

# **MBUSI SERVICE PARTS**

## **Supplier Guide**

### **Supplier Packaging Guidelines**

## Document History

<b>Version Number</b>	<b>Author User ID</b>	<b>Location of Change(s)</b>	<b>Summary of Changes</b>	<b>Date of Release</b>
Version 1	REBERCO		Final Draft Version	5/1/2022

# Table of Contents

1. Packaging Operations Overview .....	5
1.1 Approval Process.....	5
1.2 Packaging Contacts.....	6
1.3 Supplier Chargebacks .....	6
1.4 General Packaging Requirements .....	6
1.4 General Packaging Requirements (cont.) .....	7
2. Individual Packaging Methods .....	8
2.1 Cartons.....	8
2.2 Carton Print.....	9
2.3 Additional Carton Markings.....	9
2.4 Hazardous Materials / Dangerous Goods.....	10
2.5 Clear Bags.....	11
3. Package Testing Requirements .....	12
3.1 Free-Fall Drop Testing for Individually Packaged Parts .....	12
4. Individual Part Labeling Requirements .....	13
4.1 Mercedes-Benz Label Format .....	13
4.2 Label Software .....	14
4.3 Ordering Mercedes-Benz Labels.....	14
4.4 Marking / Label Placement .....	15
5. Labeling Inbound Shipments.....	17
5.1 Master Label.....	17
5.2 Mixed Load Labels .....	18
5.3 Load Label Placement.....	19
5.4 Label Definitions .....	20
5.5 Bar Code Specifications.....	21
5.6 Bar Code Symbology .....	22
6. Pallet Requirements .....	23
6.1 General Pallet Requirements .....	23
6.2 General Pallet Construction .....	23
6.3 Acceptable Pallet Styles .....	24



6.4 Pallet Utilization and Load Stacking..... 24

7. Mercedes-Benz Returnable CO Cartons..... 25

7.1 General Information ..... 25

7.2 Requesting CO cartons..... 26

7.3 Damaged CO Cartons..... 26

# 1. Packaging Operations Overview

## 1.1 Approval Process

All new packaging designs or packaging design changes must be submitted using the SG 10 MBUSI Service Parts Packaging Approval Form. All fields highlighted in green must be filled out. The completed form shall be submitted to a MBUSI Packaging Engineer for approval. Once the packaging form is reviewed and approved, component supplier must submit all associated packaging costs to Mercedes-Benz AG Purchasing for contract updates.

MBUSI is committed to continuous improvement efforts to ensure the delivery of parts safely and without damage to our customers. Based on market claims and volume changes, MBUSI will change packaging requirements and ultimately request the supplier alter packaging to meet these demands. Component supplier must submit proposals and costs to Mercedes-Benz AG Purchasing for final approval.

### MBUSI Service Parts Packaging Approval Form



Supplier Name		Supplier Code		Date	
Supplier Address			Supplier Contact Information		
Name			Email		
Phone			Fax		
Name			Etc.		

Load Carrier Information										
Type	Carrier Size	For loads NOT in carrier sizes			Quantity Per Layer	Number of Layers	Total Pallets	Load Protection		
		Dimensions (mm)						Corner Boards	Banding	Stretch Wrap
		L	W	H						

Part Information						
MBUSI Service Part Number(s)	Dimensions (mm)			Weight (kg)	Part Photo	
	L	W	H			
Part Number					INSERT PART PHOTO HERE	
Part Name						
See Additional List On Separate Sheet						

Packaging Information							
Mercedes Service Part Label	Location	Quantity					
Primary Packaging	Description	Dimensions (mm)			Weight (kg)	Parts Per Item	Style
Interior Packaging / Damage	Description	Dimensions (mm)			Weight (kg)	Parts Per Item	Style
Interior Packaging / Damage	Description	Dimensions (mm)			Weight (kg)	Parts Per Item	Style
Interior Packaging / Damage	Description	Dimensions (mm)			Weight (kg)	Parts Per Item	Style

Packaging Photos	
INSERT PACKAGING PHOTOS HERE	
SERVICE MERCEDES BENZ PART NUMBER LABEL PHOTO	
SERVICE MBUSI MASTER LABEL PHOTO	

Packaging Approval			
Supplier		MBUSI Packaging Specialist	

## 1.2 Packaging Contacts

A MBUSI Packaging Engineer should be consulted /alerted regarding all packaging decisions from suppliers.

Contact Name	Email
Service Parts Packaging Contact	<a href="mailto:MBUSI-Service-Parts-Packaging@Mercedes-Benz.com">MBUSI-Service-Parts-Packaging@Mercedes-Benz.com</a>

## 1.3 Supplier Chargebacks

It is the responsibility of the supplier to ensure all parts are properly packaged and labeled. If incorrectly packaged parts are found, the supplier will be notified and given the opportunity to fix any issues. Failure to provide an effective solution agreed upon by the MBUSI Service Parts Packaging team will result in a supplier chargeback and the supplier will be billed for any rework associated. Damaged parts due to insufficient packaging will be returned or scrapped at MBUSI discretion. Concealed part damage due to insufficient supplier packaging will be charged back to the supplier.

## 1.4 General Packaging Requirements

Supplier packaging will be specified as “service individual” or “service bulk”, and should be packaged as specified by MBUSI Packaging Engineer and paid for in the purchase agreement from MB Purchasing (PMC) Germany. The part number quantity per container and part configuration must be agreed upon between MBUSI and the supplier. MBUSI production returnable containers should not be used as shipping containers for Service Parts unless approved by a Packaging Engineer.

*All parts should have internal dunnage to prevent damage or contamination, must be shake free (no part movement), and not be placed into oversized boxes. In general, all individually packaged parts must be able to be shipped as a single unit, in an environment similar to a standard mail carrier, and arrive at their destination damage free.*

### 1.4 General Packaging Requirements (cont.)

Parts requiring electro-static discharge (ESD) protection must be packed individually in translucent static shielding bags or wrap that will remain completely around the part until it arrives at the final customer. Primary and secondary packagings for such parts (inner bags/wraps and outer cartons) shall be labeled with static sensitive warning labels (quantity 1 label per tier of packaging) similar to the one shown below.



#### Individually Packed Service Parts

Individually packaged Service parts sent by the supplier should be ready to be sold to the end customer at the dealership level. In general all large, heavy, hazardous, and fragile parts (sheet metal, glass, brake rotors, airbags, etc.) are required to be individually service packaged by the supplier. Service packaged parts should be packed in expendable packaging, in units of one, and should be labeled with Mercedes-Benz service label(s) as seen in section four. MBUSI will, in some cases, package parts for the component supplier.

#### Bulk Packed Service Parts

Bulk packaging, contrary to individual packaging, is strictly used to transport components to MBUSI. Upon receipt, MBUSI will package the components for the end customer. Bulk packaged parts should be shipped in expendable packaging that can be thrown away upon receipt.

Palletized bulk items shall be banded to the pallet with no less than 4 plastic bands (2 each direction). Edge protectors shall be added to a load so that carton are not crushed due to excessive pressure from banding. Stretch wrap can be used to further protect the load but the load must be banded to ensure a safe shipment. Metal bands are not permissible.

## 2. Individual Packaging Methods

### 2.1 Cartons

All cartons must be free of print and color except when MBUSI has requested Mercedes-Benz approved prints (*See 2.2 Carton Print*). The supplier's name or logo shall **NEVER** appear on the end user package. Each carton shall be sealed, either with clear packaging tape or plastic banding, which allows it to be handled separately without opening during transportation. Colored tape IS NOT acceptable. Interior dunnage, where needed, should be used to ensure parts are **damage and shake free (no part movement)**.

A carton should be chosen such that it will protect the part within and be strong enough to not allow the part to puncture through the package during shipment.

**Large bulky parts or parts with a weight greater than 40 lbs. must be placed into, at minimum, double wall cartons.**

**Parts should fill at least 80% of the designated shipping carton.**

Crushed cartons, as a result of oversized packaging, are not acceptable and the supplier will be responsible for any rework associated with improper carton selection.

#### Packaging Closure Types:

- Tape:** Pressure sensitive clear 2" wide (minimum) PVC packaging tape. All (Preferred) tape must extend at minimum 2" beyond the length of the carton on both sides to ensure proper sealing.
- Banding:** Plastic banding can be used for large and bulky cartons but the bands must be securing the carton only. Do not band an unsealed carton to a skid as a closure method; if the band breaks the carton is not sealed. At minimum 2 bands must be used to secure the carton closed. Metal bands are not permissible.
- Wet Tape:** Liquid adhesive tape is acceptable for corrugated or chipboard cartons only. The tape should cover at least 80% of the sealing area.

### 2.2 Carton Print

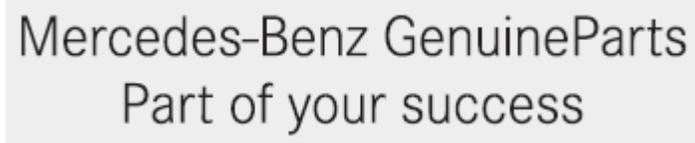
Based on service part volumes MBUSI may require print on cartons for end user packaged parts. The only allowed prints on Service Part cartons are the Mercedes-Benz promotional markings. Print should be scaled appropriately according to the height of the carton and are only necessary on cartons with a height greater than 4". In order to be approved to print the promotional markings, contact your Mercedes-Benz Packaging Engineer to complete the approval process. Once approval is completed you will be given a reference guide for specifications on size, locations of carton print, and any additional required markings.

#### Required Prints on cartons with height greater than 4"

Mercedes-Benz Promotional  
Marking  
  
(Front of Carton)



Mercedes-Benz Promotional  
Marking  
  
(Back of Carton)



### 2.3 Additional Carton Markings

Items which are sensitive may require appropriate symbols and language such as the glass goblet or "Do Not Drop" symbols. Indicator arrows showing upright position are also required on items which must be handled in a specific orientation.

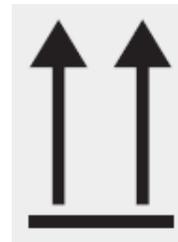
"Do not drop"



Glass goblet for  
fragile items



Arrows indicating correct  
carton handling orientation



## 2.4 Hazardous Materials / Dangerous Goods

All Service parts containing hazardous materials shall be properly classified per Code of Federal Regulations 49 (CFR 49), International Civil Aviation Organization (ICAO) / International Air Transport Association Dangerous Goods Regulation (IATA) Technical Instructions, and International Maritime Dangerous Goods (IMDG) regulations. The supplier is responsible for ensuring all hazardous material packagings are compliant with these regulations for shipping both domestically and internationally. The packaging materials used shall ensure that the part has sufficient damage protection. All parts classified as hazardous materials shall be packed into certified performance packaging as required by CFR 49, IATA and IMDG regulations. The supplier must keep all test reports for certified packaging and shall be made available upon MBUSI request.

Under **NO** circumstances will damaged hazardous materials be accepted upon delivery to MBUSI, including mutilation to the packaging itself. In addition, any package with noncompliant marking and labeling (covered, obscured, damaged, incorrect orientation) will also not be accepted. All packages must be shake free (no part movement inside of the package).

Suppliers shipping hazardous materials are considered hazmat employers and therefore shall provide record of training per CFR 49, IATA and IMDG regulations upon request from MBUSI.

Suppliers involved with the transport of dangerous goods to MBUSI must cooperate with any requested process audits for dangerous goods.

Prior to all initial shipments of dangerous goods to MBUSI, Supplier must provide the Packaging Engineer with details of all dangerous goods to be transported, including, but not limited to, UN number, proper shipping name, safety data sheet, technical information required to perform classification of part, etc).

### Accumulator Dangerous Goods Confirmation Letter

For suppliers who **ship shock, strut, damper, and/or prop types**, completion and return of this document, prior to the supplier's initial shipment, is mandatory. Please refer to document *SG 11* in the MBUSI Service Parts Supplier Guide to find this form. This letter is to serve as verification that shocks, struts, and props parts manufactured and sold to Mercedes-Benz US International Service Parts (MBUSI SP) by suppliers, have or have not been designed to meet all applicable exceptions within DOT, ICAO, and IMDG standards in reference to transportation of such parts via air, land, and sea.

## **Hazardous Material Marking and Labeling**

All packaging for parts classified as hazardous materials shall be marked and labeled per CFR 49, IATA and IMDG regulations.

### **UN Specification Marking**

Hazardous materials requiring UN certified packaging shall be properly marked as described in CFR 49, IATA and IMDG regulations. The carton manufacturer must print the marking on each container which certifies the box to be able to ship hazardous materials. The UN certification **MUST** be printed on the outside of the individual shipping container. Below is an example of a correctly formatted UN code:

 **4GV/X2.1/S/14/USA/+AQ0751**

## 2.5 Clear Bags

Small parts which are not sensitive, or parts which require protection from contamination can be packed into clear bags or bubble bags free of color. Parts placed into bags shall be visible from the exterior. An appropriate bag size shall be chosen so that the part fits entirely inside and the bag can be closed sufficiently. Bags shall have a positive seal in the form of clear packaging tape or heat seal, heat seal being the preferred method. All polybags must have a minimum thickness of 3 mil. When using bags, ensure that a thick enough bag is chosen so that parts will not cause a puncture during handling or transportation.

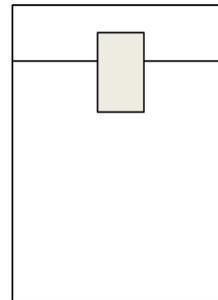
**Please Note:** Any Clear Bags that are damaged using the heat seal closure method, where the integrity of the bag is compromised, leaving the parts exposed, will not be accepted.

### Bag Positive Seal Closure Methods:

Heat Seal



2" PVC  
Tape



### 3. Package Testing Requirements

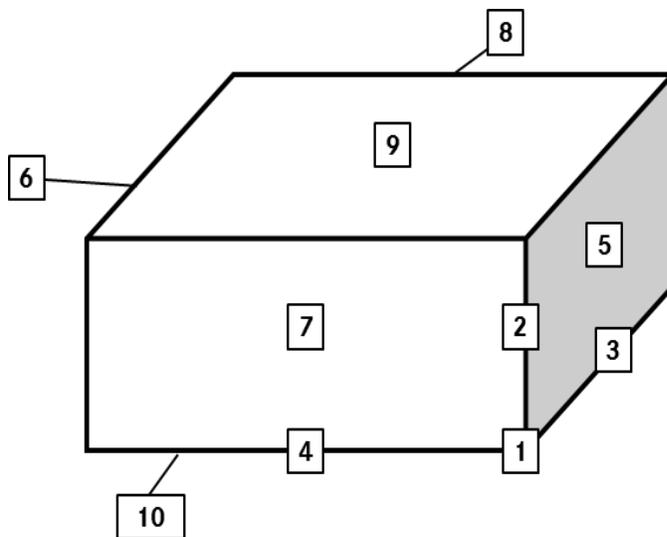
#### 3.1 Free-Fall Drop Testing for Individually Packaged Parts

In order to ensure individually packaged parts are protected properly in the designated shipping container, a drop test sequence should be performed according to ISTA-3A (International Safe Transit Association) standards. If damage is apparent at any point during the testing sequence, further testing should not be completed and additional protective packaging materials must be added to ensure the parts are shake free and protected adequately. Use the following chart to determine drop testing height:

**Note:** In the case that damage occurs and additional protective packaging is required and added, suppliers must re-start the Free-Fall Drop Test procedure.

Package Weight	Drop Height	Drops per Sequence
Equal to or less than 75 lbs.	30"	10
Greater than 75 lbs. but equal to or less than 100 lbs.	24"	10
Greater than 100 lbs. but equal to or less than 150 lbs.	18"	10

Ten free-fall drops should be performed on the package using the designated drop height. The drops should be performed on a flat/firm surface, ex. concrete, in the following sequence so that the package lands on the specific edge or face:



- 1) Edge of highest concern for damage
- 2) Shortest edge from drop corner
- 3) Medium edge from drop corner
- 4) Longest edge from drop corner
- 5) Smallest flat face
- 6) Opposite smallest flat face
- 7) Medium flat face
- 8) Opposite medium flat face
- 9) Largest flat face
- 10) Opposite largest flat face

## 4. Individual Part Labeling Requirements

### 4.1 Mercedes-Benz Label Format

All end user service packed parts must be individually labeled using Mercedes-Benz approved labels and software. Supplier labels shall never be present on the end user packaging. The Mercedes-Benz labels are designed to improve supplier and customer productivity by allowing effective and efficient capture of data for production counts, warehouse input/output, cycle counting, shipper generation, forwarding, freight transfer control, receiving and other inventory controls.

**Part Expiration Dates:** If your part has a shelf life then the expiration date **MUST** be printed onto the Mercedes-Benz label. The manufacture date must be located physically on the part and the expiration date must correlate with the date the part was manufactured. (Example of 2 year shelf life: Manufacture Date = 5/1/2022, Expiration Date = 5/1/2024)



The label **MUST** contain the following elements:

1. **Part description** in 4 languages (German, English, French, Spanish)
2. **Number** of parts contained in the package
3. **Quantity unit** of parts contained in the package
4. **Bar code** (part number represented in code 128)
5. Mercedes-Benz **part number**
6. **Country of origin** of the part
7. **Packaging date or batch number**
8. **Mercedes-Benz star and word mark**
9. **Supplier number**
10. **Name and address of manufacturer** (always Mercedes Benz AG)
11. **Part expiration date** (not shown, only applicable on shelf life parts)
12. **QR Code** for additional part information

## 4.2 Label Software

In order to print labels correctly formatted, VAS2000 label software is provided for download via the Mercedes-Benz Supplier Portal. The software will also require a font file to be installed. For installation help please refer to the [SG 10 VAS2000 Label Installation Guide](#) located in the Service Parts Supplier Guide. Both the font file and the install guide can be obtained by contacting your Mercedes-Benz Service Packaging Engineer.

The software will format and print labels according to the predetermined specifications by Mercedes-Benz Service and should be the go-to method. Carrying out regular updates of the master parts list file for the software, will allow the information to appear automatically after the part number is entered. The master list file can be downloaded via the Mercedes-Benz AG Supplier Portal.

Both the VAS2000 label software and the parts master list are updated at regularly. Suppliers are responsible for updating their VAS software and files regularly (once a month minimum or upon MBUSI request) to ensure label info is up to date and accurate.

## 4.3 Ordering Mercedes-Benz Labels

All Mercedes-Benz Service Part blank labels can be ordered in various print styles and must be ordered from an approved MBUSI supplier. Please see below for approved supplier contact information.

### LaPerla LLC

806 South 29<sup>th</sup> St. Ste C  
Harrisburg, PA 17111

Patrick Bowen  
Phone: (717) 561-1257  
Fax: (866) 885-4231  
E-mail: [Patrick@LaPerlaLLC.com](mailto:Patrick@LaPerlaLLC.com)  
E-Mail 2: [Carmen@LaPerlaLLC.com](mailto:Carmen@LaPerlaLLC.com)

Common Label Styles				
Supplier Part #	Style	Size	Labels Per Pack	Labels Per Box
B4LBLMrcd FF	Fan Fold Continuous Feed	4" x 1.5625"	5,000	20,000 (4 Packs)
MBB4SHEETED	Sheet (8.5x11")	12 labels per 8.5x11" sheet	3,000 (250 Sheets)	3,000 (250 Sheets)



## 4.4 Marking / Label Placement

### Bare Part

If the label is placed directly onto the genuine part, it must not damage the part or alter intended function. The label must fit completely on the bare part and have no overhang. All bare part labels must be placed on a flat surface so the bar code remains readable and must be placed in an area that is not visible once the part is installed onto the vehicle. The label must remain intact without damage during transportation.



### Clear Bags

Individual end user packaged parts in bags must be labeled with one label. The label shall be placed on the center of the package and shall not be placed over any packaging tape. Do not roll the polybag up and wrap a label around it. All labels shall be flat and the entire label readable.

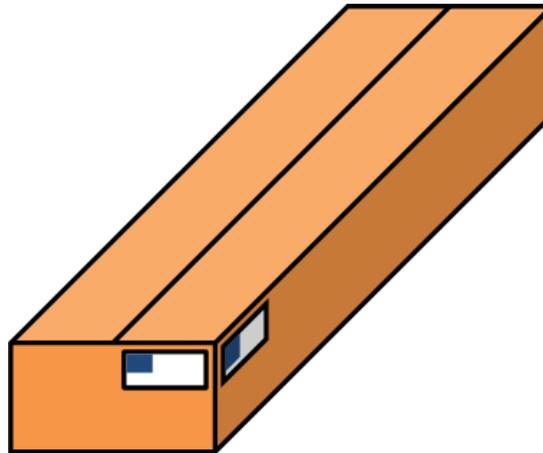


## **Individual Container**

All individual end user packages require, at minimum, one label. Do not place labels over packaging tape. The label should be placed parallel to the top left of the long edge of the container. If the available area is too small, then the label is to be applied at the top left of the lid flap.



If a carton exceeds 43” in length then it is to be marked with two identical labels. One label is affixed to the top left corner of the long side parallel with the long edge, and a second is applied at the same height on the top right corner of the adjacent end face.



## 5. Labeling Inbound Shipments

### 5.1 Master Label

All shipments containing the same part number require a master label to identify the shipment. Label size shall be approximately 4" x 6". Any skid or container must have two labels, on adjacent sides, showing the following information:

1. PO Number
2. Quantity of Parts
3. Part Number and Part Description
4. Supplier Code, Name, and Address

<b>MASTER LABEL</b>	
PO NO. <b>Block 1</b>	TOTAL QUANTITY <b>Block 2</b>
PART NO. AND DESCRIPTION <b>Block 3</b>	
SUPPLIER <b>Block 4</b>	

Example of a complete master label of common parts:

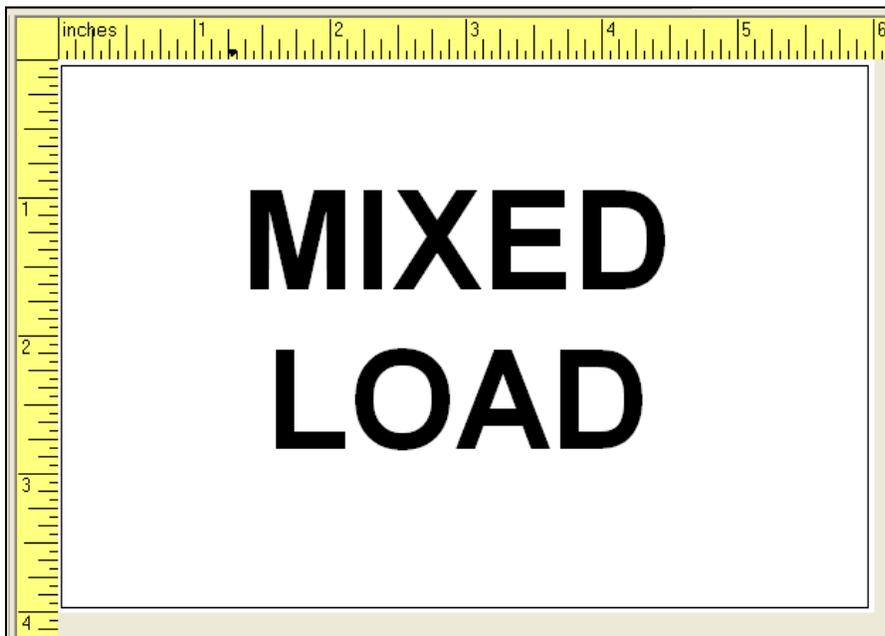
<b>MASTER LABEL</b>	
PO NO. <b>4500518101</b> 	TOTAL QUANTITY <b>120</b>
PART NO. AND DESCRIPTION <b>A164 241 09 34 9051</b> <b>STEERING WHEEL</b> 	
SUPPLIER <b>1551337</b> XYZ COMPANY, INC. TUSCALOOSA, AL 35401	

## 5.2 Mixed Load Labels

Mixed pallet/CO Carton loads are acceptable for low volume shipments; however the load should be cubed to best utilize the space on a trailer. If parts are mixed in CO Cartons they must be clearly separated by individual dividers or separating layers. Mixed loads layered in Mercedes-Benz CO Cartons must be organized by quantity of parts where the largest quantity is at the bottom of the CO Carton and the lowest quantity of parts is at the top.

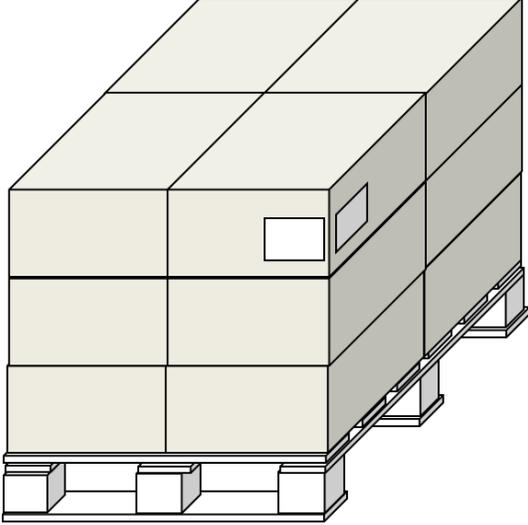
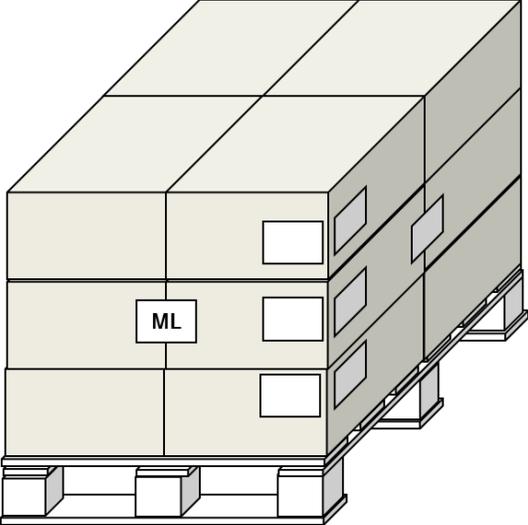
A mixed load which contains end user packaged parts on pallets **MUST** be stretch wrapped prior to placing the individual and mixed load labels so they can be easily removed.

All mixed loads must be identified with a “mixed load” label. The label contains only the “MIXED LOAD” heading and can be printed on the same (4” x 6”) stock as the individual labels. Two labels must be used, one on each adjacent side of the load.



### 5.3 Load Label Placement

Below is a guide on proper placement of shipping labels for end user packaged parts:

Load Type	Labels Required	Correct Label Locations
Load of Common Parts	Master Labels	
Mixed Load	Individual Labels “Mixed Load” Labels	 <p data-bbox="820 1648 1421 1722">**Pallet must be stretch wrapped prior to placing ALL required mixed load labels**</p>

## 5.4 Label Definitions

Description – MBUSI Service Parts part description

Part Number – Human readable MBUSI Service Parts part number

Part Number Bar Code – Barcode representation of MBUSI Service Parts part number

Purchase Order – Human readable purchase order number designated by MBUSI

Purchase Order Bar Code – Barcode representation of purchase order number, serial number, and order quantity combined

Supplier – Supplier code, name, and address

Required Field Print Heights on Label	
<b>Block 1</b>	
Purchase Order (Human Readable)	0.2" (5mm)
Purchase Order (Bar Code)	0.5" (13mm)
Quantity (Human Readable)	0.5" (13mm)
Quantity (Bar Code)	0.5" (13mm)
<b>Block 2</b>	
Part Number (Human Readable)	0.5" (13mm)
Part Number (Bar Code)	0.5" (13mm)
<b>Block 3</b>	
Description	0.2" (5mm)
<b>Block 9</b>	
Supplier Code	0.2" (5mm)
Supplier Name	0.1" (2.5mm)

### 5.5 Bar Code Specifications

#### Purchase Order Bar Code

In the Label, the bar code in Block 1 shall consist of the following fields, concatenated together:

- The PURCHASE ORDER data identifier (15K)
- The PURCHASE ORDER
- The Quantity data identifier (Q)
- The Quantity

These three fields are to be combined into a single bar code so that they can be read with a single scan. For example, if the PURCHASE ORDER is C3F3003115 and the Quantity is 125, the barcode would contain “15KC3F3002115S001Q125” in a single barcode.

#### Part Number Bar Code

The part number shall use the following spacing:

In Human-readable Area	In Bar Code
A000 111 22 33	A0001112233
N123456 123456	N123456123456
A000 111 22 33 5555 ← Color Code	A0001112233 5555
N123456 123456 5555	N123456123456 5555
... ... ... ... ...	... ... ... ... ...
1234567890123456789012345	1234567890123456789012345

## 5.6 Bar Code Symbology

Bar codes shall be Code 128 symbology and shall conform to ANSI/AIM BC4-1999 International Symbology Specification for Code 128. Additional specific requirements for the Parts Identification Label are as follows:

### Code Configuration

Barcodes shall consist ONLY of upper case alphabetic characters and numbers.

### Check Characters

Non alpha-numeric characters are not permitted in the human legible form of the barcode.

### Code Density and Dimensions

The bar heights shall be 0.5 inch (13 mm). For each bar code symbol, the narrow element width ("X dimension") shall be within the range of 0.013 to 0.017 inch (0.33-0.43 mm). For optimum scanning, the leading and trailing quiet zone shall be a least 0.25 inch (6.4 mm). Inter-character gap width shall be the same as the width of the average narrow elements, plus or minus the element width tolerance. See ANSI/AIM BC4-1999 for definition of tolerance, element widths and quiet zones.

### Reflectivity and Contrast

Reflectivity and contrast shall be measured at B900 nanometers. Symbols shall comply with all optical specifications of ANSI/AIM BC4-1999, and shall meet at least one of the following contrast requirements:

- (1) Print Contrast Signal  $\geq 75\%$
- (2) Minimum Reflectance Difference  $\geq 37.5\%$ , or
- (3) ANSI Print Quality Grade shall **NOT** fall below that stated in this document.

### Printing Methods

The acceptable methods of printing Bar Code Labels are as follows (In order of preference):

- (1) Thermal Transfer
- (2) Laser
- (3) Direct Thermal

\* Dot Matrix Labels will not be accepted.

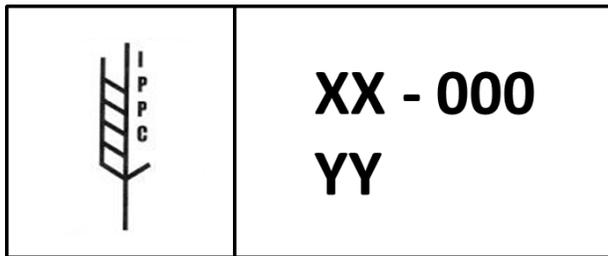
## 6. Pallet Requirements

### 6.1 General Pallet Requirements

Pallets must be double-face non-reversible (specific top face and specific bottom face which are not interchangeable). All pallets must be four way entry to allow lift trucks to enter from all sides. Broken pallets in any form are NOT acceptable and the supplier will receive a chargeback for any rework associated with the transfer of parts to a suitable pallet.

Load Securing - All parts shipped on pallets must be secured with plastic banding, 2 on each side (total 4). Edge protectors are required for all pallets of parts that will be delivered to the end user. Metal bands are not permissible.

Heat Treated Pallets - All pallets and wood packaging materials regardless of style must be heat treated and include the heat treat indication stamp. This stamp (example below) shall be applied to opposite pallet side support block (smooth surface only) in dark blue or black ink. All markings shall be completely legible and clearly visible.



**XX:** ISO country code

**000:** Unique number assigned by the National Plant Protection Organization

**YY:** "HT" for heat treated wood

Wood Infestation – Infestation of any wood boring insects such as termites or powderpost beetles is not permitted.

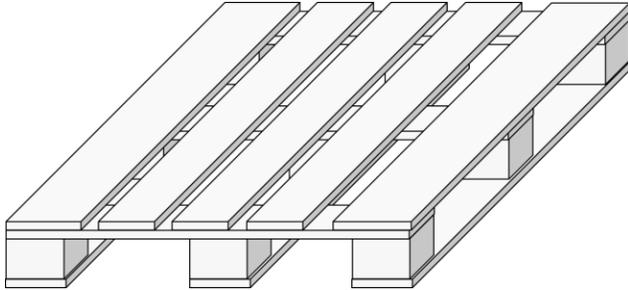
### 6.2 General Pallet Construction

- Blocks must be flush with top deckboards.
- There should be no less than five top deckboards per pallet. Spacing between each deckboard should be 3"- 4".
- Only one split per board is allowed if nails are used during construction.
- All block shall have no splits or cracks.
- No less than three bottom deck boards. Bottom deckboards shall be flush with the block.

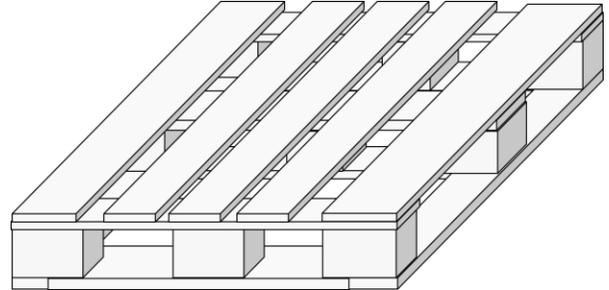
### 6.3 Acceptable Pallet Styles

Shown below are the **ONLY** acceptable pallet styles, which can be used as a load carrier for enduser packaged parts. To use any other style of pallet, approval must be given by a MBUSI Packaging Engineer.

**EURO Style Block**

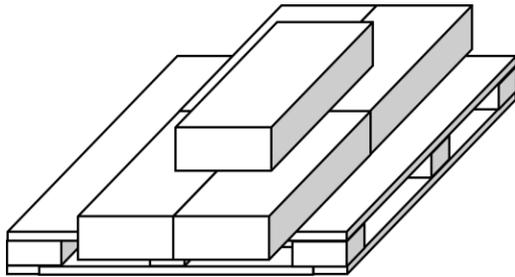


**Perimeter Base Block**

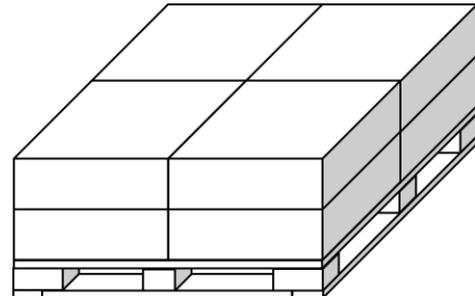


### 6.4 Pallet Utilization and Load Stacking

Any parts shipped to MBUSI on a pallet must utilize the surface of the pallet such no overhang or underhang occurs, and that a load is even so that it can be stacked. A correct size pallet must be chosen to protect the parts from damage during shipment but also allows the parts to be stored without causing damage.



**NOT Acceptable**



**Acceptable**



## 7. Mercedes-Benz Returnable CO Cartons

### 7.1 General Information

The Mercedes-Benz universal CO carton load carrier packaging is the preferred carrier method for individually packaged components, which are shipped from supplier locations inside the United States. Parts should be placed in CO cartons such that the labels are facing the front of the CO carton (side with half folding door labeled 'FRONT'). Generally, parts should be placed into the smallest CO carton size that they fit in. Do not mix part numbers in CO cartons unless they are clearly marked with separating layers and appropriate labeling.

**\*Please ensure when erecting the CO carton that the half-folding door of the inner-tri wall aligns with that of the outer box.**

The top layer of parts in a CO carton shall not extend above the inside dimension of the CO carton. When shipping a CO carton, ensure that all CO carton doors and lids are secured and closed before placing them onto a shipping container. The same labeling rules apply to CO cartons as to palletized loads—master labels must be placed adjacently in relative to the front left of the CO carton.

When shipping stacked CO cartons, ensure orientation is consistent (ex: all doors facing the same direction). CO cartons should be carefully stacked to ensure the pallet's corner blocks meet the thick vertical structural components on the inside of the CO carton.



MB - Name	CO 830	CO 830/2
Number of Packages per Transport	72 (HC-Container)	36 (HC-Container)
Height Outside	830 mm	830 mm
Length Outside	1145 mm	1145 mm
Width Outside	995 mm	1990 mm
Height Inside	695 mm	690 mm
Length Inside	1045 mm	1065 mm
Width Inside	915 mm	1910 mm
Tare Weight	25 kg (including pallet)	38 kg (including pallet)
Load Capacity	700 kg	700 kg
Superimposed Load (23C; 50% / 20C; 90%)	7000/3500 kg	7000/3500 kg

## 7.2 Requesting CO cartons

In order to request Mercedes-Benz CO cartons please contact the following person(s):

Contact Name	Contact Position	Phone	Email
Gail Fikes	Transportation Specialist	(205) 462-5821	<a href="mailto:Gail.Fikes@mercedes-benz.com">Gail.Fikes@mercedes-benz.com</a>
Cody Minor	Transportation Specialist	(205) 507-3446	<a href="mailto:Cody.Minor@mercedes-benz.com">Cody.Minor@mercedes-benz.com</a>
Danny Fennimore	Transportation Specialist	(205) 219-7758	<a href="mailto:Daniel.fenimore@mercedes-benz.com">Daniel.fenimore@mercedes-benz.com</a>

Please provide a request at minimum of a one-week lead-time with the following information:

1. Supplier name
2. CO carton Type Requested
3. Quantity of CO cartons Requested
4. Ship-to Location

If you have a schedule of build that requires CO cartons to be supplied on specific dates, please provide that schedule with as much detail as possible.

## 7.3 Damaged CO Cartons

Under no circumstances should a damaged CO carton be used to ship parts to MBUSI Service Parts. In the event that CO cartons are unusable, or structurally compromised in any way, they must be disposed of. Should a CO carton have a damaged lid only, do not dispose of this box, as lids are not a structural component of the CO carton.