”, the pallet stringers must be the length (longest side dimension) of the pallet.

For SPO Spring Hill, the maximum height limit for oversize pallets (pallets >48”) is 64” with one exception. If the individual box height is >30”, the maximum pallet height is 80”. This allows boxed parts such as fascias, fenders and quarter panels to be double stacked on a pallet.

Construction of oversized pallets. If the pallet is >48” in length and also >40” in width, then a minimum of 5/8” actual nominal of a 1” x 4” nominal top boards must be used. No more than seven inches between top boards, minimum of four bottom boards.

Load Arrangements

1. Directional arrows must be followed when cartons are stacked for shipment.
2. Loads stacked must use materials of sufficient strength to double stack similar product to a height of 10 feet when received at GMSPO “Receiving Point” and/or customer. This means if palletized loads are stacked, they must withstand double stacking upto 10 feet high. The pallet must be reinforced with vertical supports at four corners if the shipping container will not support the load when loads are double stacked. Vertical corner supports shall be constructed of solid fiberboard (minimum .2” thickness) or wood and must run the full vertical length of the load. No placards, labels etc. to be used indicating do not double stack.
3. The top surface of the load must be parallel to the pallet base.

   ![Pallet Overhang](image)

   DO NOT PYRAMID STACK FULL PALLET LOADS.

4. The load must be secured to the pallet with stretch-wrap, strapping, or both. If using pallet boxes, the lid must be properly secured (ie. stretch wrap, banding, etc.).
5. Loads secured to pallets using shrink or stretch-wrap must use material of sufficient thickness to retain the load and to prevent load shift. Use a minimum of 70-gauge (.0007 inch) stretch wrapping. The stretch wrap can be twisted like rope for greater strength, but only in combination with full stretch wrapping of the load. Securely capture the pallet when wrapping the bottom layer. Wrap the entire pallet load (pallet + product) from top to bottom a minimum of three times, heavier loads may require more. DO NOT ONLY WRAP THE CARTONS.
6. If using stretch-wrap, DO NOT wrap two pallets, racks, pallet boxes together. These units need to handled on a one load each basis.
7. Shrink or stretch material shall allow for labels to be read via bar code scanners. Refer to the Product Identification Section in the GMSPO Packaging Standards and Guidelines manual.
8. Loads secured to pallets with strapping must use edge protectors to prevent straps from cutting into cartons. Draw the strapping tight and keep the strapping as close to the load as possible to avoid strapping damage or breakage. This may require running the strapping between deck boards rather than the edge of the pallet.
9. Interlocking of lightweight cartons is acceptable. However, interlocking of heavy (>25 lbs.) unit packages should be avoided to eliminate container wall crushing. When column stacking is used, layer pads should also be used to eliminate column toppling.

10. A liner sheet must be placed on the top deck of a pallet to prevent small product from coming through the top deck boards.

11. When shipping small parts that are double stacked, a liner sheet must be placed on top layer to prevent damage.

   NOTE: For SPO Spring Hill a single wall corrugated liner (slip) sheet is required for pallets >48" X 45", if the individual part weight is >20 pounds. This liner sheet acts as a friction reducer when picking heavy, oversized parts.

12. Product weight should be distributed evenly over the pallet surface.

13. Pallet boxes may be used in place of stretch-wrap or strapping. Refer to the Design Performance Requirements section.

14. When using shipping baskets (ie. 5131, 6154), baskets must be lined if contained material can poke through the sides of the basket.

### Mixed Loads

1. All parts should be shipped in full pallet loads. However, if quantity is not sufficient for one pallet load, more than one part number may be contained in the pallet load. Refer to “Palletizing for GMSPO-GM 1724-C”.
   
   If shipping to SPO Spring Hill the load must be marked “Mixed Load” on at least two sides of the pallet load.

2. Part numbers are not to be on more than one pallet load or fragmented when quantity is sufficient to make a full pallet load.

3. Individual cartons must be used to segregate each part number if more than one part number is contained in the pallet load.

4. Each container must be identified with part number and quantity. Refer to: Pallet and Shipping Container Identification in this section and/or the “Distribution Containers GM 1724-A” section.

5. Oversized pallets are only permissible for mixed loads if all the part numbers on the pallet require the larger pallet. Parts that will fit on a standard pallet (48" X 40") cannot be mixed on an oversized pallet.

6. Part numbers are to be palletized based on the quantity of cartons being shipped. The largest quantity of cartons containing a single part number will be at the bottom of the pallet load. Subsequent cartons will be stacked in a manner such that the smallest quantity of cartons will be at the top of the pallet load. If a carton weighs more than 40 lbs., it cannot be stacked on top of another carton. Otherwise, load stability and carton integrity must be taken into consideration when palletizing.

7. If shipping mixed loads, the top layer may not be fully parallel to the base, however the pallet must be able to be double stacked.

8. Do not utilize returnable containers for mixed bulk shipments without permission of GMSPO Packaging Engineering.
Requirements For Overpack Containers

1. Bags, drums, barrels, bales, cans, pails, or wooden kegs are not acceptable shipping containers for other than granular or liquid materials.

2. **Manually** handled overpacks (both palletized and unpalletized) must meet the following requirements:
   - Minimum of 200# burst test (32ECT optional)
   - Stitched or glued manufacturers joint.
   - Individual overpacks (unless weight of individual part is over 40 pounds) must not exceed 40 pounds total weight (weight of the part + package).
   - Boxmaker’s certificate and recyclable symbol must be printed on the **bottom** of the carton, unless approved by GMSPO Packaging Engineering. The certificate must be visible on outside of the carton.

3. Large corrugated pallet packs must meet the following requirements:
   - Stitched manufacturers joint.
   - Use corner posts made of corrugated or solid fiber to give additional stacking strength unless load is self supporting.

4. Do not use loose fill packaging (foam peanuts, shredded paper, etc.).

Pallet And Shipping Container Identification

1. All shipping containers which contain material that is a dangerous article as described in Department of Transportation Regulations for Transportation of Hazardous Materials must have the prescribed special label conspicuously applied on the same panel to which the shipping label is applied.

2. All incoming material must be identified with an identification label affixed either on each of two adjacent side panels, or on opposite sides of each shipping container or product load. When using steel returnable baskets, one label must be placed on the gate opening side. When using pallets, one label must be placed on a fork entry side (side with full stringer height opening, not the notched stringer side). If banding loads, put one layer of stretch wrap around top of the pallet load and then affix the appropriate 1724 labels.

   The label must meet the Shipping/Parts Identification Label Standard GM 1724-B or GM 1724-C; reference AIAG-B-14. [See “Palletizing for GMSPO”, GM 1724-B & GM 1724-C].

   If using plastic stretch wrap, the labels need to be affixed to the outside of the wrap.