

General Motors Service Parts Operations Packaging Standards and Guidelines UNITIZED & BULK Revision July 2007

NOTE: We have revised these Guidelines to include both a Unitized and a Bulk section. The Bulk section starts on page 59. There are links in both sections, suppliers are required to check periodically the Guidelines in www.gmsupplypower.com to get the most upto date links.

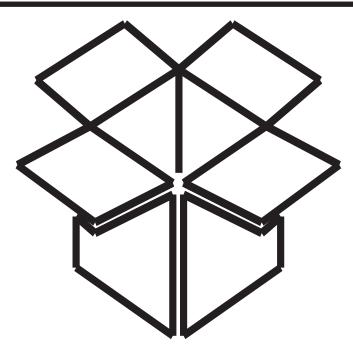


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INTRODUCTION

- 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 484-392-222, P.O. Box 6020 6200 Grand Pointe Drive Grand Blanc, MI 48439-2222 Fax: (810) 606-4380

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.

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 five folders
 - a.) GMSPO Label Suppliers
 - b.) GMSPO Packaging Information
 - c.) Packaging Standards and Guidelines

- d.) Accessories Packaging SOR
- e.) Michigan Cross Dock

SUPPLYING PARTS TO GMSPO

GENERAL INFORMATION:

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

 <u>Unitized</u> – parts are packaged to GMSPO packaging specifications. To unitize for GMSPO, suppliers should first have the GMSPO packaging specification for a part.

Unitizing for GMSPO involves several key concepts:

- a.) product identification (labeling) b.) merchandise packaging
- c.) distribution packaging
- d.) palletizing

e.) bar codes

- f.) graphics
- 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 <u>GM</u> and the <u>ACDelco</u> line of products.

<u>GM Accessories</u>, <u>GM Vehicle Care</u>, and <u>GM Performance Parts</u> are also valid types of graphics. Graphics are controlled by the GMSPO Packaging Specifications.

Supplier graphics are <u>not</u> 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).

MERCHANDISE 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.

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&togglefold er=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 <u>Ship Direct Folder</u> to find the following:

Packing Slip Requirements

3) Click on the <u>SPO Ship Direct Statement of Requirements (SOR) Folder</u> 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 <u>SPO – Saturn Operations Folder</u> 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 Joe Glenn (810) 606-2037 or Brad Grubb at (810) 606-4027.

Accessing the GMSPO Packaging Website

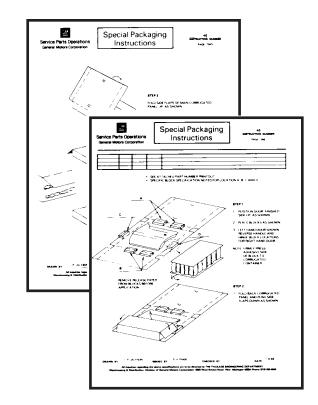
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- 6.) You will be able to select one of three folders
 - a.) GMSPO Label Suppliers
 - b.) GMSPO Packaging Information
 - c.) Packaging Standards and Guidelines

The GMSPO Packaging Information folder contains a "Packaging Label Information" access file. You can obtain label information that is required to be printed onto the GM or ACDelco labels from this file.

Special Packaging Instructions (PD 1130)

• The Special Packaging Instructions illustrate the assembly of complex packages or define other critical packaging instructions.



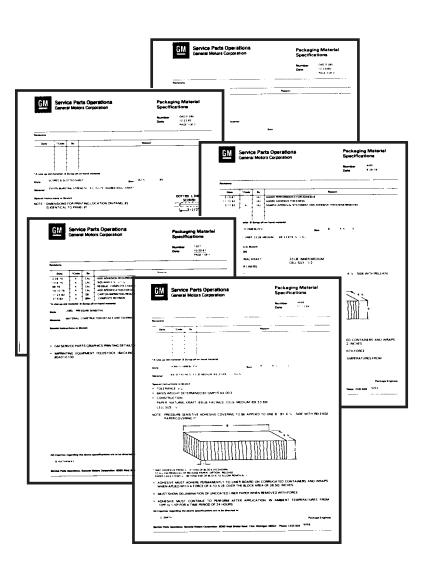
Please acknowledge and return carbon copy to: Worldwide Purchasing Department, General Motors Service Parts Operations 6200 Grand Pointe Drive, Grand Blanc, MI 48439		Rev 12/06
	Unit Load The pallet or rack used to accomplish the unit load or source pallet quantity.	Special Instructions (SPECIAL INSTR-PKG PROD) An indicator to denote that special instructions have been issued explaining the forming, loading, closing, marking, etc. for the containers specified.
	Distribution Label (DIST LBL) The label to be used on the distribution container to show part numbers (ACDelco and GM) and distribution quantity.	Source Pallet Quantity(SOURCE PALLET QTY) The quantity (in pieces) on a pallet or rack that the source uses to ship material to GMSPO for both packaged and bulk material.
Returnable Shipping Containers: Returnable shipping containers to have vendor's name and return address clearly stamped, stenciled or otherwise identified.	Distribution Carton (DIST CTN) The overpack, over wrap, etc., of the merchandising containers (Master pack).	UPC Bar Code (UPCBARCODE) Version A and 1 2/5 bar codes associated with the merchandising, distribution, and unit load quantity(ies) (where applicable). If barcode not shown default to Code 3 of 9.
Engineering Department when quoted, it musclass be caven into consider administration in a all material shall be suitably packed, marked and shipped in accordance with the requirements of common carriers in a manner to secure the lowest transportation costs. Refer to Packaging Standards and Guidelines manual.	Merchandising Label (MERC LBL) The product identification label on the merchandising container or on the part when no merchandising container is specified.	Future Quantities (FUTURE)These fields indicate that a change is being made to a packaging quantity. If there is a future quantity indicated, all future processing of material is to be accomplished using the new quantity or quantities indicated.
packaging requirements, unless otherwise specified, shipping and palletizing requirements are outlined to assistyou in meeting our material handling objectives. Any exceptions to these requirements must be referred directly to the Package Fractionary of the packag	Merchandising Carton (MERC CTN) The unit container which is associated with the merchandising quantity.	PresentUnit Load Quantity(UNLD QTY)The quantity of parts in a rack or on a pallet for parts that are in our unit load program. If the part is in the unit load program and is source packaged, the source pallet quantity and the unit load quantity will be the same.
shipment. Shipping Requirements Packaged Service Parts In addition to the above	PackageUnits(PKG_UNITS)The unit of measure of the packaging material to be used i.e.: (1pc., 12.ft., 4 in., 10 oz. etc.)	NOTE: This is the actual number of pieces not the number of merchandising containers. This quantity is to be preprinted or imprinted on the distribution container or distribution label.
SamplePartsSample packaged parts may be required for sample approval by our Package Engineering Department or Quality Assurance Department prior to the first	Package Number (PACKAGE NUMBER) The number assigned to the packaging material specifications.	Present Distribution Quantity(UIS) (Q1Y) has is the quantity of pieces of the part that are in the distribution container if specified.
Processing Lot Identification Date Codes are required as outlined in the Packaging Standardsand Guidelines Manual. Any question on these date code instructions must be referred to our Quality Control Department.	Internal sub-packs contained in the unit package. Sub-Packs are not subject to I.D. standards. Pallet or rack Distribution container label	Present MerchQuantity (PRESENT MERCH QTY)This is the number of pieces of the part to be packed in the merchandising container specified. This quantity is to be preprinted or imprinted on the merchandising container or product ID label.
origin. It shall be the vendor's responsibility to assure that every packaged part has the country of origin indicated on the outside of the unit package. Bulk parts must have the country of origin indicated on each piece. See Packaging Standards and Guidelines Manual for kits with foreign source content.	 Distribution container (master pack) Imprinting Specification Merchandising container label Merchandising container (unit container) Optional merchandising container P Pallet 	 Part is packaged by Allied GM Division. P – Requires unit packaging and/or identification. M – Part number is stamped or embossed in the product and does not require unit packaging. N – Part does not require packaging or identification.
Foreign Source Items Foreign Source items must be identified with the country of	Bar Code requirements. Closure code	PackID (PACK ID) This is the package engineering control code and is defined as
Closure Container closure shallcomply with good commercial practice and conform to carrier regulations. Exact methods of closure will be specified with a package specification or special instructions when required	 PackageType (PKG TYPE) The code to indicate the type of material specification required. A – Inserts, fillers, corrosion inhibitors, special labels, etc. 	If the group number is 66.666, 77.777, 88.888, 99.999 or blank, do not preprint or imprint this catalog number on the package or productID label. ACDelco exclusive parts do not require catalog group number.
Foroing boxes, Lapers, Bags, Fouches, Enveropes, etc. Location for imprinting product identification information can be found in the Packaging Standards and Guidelines Manual. Exceptions will be noted on special packaging instruction documents or on individual package material specifications.	Future Packaging Information (FUTURE) This column indicates that a change is in processand that when present material is exhausted all new processing requirements will incorporate the future specifications.	Part Name (PART NAME)This is the product noun name to be preprinted or imprinted on the merchandising container or product ID label in accordance with the attached product ID standards. Group Number (GROUP NO.)This is the GM parts catalog group number. It is to be preprinted or imprinted on the merchandising container or product ID label.
and Guidelines Manual.	Present Packaging Information (PRESENT) This column indicates the present packaging material required to package the part.	Line Code (LC) this is the ACDelco line code.
s), etc. LocATIONLAYOUTof PRODUCT IDENTIFICATION-Corrugated Carton Labels shall be located in the center of the end panel. Printing product identification information directly on corrugated cartons is acceptable as outlined in the Packaging Standards	GraphicsCode (GRAPHICSCD) A code to indicate the type of graphics i.e.: (ACDelco, GM) required on the package and/or label. See package material specification for correct graphics type and layout.	Date (DATE) Document generation date. (Julian) ACDelco Number (AC-DELCO NO.) This is the ACDelco catalog number (short number or type number). When this number is different than the GM standard number it is also to be preprinted or imprinted on the merchandising container or product ID label.
Additional (ADD'L) All other package components required to complete the packaging requirements, i.e.: inserts (Package Type A), sub packs (Package Type	Paint Code (PAINT CD) The prime paint, surface plating or rust prevention coating required by engineering blueprint or specification.	Part Number (PART NO.)This is the GM part number to be preprinted or imprinted on the merchandising container or product ID label.
on of Data Fields	Terminology and Explanation o	*Definition of Ter

Packaging Material Specifications

• The Packaging Material Specifications detail requirements necessary to fabricate the package, defining size, material, construction and printing (graphics).

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 Part is Aluminum and requires special paint routing.
- BG Bulk Glass: shipped direct to GM customer by participating supplier.
- CV Curved Molding
- DM High Damaged part
- DQ 'MSU' Distribution Pack Quantity
- LN Part needs to review by SPO Pkg Eng to determine if distributable or non-distributable packaging is needed.
- PJ J-Car, Toyota part
- R Source multiple package quantity has been reviewed and rejected by Marketing. Therefore, part must be repackaged.
- RI Rolled Molding, adhesive
- RL Rolled Part
- RK Received in production container
- RO Rolled Molding, adhesive rolled outside
- TP Third Party Package
- UI Parts arriving Unitized Incorrectly on a regular basis
- WD Part is processed on cable winder machine
- WP Completely wrap part

General Instructions

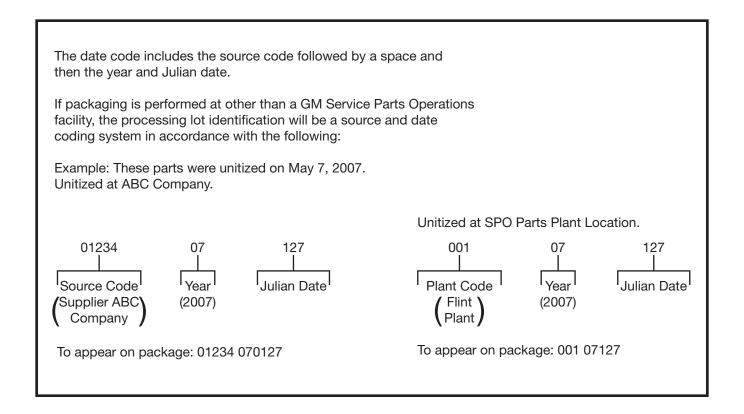
Date Codes

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 Jan. 3, 2007, date code can be 07001 to 07005.

- 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.
- 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.



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 plain white label placed directly underneath or next to 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: 248-474-8500

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"
- 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)

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

- Frames
- Gears
- Hubs
- Levers
- ManifoldsPumps
- Rotors
 Shafts

GM Service Parts Operations Packaging Standards and Guidelines

⇒

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. (See illustration to the right.)
- Characters cannot have breaks or gaps in their body (X) or missing ends, tails or sections (Y). (See illustration to the right.)
- 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.)



y_**765**

12345



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).
- <u>When specified</u> 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, <u>Bar Code Print Quality - Guideline.</u> 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

- <u>The data encoded in the Code 39 bar code is the GM part number only.</u> 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.

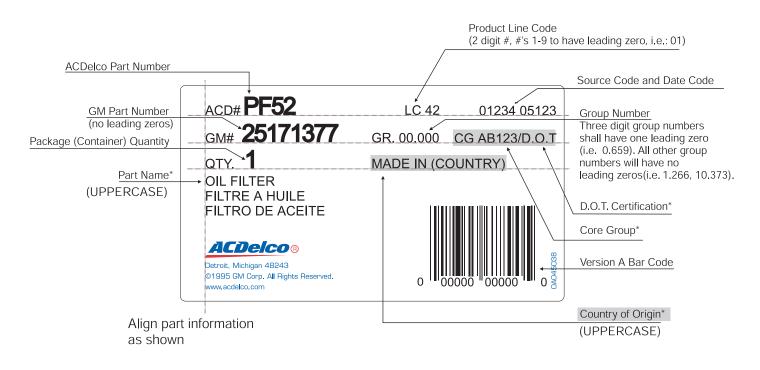
UPC Version A

- 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").

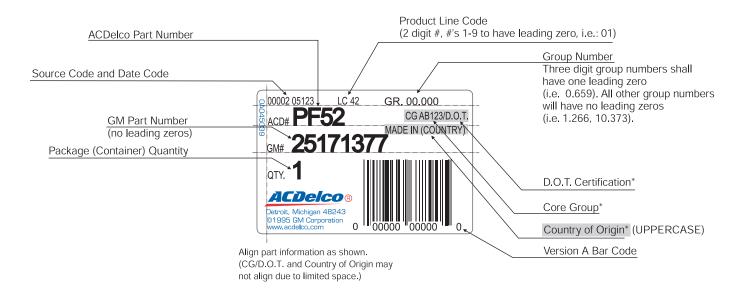
ACDelco Standard Label Design Elements (4" x 2¹/₄" label)



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

- 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 <u>18 point</u> size and <u>bold</u> font style. Part Numbers and quantity number to be of equal point size.
- All other information (description and variable text) to be minimum <u>10 point</u> size and <u>regular</u> font style. (See the "Type Style Requirements" section for acceptable fonts.)
- The above format represents a 4" x 21/4" 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 "Materials", click on "Service Parts Operations (SPO)", click on "North America", click on "GMSPO Packaging Engineering", click on "GMSPO Packaging Information" and lastly click on "Packaging Trilingual File".

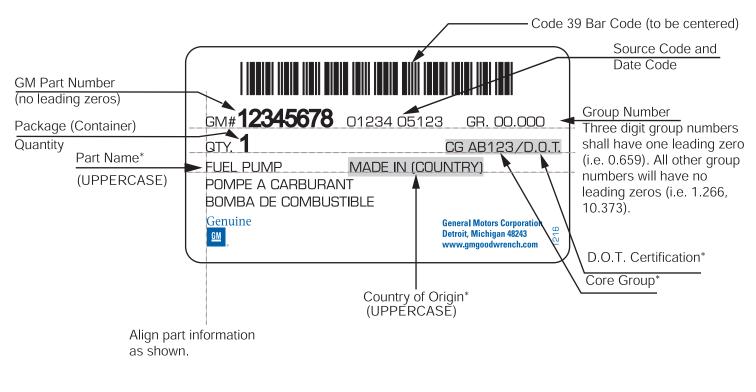
ACDelco Standard Label Design Elements (2¹/₄" x 1¹/₂" label)



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

- 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 <u>18 point</u> size and <u>bold</u> font style. Part Numbers and quantity number to be of equal point size.
- All other information and variable text to be minimum <u>8 point</u> size and <u>regular</u> 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 21/4" x 11/2" label.

GM Standard Label Design Elements (4" x 21/4" label)



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

- Part Numbers and quantity number to be minimum <u>18 point</u> size and <u>bold</u> font style. Part Numbers and quantity number to be of equal point size.
- All other information (description and variable text) to be minimum <u>10 point</u> size and <u>regular</u> font style. (See the "Type Style Requirements" section for acceptable fonts.)
- The above format represents a 4" x 21/4" 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 "Materials", click on "Service Parts Operations (SPO)", click on "North America", click on "GMSPO Packaging Engineering", click on "GMSPO Packaging Information" and lastly click on "Packaging Trilingual File".

The standard label format is also used for the GM Accessories, GM VehicleCare, GM Performance Parts, and HUMMER Genuine Accessories labels.

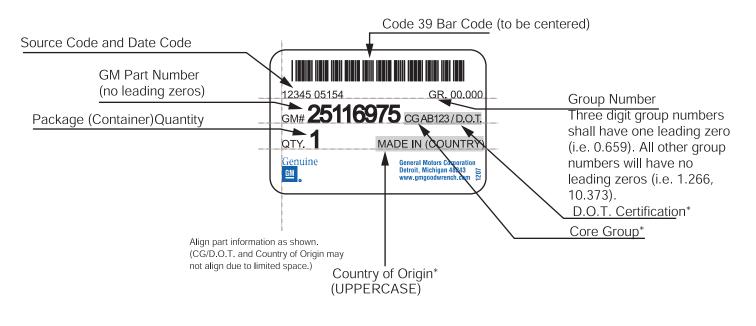








GM Standard Label Design Elements (2¹/₄" x 1¹/₂" label)



- *The shaded areas shown above represents the variable imprint area. Information within this area is to be located as shown when <u>specified or required by law.</u>
- Part Numbers and quantity number to be minimum <u>18 point</u> size and <u>bold</u> font style. Part Numbers and quantity number to be of equal point size.
- All other information and variable text to be minimum <u>8 point</u> size and <u>regular</u> font style. (See the "Type Style Requirements" section for acceptable fonts.)
- The above format represents a 21/4" x 11/2" 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.

GM

The standard label format is also used for the GM Accessories, GM VehicleCare, GM Perfomance Parts, and HUMMER Genuine Accessories labels.





PERFORMANCE

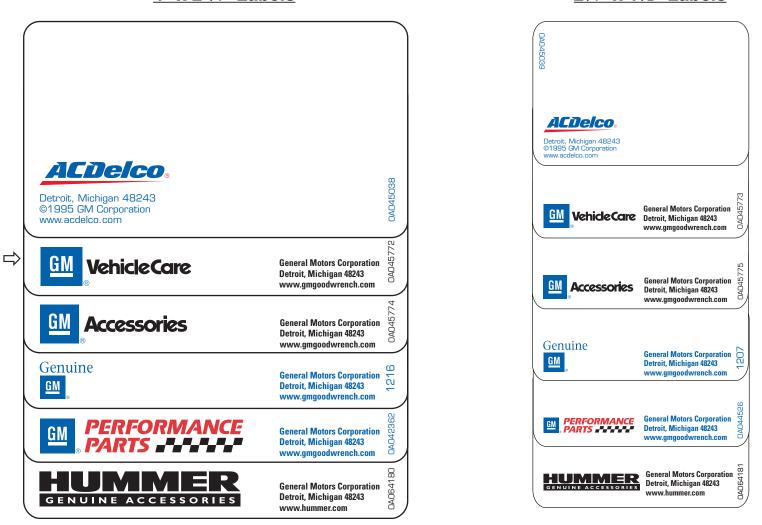


Label Designs

4" x 2 ¼" Labels

21/4" x 11/2" Labels

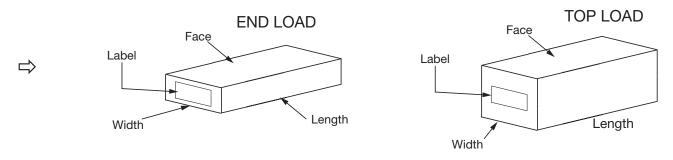
 \triangleleft

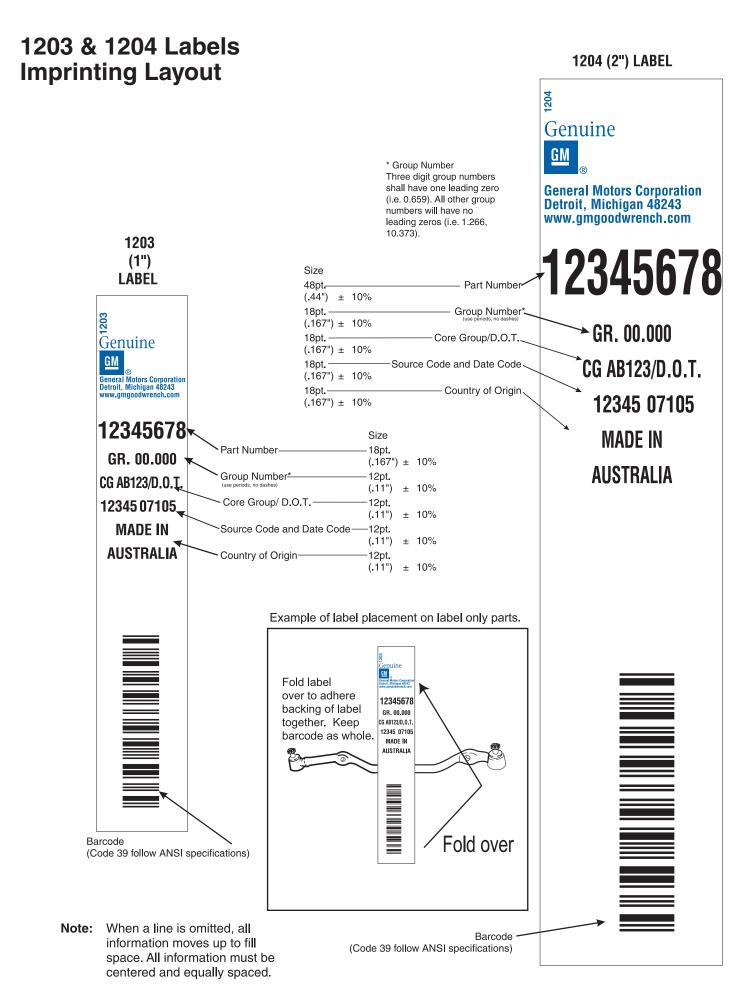


Label Placement on Non-graphic Merchandising Cartons

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.





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 guantities in place of merchandising package guantities.

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 Code 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.



(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 above is also used for the GM Accessories, GM Vehicle Care, GM Performance Parts and HUMMER Genuine Accessories labels.

Sample Labels



H.) 0A044779 — UCC-14 barcode (I 2 of 5)

Note: Shaded fields required when specified.

MADE IN MEXICO General Motors Corporation 5425 Detroit, Michigan 48243 www.gmgoodwrench.com

MADE IN GERMANY

GR. 00.000

0

General Motors Corporation

CG1248/D.O.T.

Detroit, Michigan 48243 www.gmgoodwrench.com

Placing Product Identification onto a Package

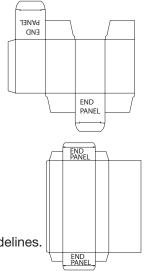
- Certain product information needs to be on the package. This information is:
 - date code/source code country of origin (if not made in the U.S.A.)
 - GM # barcode

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.

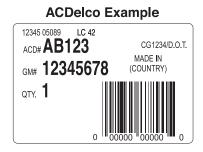


- quantity

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

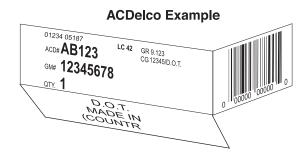
• Product identification format/point size to be adjusted according to package material width and height. Minimum point size is 8 point. If using a point size below 8, contact GMSPO Packaging Engineering.



GM Example
GM# 12345678 12345 05117 СG 1234/D.O.T. QTY. 1 МАДЕ IN (COUNTRY)

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.





Imprinting/Labeling ACDelco Graphic Cartons

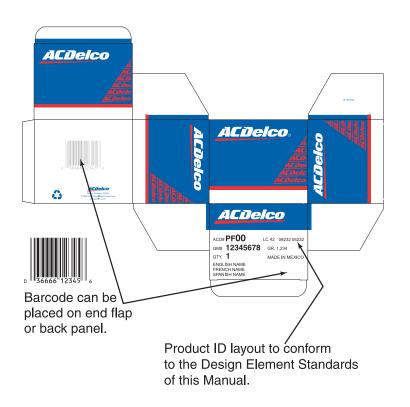
Cartons that do not contain trilingual part name

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.

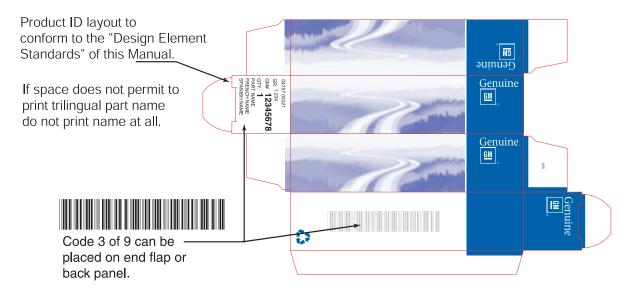
Cartons with preprinted trilingual part name

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





Imprinting/Labeling GM Graphic Cartons



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.



Refer to the "Auto Bag Imprinting Layout" for ID format.

Auto Bags Imprinting Layout

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





Imprinting Layout Detail

Genuine CHOY GM

eral Motors Corporation roit, Michigan 48243

GM# 12345678 04757 05266 GR. 00.000 GTY. **1** CG 1248/D FUEL PUMP POMPEA CARBURANT BOMBA DE COMBUSTIBLE

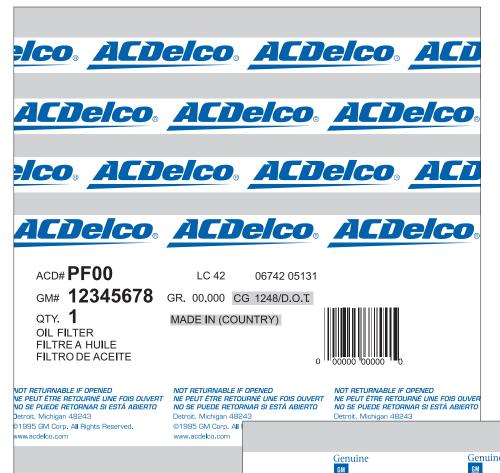
CG 1248/D.O.T.

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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.

	Genuine		Genuine		Genuine M	
Genuine		Genuine		Genuine		Genuine
	Genuine ≝		Genuine		Genuine M	
Genuine	Ge <u>G</u>	nuine		Genuine M		Genuine
	Genuine M		enuine M		Genuine	
	QTY. 1 FUEL PUMI POMPEA C		MADE IN (COU	GR. 00.000 3 1248/D.O.T NTRY)		
	NOT RETURNABLE IF OPENED Ne peut être retourné un No se puede retornar si) Ie fois ouvert Está abierto			NOT RETURNABLE IF O Ne peut être retou No se puede retorna	PENED Rné une fois ou\ R si está abierto
	General Motors Corporation Detroit, Michigan 48243 www.gmgoodwrench.com	Detroit,	l Motors Corpora Michigan 48243 ngoodwrench.co		General Motors Corpor Detroit, Michigan 4824 www.gmgoodwrench.c	l3 Dei

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 corners of each carton.

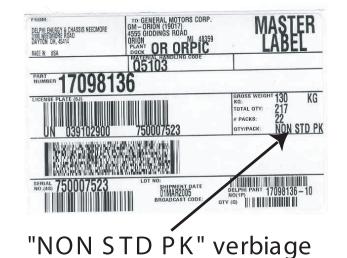
GM 1724 information (continued)

(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.

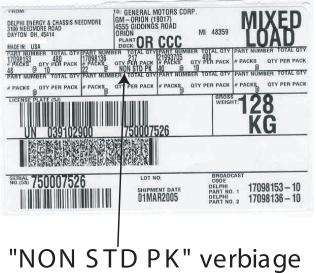
For single packs (unitizing packages), the 1724-A is not to be used, only the label specified on the packaging specification (e.g. 1216, 0A045038, etc.) is to be applied.

- 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



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"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).

 \Rightarrow Do NOT put suppliers phone number in the FROM box.

Example of Ship Direct Shipments directly to a customer.

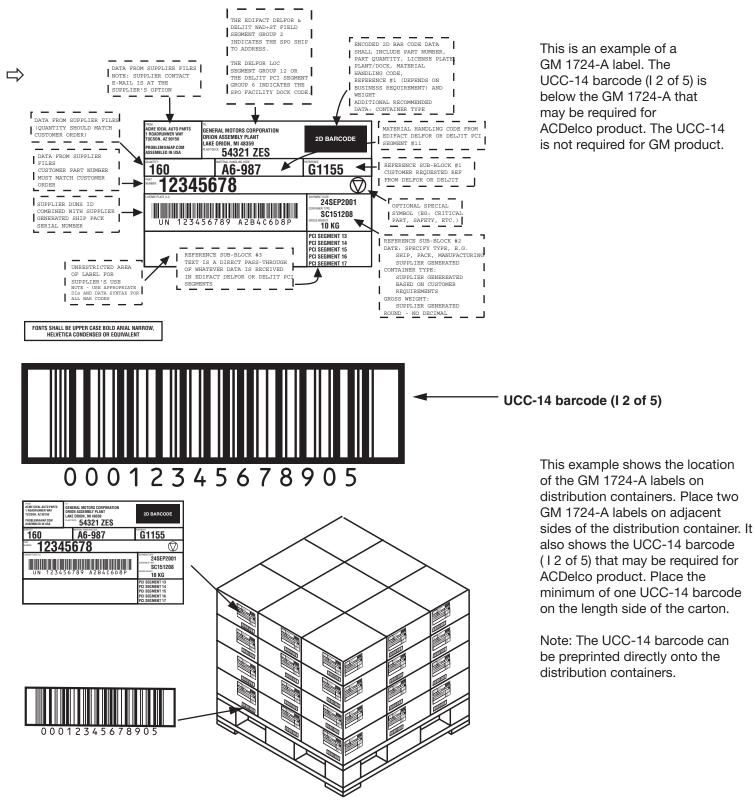
FROM: BOX FROM:

GMSPO 123ABC STREET ANYWHERE, USA 123456

EMAIL ADDRESS (OPTIONAL) ASSEMBLED IN USA Example of LTL and TL Shipments to a GM Facility.

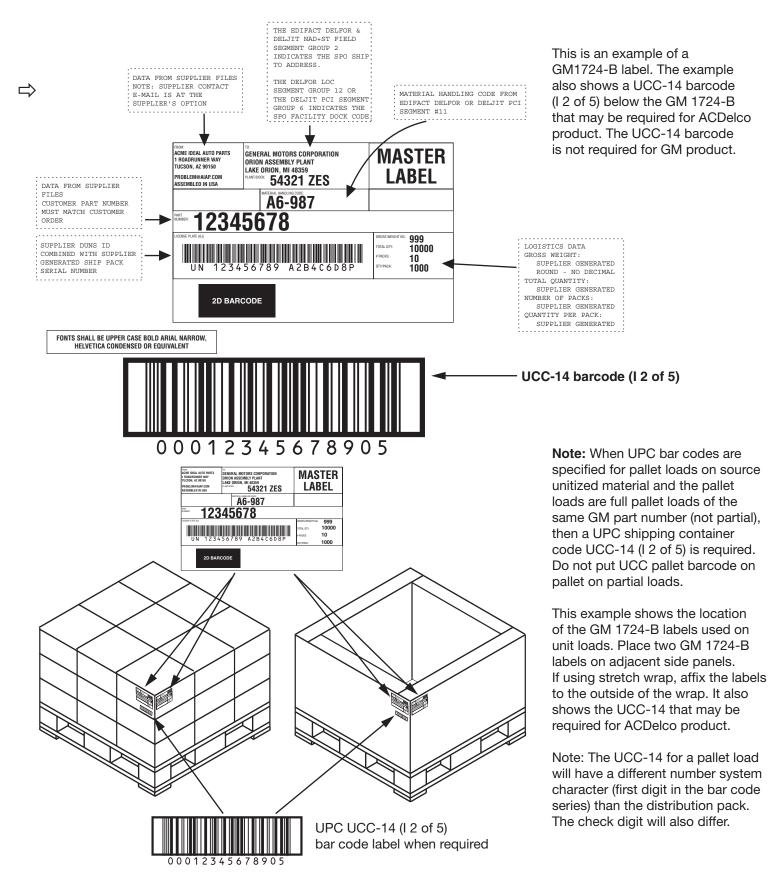
FROM: BOX							
V							
FROM:							
SUPPLIER NAME							
123ABC STREET							
ANYWHERE, USA 123456							
. , , ,							
SUPPLIER NAME 123ABC STREET							

Unitizing For GMSPO <u>Distribution</u> <u>Containers</u> GM 1724-A Label Shipping/Parts Identification Label

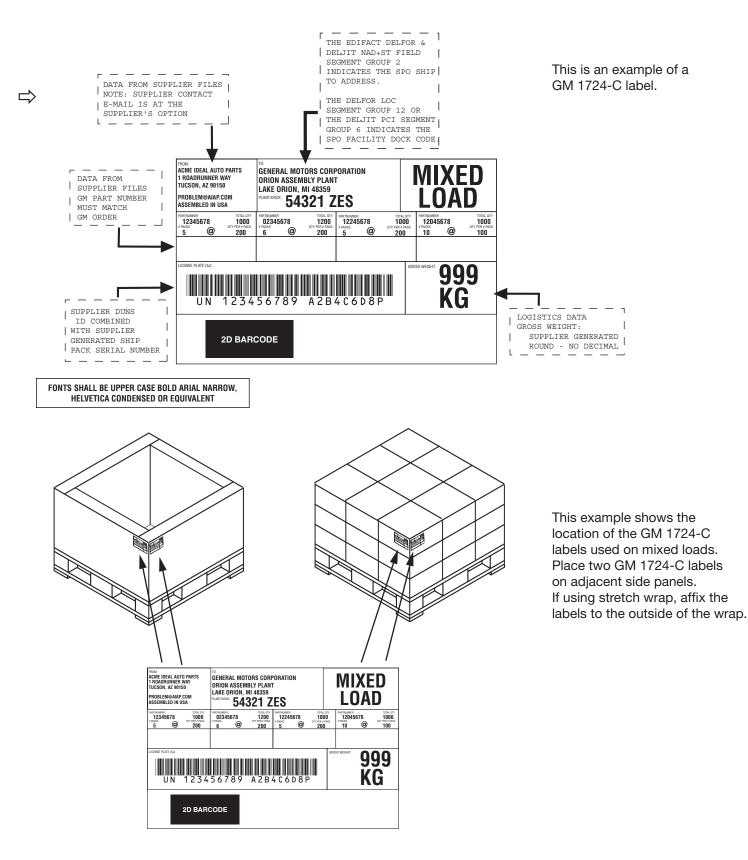


UPC UCC-14 (I 2 of 5) bar code label when required

Unitizing For GMSPO <u>Unit</u> <u>Loads</u> GM 1724-B Label Shipping/Parts Identification Label



Unitizing For GMSPO <u>Mixed</u> Loads GM 1724-C Label Shipping/Parts Identification Label



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 <u>without notice</u>. 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. Contact is the Material Expedite Team Leader, Chris Auten, 931-486-5863

Label Media Requirements

Specific Criteria for the labels:

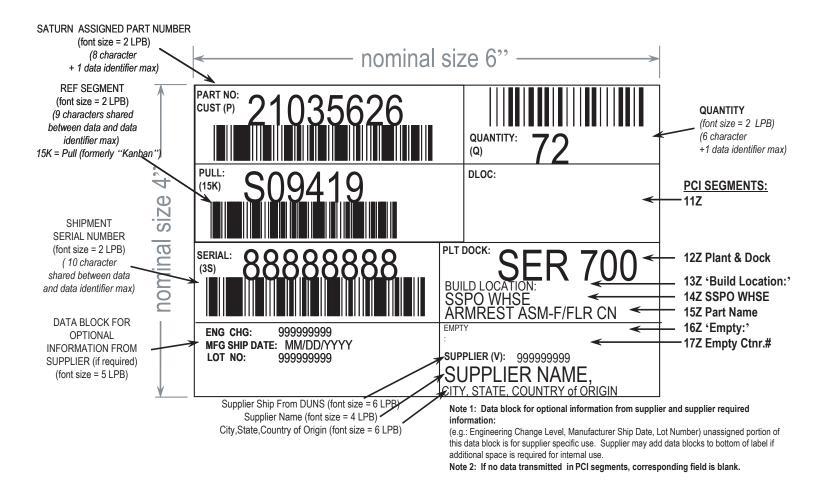
- The label dimensions are a nominal 4" high by 6" wide.
- Labels shall be printed with black characters on white background (neither colored paper nor colored ink is allowed).
- Label and bar code measurements are set in accordance with AIAG B-10 Label standards. Reference the AIAG B-10 Label Guidelines 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 lables (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 <u>NOT</u> 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



PLATE CODE PLATE SIZE								
ACD-1 . ACD-2 . ACD-3 .		• •				6 ⁵ / ₁₆	x	1 3/ ₁₆

Detroit, Michigan 48243 ©1995 GM Corp. All Rights Reserved. www.acdelco.com

PLATE CODE PLATE SIZE

ACDJ-1/4 1⁹/₁₆ x ⁵/₁₆

GM Plate Codes



WARRANTY The General Motors Service Replacement Limited Lifetime Sheet Metal Warranty applies to this part. Warranty remains in effect for as long as the named purchaser owns the vehicle. Only GM warranted parts maintain the GM Vehicle Factory Warranty for that part or assembly. QUALITY This sheet metal part was designed and manufactured with GM original factory equipment dies and tooling for

Concern - This allock mean part was designed and manufactured for oronsion resistance only operations used and cooming for proper installation. This sheet metal part has been manufactured for corrosion resistance and prime coaled for durability, easier paint application and vehicle resale value protection. INSTALLATION Do not remove prime coating. Scutf and finish process according to GM approved procedures outlined in GM service manuals.

GRANTIE Cette pièce est couverte par la garantie limitée à vie General Motors de remplacement des tôles. Cette garantie reste en vigueur tant que l'acheteur désigné reste propriétaire du véhicule. Seules les pièces garanties GM doivent être utilisées pour maintenir la protection de la garantie d'origine du véhicule GM. OUALITÉ Cette pièce en tôle a été conque et fabriquée à partir des matrices et outils GM d'origine pour garantir son bon ajustement. Cette pièce en tôle a été fabriquée pour résister à la corrosion et est revêtue d'une couche d'apprêt assurant sa durabilité, la tacilité d'application de la painture et la protection de la valeur de revente du véhicule. INSTALLATION Me pas enlever la couche d'apprêt. Poir et finir conformément aux procédures GM approuvées, telles que décrites dans les manuels de réparation GM.

GARANTÍA Esta pieza está cubierta por la garantía limitada por toda la vida de General Motors de reemplazo de la chapa. GARANTIA Esta pieza está cubierta por la garantía limitada por toda la vida de General Motors de reemplazo de la chapa. Dicha garantía estár vigente mientas el comprador designado sigai seindo propietario del vehículo. Sólo las piezas de recambio garantizadas por GM tienen la garantía de fábrica de GM para la pieza o el montaje en cuestión. CALUDAD Esta pieza de chapa ha sido diseñada y fabricada con el equipo de troquelado y mecanizado original de GM que permite una instalación correcta. Asimismo, esta peiza de chapa ha sido fabricada para resistir la corrosión y se le ha aplicado una capa de imprimación para aumentar la durabilidad, facilitar la aplicación de la pintura y proteger el valor de reventa del vehículo. INSTALACIÓN No quitar la capa de imprimación. El proceso de pulido y acabado debe atenerse a los procedimientos aprobados por GM y descritos en los manuales de servicio GM.

PLATE CODE

PLATE SIZE

RSV 5.... 15¹/₂ x 17



WARRANTY The General Motors Service Replacement Limited Lifetime Sheet Metal Warranty applies to this part. Warranty remains in effect for as long as the named purchaser owns the vehicle. Day GM warranted parts maintain the GM Vehicle Factory Warranty for that part or assembly. QUALITY This steme therapt and was depicted and manufactured with GM erginal laceburg explanment dies and toding for proper installation. This sheet metal part has been manufactured for corrosion resistance and prime coated for durability, easier paint application and vehicle reside value protection. WISTLINDEN to name prime coated for durability, easier paint application and vehicle reside value protection.

GARANTE Cette pièce est couverte par la garante limitée à vie General Motors de remplacement des tôles. Cette garantie reste en vigueur tant que l'acheteur désigné reste propriétaire de véhicule. Seules les pièces garanties 6M doivent être utilisées pour maintein la protection de la garantie d'origine du véhicule. GM. QUALTE Cette pièce en tôle a élé conque entraindes parties et autils 6M doivent protection to a justement. Cette pièce en tôle a été nature du véhicule, se constante entrainde d'argine paranties parties d'active de la garantie est protection de la véhicule. Cette pièce en tôle a été nature du durabile, la facilité d'application de la paintime et la protection de la valeur de revente du véhicule. MISTALLIDIN Ne sel elevert lo cucit d'apple? Priort finit concent de la paintime et la protection de la valeur de revente du véhicule.

GARANTIA Esta pieza está cubierta por la garantia limituda por toda la vida de General Motors de rerenglazo de la chapa. Dicha garantia estará vigente mientras el compandor designado siga siendo propietario del vehículo. Sobla su piezas de recamibio garantizadas por GM tienen ta garantia de tábrica de GM para ta la pieza o el montaje en cuestido. ECULDO Esta pieza de chapa ha sido desida y tábricato con el quiego de troquetados unexanizado misma de GM que pentima una instalación correcta. Asimismo, esta pieza de chapa ha sido tábricada para resistif ta corresión y se le ha aglicado una capa de imprimación para aumentar la dirutalizada, facilitar la aglicación de la pinhura y protegier al vitor de reventa de tehicalo. INSTALACIÓN No quartía te capa de imprimoción El proceso de polídivo acabado deb estares a las procedimientos aprobados por GM viserios nel nos manuales de servicio GM.

PLATE CODE	PLATE SIZE
RSV 8	 24 ⁷ /8 x 14

Genuine



PLATE CODE

PLATE SIZE

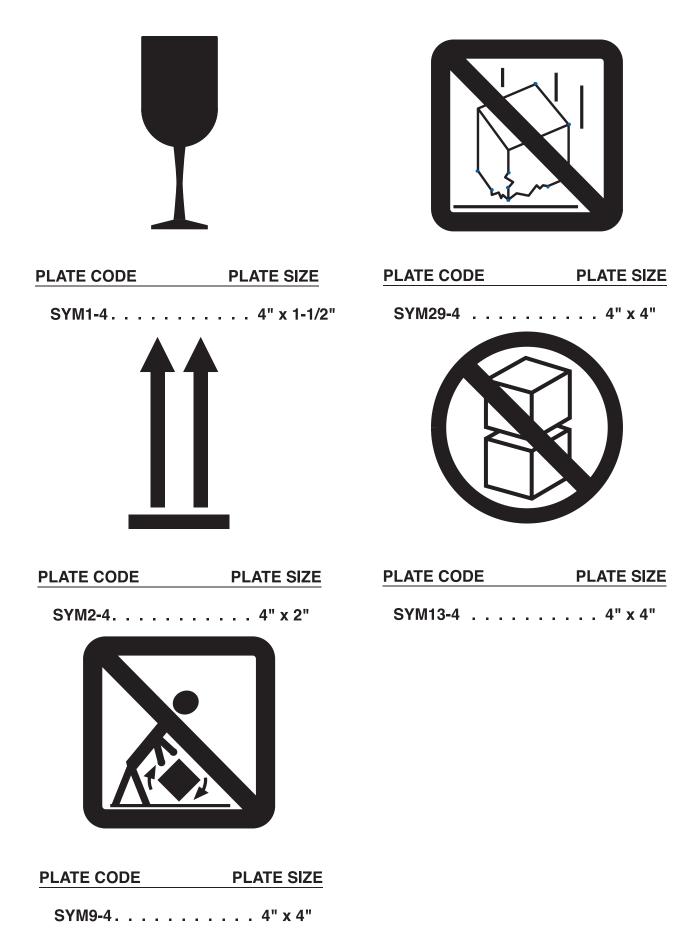
GM Plate Codes





PLATE CODE										F	ר	ATE SIZE	
F1.													1 x 1
F2.													2 x 2
F3.													3 x 3
F4.													4 x 4
F5.													5 x 5
F6.													6 x 6
F7.													7 x 7
													8 x 8

Universal Plate Codes



Additional Plate Codes



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.

PLATE CODE

FDX

Corrugated Container Closure

Requirements

General Information for all Closures

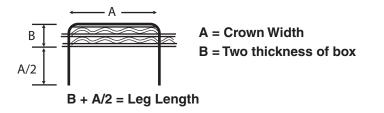
- These general requirements apply to merchandising and distribution containers both for source and in-house processed items
- These requirements are to be followed for closure material and closure instructions specified for an individual part.
- Boxmaker's certificate must be visible after closure method 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.

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:



Both legs shall be properly clinched as shown.

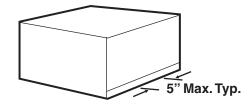


Full Overlap Boxes (FOL)

- 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.



Top Loading



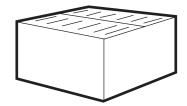
End Loading

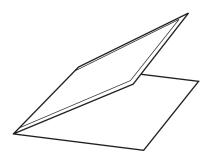
Regular Slotted Container (RSC)

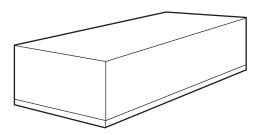
• Staples shall be used in pairs with one on each side of center seam, but need only be used in an area where outside flaps overlap inner flaps. Also, they shall be used along outer edge when width is eight inches or greater, as shown in the diagram.

Placement of staples in the folder should be parallel to the three open edges

• Staples shall be GMSPO #1314, #1315, or #1316, selected by leg length as







Five Panel Folders (FPF)

Two Panel Folders (TPF)

described above.

• Do not staple in the part.

and not more than one inch in from the edge.

• 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.

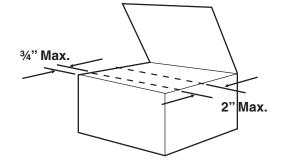
Hot Melt Adhesives

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.



GM Service Parts Operations Packaging Standards and Guidelines

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.

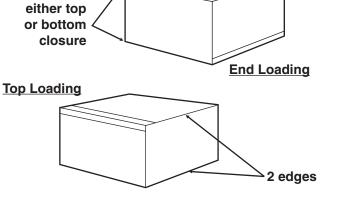
Таре

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.

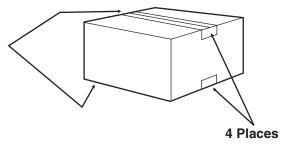
Full Overlap Boxes (FOL)

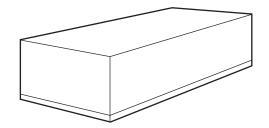
• Tape shall extend the full length of the flap edge (on two edges as shown in diagram).



Regular Slotted Container (RSC)

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

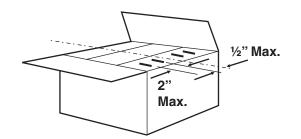




GM Service Parts Operations Packaging Standards and Guidelines

Five Panel Folder (FPF)

• Tape shall extend the full length of the three flaps.



L-CLIP General Information

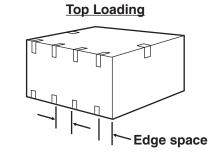
- L-Clip closures are strips of pressure sensitive strapping tape running perpendicular to the edge of a container to secure the container flaps. The length of the tape is divided evenly on adjacent panels.
- Strapping tape properties shall be in conformance with specification 0A039446 as shown on 0A010114.
- 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.

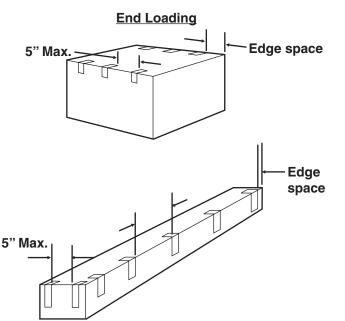
Full Overlap Boxes (FOL)

Size	Edge Space	Min.# Clips	L-Clip Spacing
Box length less than or equal to 6"	1⁄4" - 1⁄2"	2	5" Max.
Box length greater than equal to 6"	1⁄4" - 1"	2	5" Max.
Box length less than or equal to 8"	N/A	2	N/A
Box length greater than 8"	5" Max.	1 (centered)	5" Max.

Five Panel Folder (FPF)

Size	Edge Space	Min.# Clips	L-Clip Spacing
Box length All	¹ ⁄4" - 1"	2	8" Max.
Box width less than or equal to 6"	1⁄4" - 1⁄2"	2	5" Max.
Box width greater than 6"	1⁄4" - 1"	2	5" Max.





Stitching

Other than Metal Stitches

General

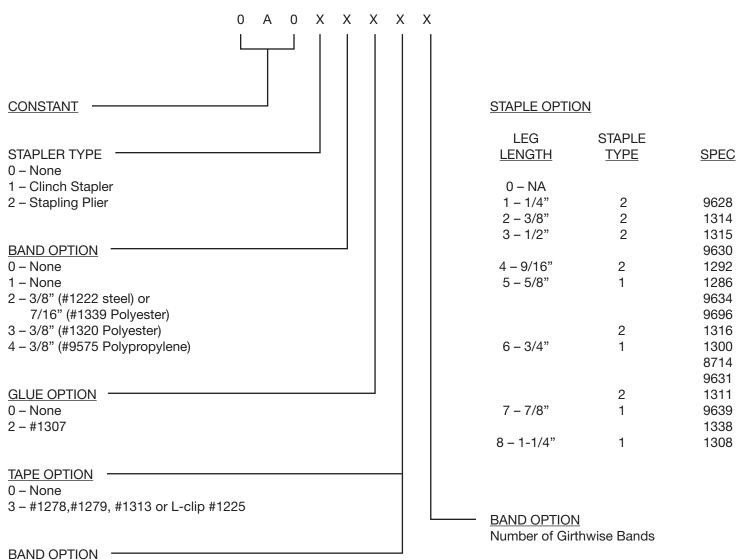
- Stitching for closure has limited applications in several flat glass folders and some off-shore vehicle parts.
- For specific approval contact the Package Engineering Department.
- Note: Wire stitching shall comply with the staple closure section.

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.
- ee Plastic banding must be either polyester or polypropylene.

Closure Code Specification



Number of Lengthwise Bands

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 <u>www.ippc.int</u> or <u>www.nappo.org</u>.

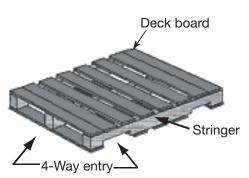
- Use only four-way entry, double-face, non-reversible pallet with 2 1/2" x 9" minimum fork entry openings on 27" centers on each stringer. (Note: Due to size restrictions, smaller size pallets, ie. 32" X 30" may only be two way entry.)
- Winged pallets are not acceptable. Refer to GMSPO Packaging Material Specification No. 0A044898.
- No overhang of product material is allowed.
- Pallet loads must not exceed 3000 pounds.
- 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 <u>NOT</u> recommended for ship-direct shipments.
- The pallet dimensions below are to be used for all shipments made to all GM Service Parts Operations locations.

Source Unitized Material						
Required Footprint Length Width Height						
48"	40"	45"*+				

Imported Source Unitized Material						
Optional Footprint Length Width Height						
1200mm 1140mm 1143mm*+						

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





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

- Loads stacked must use materials of sufficient strength to double stack <u>similar</u> product to a height of 10 feet when received at GMSPO facilities. 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.
 - 2. The top surface of the load must be parallel to the pallet base. DO NOT PYRAMID STACK FULL PALLET LOADS.



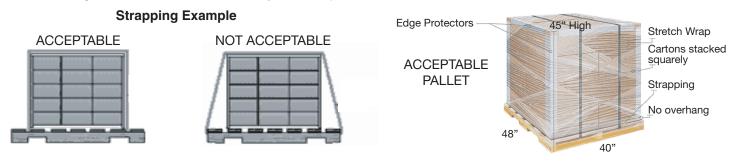


- 3. The load must be secured to the pallet with stretch-wrap, strapping, or both. If using pallet boxes, the lid must be properly secured (ie. stretch wrap, banding, etc.).
- 4. Loads secured to pallets using shrink or stretch-wrap must use material of sufficient thickness to retain the load and to 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.
 - 5. 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.
 - 6. 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.
 - 7. 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.
 - 8. A liner sheet must be placed on top deck of pallet to prevent small product from coming through top deck boards.

9. 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 heavey, oversized parts.

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



- 11. Pallet boxes may be used in place of stretch-wrap or strapping. Refer to the Design Performance Requirements section.
- 12. 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".
- 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 containers 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 275 # burst test (44 ECT 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 carton, unless approved by GMSPO Packaging Engineering.
- 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 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. A pallet box with a corrugated tray top is required on all pallet shipments that contain product with full graphic printed cartons to prevent carton damage.
- 3. Vertical corner supports are required on all pallet shipments. 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.
- 4. For pallet loads that contain non graphic cartons, a tray top and corner supports are required.

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.

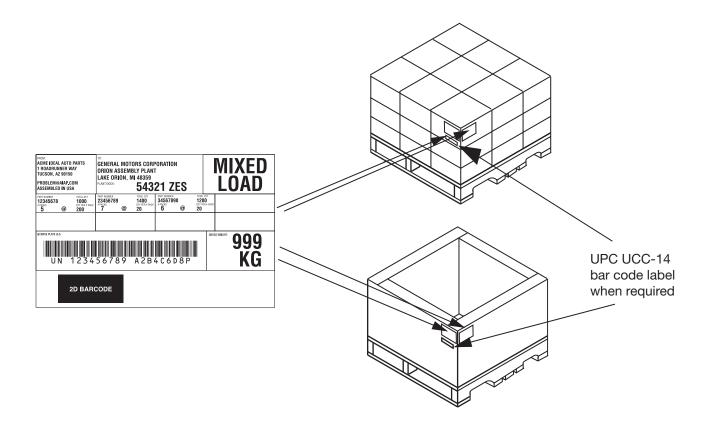
The intent is to reduce the amount of pallet load handling by utilizing small parcel carriers.

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 GMSPO Vendor Form 1257. 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

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SUPPLYING PARTS TO GMSPO

General Information:

Defintion 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. 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 five folders
 - a.) GMSPO Label Suppliers
 - b.) GMSPO Packaging Information

- d.) Accessories Packaging SOR
- e.) Michigan Cross Dock

c.) Packaging Standards and Guidelines

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 Joe Glenn (810) 606-2037 or Brad Grubb at (810) 606-4027.

Supplier Standard Requirements for Expendable Packaging

• Bulk shipments, in-bound to a GM facility, from a non-allied source must be in expendable packaging.

⇒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&togglefold er=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 <u>Ship Direct Folder</u> to find the following:

Packing Slip Requirements

3) Click on the <u>SPO Ship Direct Statement of Requirements (SOR) Folder</u> 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 <u>SPO – Saturn Operations Folder</u> 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 reatment.
- 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 container and/or label as indicated in the product identification layouts.

Parts shipped in bulk must be identified with the country of origin (if not made in the U.S.A.) on each individual part.

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)

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

- Frames
- Gears
- Hubs
- Levers
- Manifolds
- PumpsRotorsShafts

GM 1724 information

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

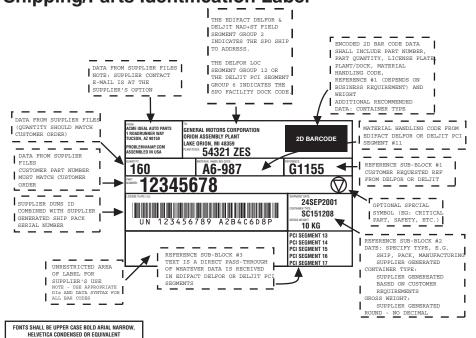
- 1.) Log into www.gmsupplypower.com
- 2.) Click on "Material" in the Document Center
- 3.) Click on the "Labels" folder on the left side
- 4.) Click on the "North America" folder
- 5.) Click in the middle of the page on the "GM 1724 Shipping Parts Identification Label Standard"
- 6.) Click the appropriate 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 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).

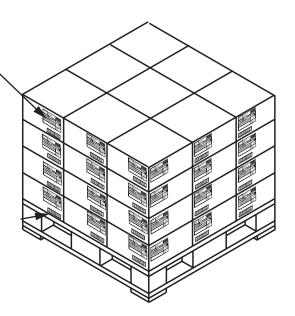
GM1724-A Label Used for <u>Overpack Containers</u>

Shipping/Parts Identification Label



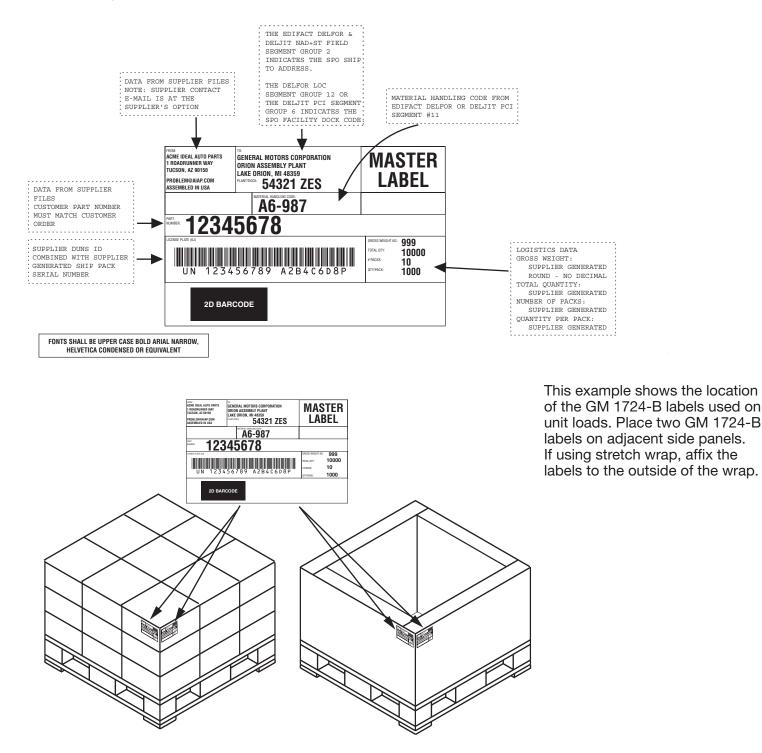
This example shows the location of the GM 1724-A labels on overpack containers. Place two GM 1724-A labels on adjacent sides of the distribution container.

ACME IDEAL AUTO PARTS 1 ROADRUNNER WAY TUCSON, AZ 90150 PROBLEMØAIAP.COM ASSEMBLED IN USA	GENERAL MOTORS CORPORATION ORION ASSEMBLY PLANT LAKE ORION, MI 48359 FAMILION: 54321 ZES	2D BARCODE				
160	A6-987	G1155				
12345678						
UN 1234	56789 A2B4C6D8P	24SEP2001 CONTAINER TYPE SC151208 APCCS VERT 10 KG				
		PCI SEGMENT 13 PCI SEGMENT 14 PCI SEGMENT 15 PCI SEGMENT 16 PCI SEGMENT 17				



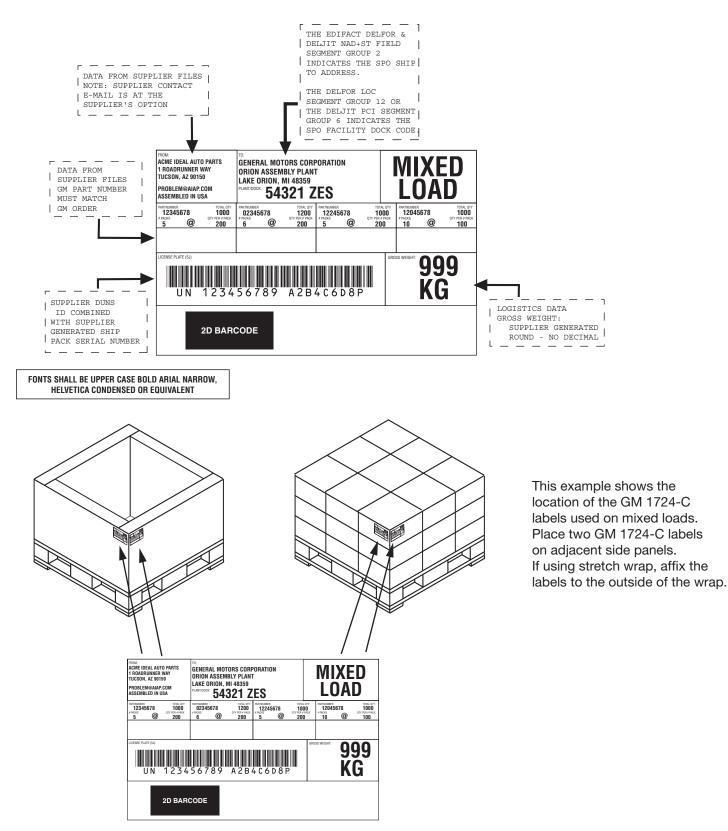
GM1724-B Label Used for a Unit Load of Same Part Number

Shipping/Parts Identification Label



GM 1724-C Label Used for <u>Mixed</u> Loads

Shipping/Parts Identification Label



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 <u>without notice</u>. 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. Contact is the Material Expedite Team Leader, Chris Auten, 931-486-5863

Label Media Requirements

Specific Criteria for the labels:

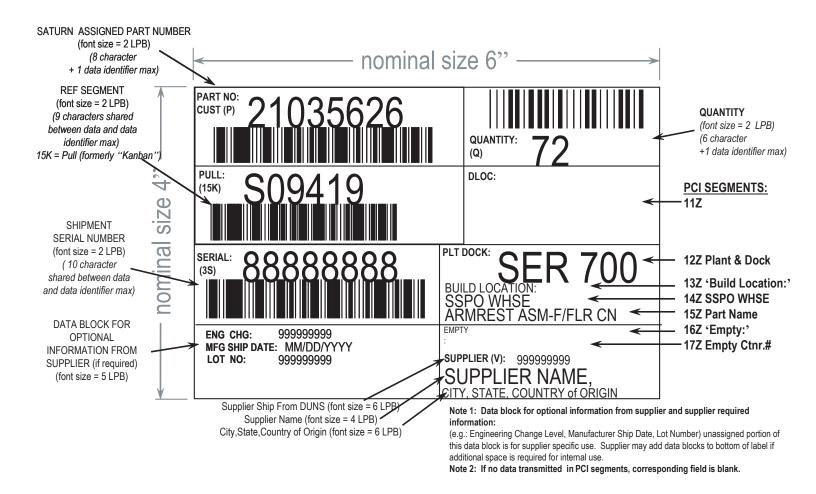
- The label dimensions are a nominal 4" high by 6" wide.
- Labels shall be printed with black characters on white background (neither colored paper nor colored ink is allowed).
- Label and bar code measurements are set in accordance with AIAG B-10 Label standards. Reference the AIAG B-10 Label Guidelines 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 lables (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 <u>NOT</u> 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.

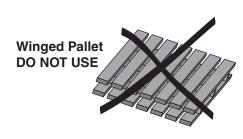
In all cases, the pallet and shipping container must:

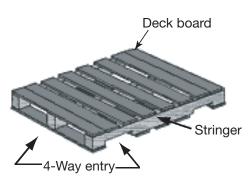
- 1. For bulk material: deliver damage free product with full pallet and container integrity to the GMSPO receiving point.
- 2. To facilitate the recycling of used, expendable packaging, PALLET CARTONS FASTENED TO THE PALLET MUST BE CONSTRUCTED WITH A "BREAKAWAY" FEATURE OR OTHER METHOD TO ALLOW EASY 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 <u>www.ippc.int</u>or <u>www.nappo.org</u>.

- 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.
- 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 <u>NOT</u> recommended for ship-direct shipments.
- The pallet dimensions below are to be used for all shipments made to all GM Service Parts Operations locations.





*	Maximum	pallet	load	height
---	---------	--------	------	--------

Bulk Material (not unitized)

Width

40"

45"

30"

1140mm

Preferred Footprints

Length

1200mm

48"

48"

32"

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

Height

45"*+

45"*+

45"*+

1140mm*+

Offshore- Seatainer Module allowed

dimensions

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

- Loads stacked must use materials of sufficient strength to double stack <u>similar</u> product to a height of 10 feet when received at GMSPO facilities. 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.
- 2. The top surface of the load must be parallel to the pallet base. DO NOT PYRAMID STACK FULL PALLET LOADS.

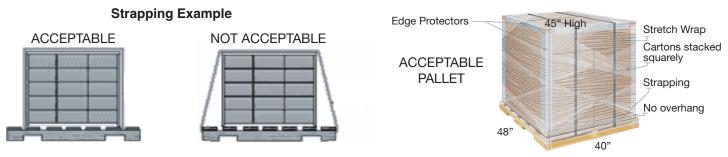




- 3. The load must be secured to the pallet with stretch-wrap, strapping, or both. If using pallet boxes, the lid must be properly secured (ie. stretch wrap, banding, etc.).
- 4. Loads secured to pallets using shrink or stretch-wrap must use material of sufficient thickness to retain the load and to 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.
- 5. 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.
- 6. 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.
- 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.

- 8. A liner sheet must be placed on top deck of pallet to prevent small product from coming through top deck boards.
- 9. 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 heavey, oversized parts.



- 10. Product weight should be distributed evenly over the pallet surface.
- 11. Pallet boxes may be used in place of stretch-wrap or strapping. Refer to the Design Performance Requirements section.
- 12. 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".
- 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 containers 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 275 # burst test (44 ECT 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 carton, unless approved by GMSPO Packaging Engineering.
- 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.).

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.