

TG AUTOMOTIVE SEALING KENTUCKY, LLC (TGASK) LABEL REQUIREMENTS

INTRODUCTION: This standard document provides guidelines for the printing and placement of Shipping / Parts Identification Labels. The intent of the labels is to improve both the supplier and customer productivity by allowing effective and efficient capturing of data for inventory and production control.

It is the responsibility of the supplier to provide bar coded labels that meet these specifications. If product is received AFTER JULY 1, 2007 without bar code labels or with labels not meeting specifications TGASK will debit \$50.00 for each label.

Label dimensions should be in accordance with the dimensions shown on the enclosed examples and stated in the written guidelines. All of the enclosed examples are for illustrative purposes only, and may not be to scale for bar code print quality standards.

Package Label

TGASK requires that all individual packs (i.e. box/package of items) have clear, identifiable labels affixed to them in an easily accessible and consistent location in accordance with Automotive Industry Action Group (AIAG) Label Standards. All labels SHALL be a minimum size of 4.0 inches (102 mm) high by 6.5 inches (165 mm) wide. All Package Labels SHALL comply with TGASK Package Label Standards included in this appendix.

Master Label

TGASK requires that the total contents of a multiple pack of common items be identified with a Master Label. The label SHALL be located in an easily identifiable and accessible location on the pallet of items in such a manner that when the pack is broken apart, the label is discarded (i.e. hang the label from the banding or attach to stretch wrap). The words "Master Label" SHALL be printed in bold with letters a minimum of 0.8 inch (21 mm) high. The placement of the words SHALL be to the right of the purchase order and lot number fields (refer to the enclosed example). The quantity SHALL be the total in all of the sub-packs. All Master Labels SHALL be a minimum size of 4.0 inches (102 mm) high by 6.5 inches (165 mm) wide and comply with TGASK Standards included in this document.

NOTE: Larger labels with the words "Master Label" across the top will also be allowed as long as they comply with the standards included in this document.

PACKAGE LABEL STANDARDS

Data Area Characteristics

The Part Number, Unit of Measure/Quantity, Purchase Order, Kanban and Lot Number SHALL be included on each Package Label in the designated areas and SHALL be displayed in both human readable characters and bar code symbols. The Supplier Name, Description, Date and Supplier Number SHALL be displayed in human readable characters in the designated areas.

Data Areas and Titles

There are nine (9) required data areas for each Package Label: Part Number, Unit of Measure/Quantity, Supplier Number, Lot Number, Supplier Name, Kanban Number, Description, Date and Purchase Order Number. These data areas SHALL be boxed with their respective titles in the upper left hand corners, as shown in the enclosed examples. Outer border lines are optional. When using vertical separation lines, the bar coded data field SHALL be clearly separated from the vertical lines by at least 0.4 inch (10 mm). Titles SHOULD be printed in .01 inch (2.5 mm) high

letters.

The data area titles are: PART NUMBER, UNIT OF MEASURE/QUANTITY, PURCHASE ORDER NUMBER, LOT NUMBER, KANBAN, DESCRIPTION, DATE and SUPPLIER NUMBER.

Data Identifiers

A Data Identifier SHALL be used. It immediately follows the start character of the bar code symbol and is used to identify the information to follow (i.e. the Data Identifier is "encoded" in the bar code representation). The Data Identifier SHALL be in human readable characters under the title for the appropriate data area and SHALL NOT be included in the human readable interpretation of the bar code symbols. TGASK requires that the following Data Identifiers SHALL be used in labels shipped to (company name): 1.) Part Number (P), 2.) Unit of Measure/Quantity (U), 3.) Purchase Order Number (R), 4.) Lot Number (L), and 5.) Kanban (K) on a Package Label.

Part Number

The human readable Part Number SHALL be bold and a minimum of 0.5 inch (13 mm) high. The bar code symbol SHALL be directly below the human readable characters, a minimum of 0.5 inch (13 mm) high, and contain the Data Identifier (P). The Part Number SHALL contain only the letters A - Z and the numbers 0 - 9 (no other characters allowed) in both the human readable and bar code representations. This number is typically a 10 digit number designated by TGASK

Unit of Measure/Quantity

Unit of Measure will be a two digit alpha numeric field which will be designated on the purchase order. The human readable Unit of Measure/Quantity SHALL be bold and a minimum of 0.5 inch (13 mm) high. The barcode symbol SHALL be directly below the human readable characters, a minimum of 0.5 inch (13 mm) high, and contain the Data Identifier (U). The maximum length is nine (9) characters plus the Data Identifier (U). The first two characters must be the unit of measure followed by the quantity. (No space between Unit of Measure and Quantity.) The human readable and barcoded quantity SHALL accurately reflect the number of items (pieces, pounds, etc.) that is actually in the box/package.

Purchase Order

Purchase Order Number must match the purchase order designated on the Vendor Release Schedule. (Blanket Order Number will not be acceptable.) The human readable Purchase Order Number SHALL be bold and a minimum of 0.2 inch (5 mm) high. The bar code symbol SHALL be directly below the human readable characters, a minimum of 0.5 inch (13 mm) high and contain the Data Identifier (R). The maximum length is nine (9) characters plus the Data Identifier (R) and typically a 4 or 5 digit number designated by TGASK on the vendor release schedule.

Lot Number

Each shipping container or pack SHALL contain a unique lot number which is related to the supplier's batch number. If the supplier chooses to mix lot numbers in the same container, a new lot number will be assigned for this container and will be tracked by the supplier. The same lot number may appear on more than a container or shipment if that container or shipment is part of the same production batch. For suppliers that do not produce in batch lots, then a unique lot number will be assigned for each shipment. Lot Numbers SHALL be assigned by the supplier, not the customer, be completely traceable and SHALL Not be repeated. The human readable lot number SHALL be bold and a minimum of 0.2 inch (5 mm) high. The bar code symbol shall be located directly below the human readable characters, a minimum of 0.5 inch (13 mm) high, and contain the appropriate Data Identifier (L). The maximum length SHALL NOT exceed nine (9) alphanumeric characters plus the Data Identifier.

Kanban Number

The human readable Kanban Number SHALL be bold, a minimum of 0.8 inch (21 mm), located to the right of the quantity and typically a 4 ~ 6 digit number designated by TGASK. The barcode symbol SHALL be located directly below the human readable characters, a minimum of .5 inch (13mm) high, and contain the appropriate data identifier (K). The kanban number will be designated on blanket order or purchase order.

Supplier Name

The Supplier Name, City, State and Zip Code SHALL be directly below the Serial Number bar code symbol and SHOULD be 0.1 inch (2.5 mm) high.

Description

The human readable Product Description SHALL be bold, a minimum of 0.2 inch (5 mm) and located directly below the Kanban Number. The human readable Product Description may use up to two (2) lines of text and SHALL be designated by the Customer.

Date

The human readable date SHALL be bold, a minimum of 0.1 inch (2.5 mm) and located directly below the Product Description. The date SHOULD represent the production date of the raw material or component.

MASTER LABEL STANDARDS**Data Area Characteristics**

The Part Number, Quantity/Unit of Measure (cumulative), Purchase Order Number, Lot Number and Kanban Number SHALL be included on each Master Label in the designated area, displayed in both human readable characters and bar code symbols. The Supplier Name, "MASTER LABEL" text SHALL be displayed in human readable characters in the designated areas.

Data Areas and Titles

There are six (6) required data areas for each Master Label: Part Number, Unit of Measure/Quantity, Purchase Order Number, Lot Number and Kanban Number, Supplier Name, and "MASTER Label" text. These data areas SHALL be boxed with their respective titles in the upper left hand corners, as shown in the enclosed examples. Vertical separation lines and outer border lines are optional. In the absence of vertical separation lines, human readable data and barcoded data in adjoining fields SHALL be clearly separated by at least 0.4 inch (10 mm). If vertical separation lines are used, the bar coded data fields SHALL be clearly separated from the vertical lines by at least 0.4 inch (10 mm). Titles SHOULD be printed in 0.1 inch (2.5 mm) high letters. The data area titles are: Part Number, Unit of Measure/Quantity, Purchase Order Number, Lot Number, and Kanban Number.

Data Identifiers

A Data Identifier SHALL be used. It immediately follows the start character of the bar code symbol and is used to identify the information to follow (i.e. the Data Identifier is "encoded" in the bar code representation). The Data Identifier SHALL be in human readable characters under the title for the appropriate data area and SHALL NOT be included in the human readable interpretation of the bar code symbols. TGASK requires that the following Data Identifiers SHALL be used in labels shipped to (TGASK): 1.) Part Number (P), 2.) Unit of Measure/Quantity (U), 3.) Purchase Order (R), 4.) Lot Number (L), and 5.) Kanban (K) on a Package Label.

Part Number

The human readable Part Number SHALL be bold and a minimum of 0.5 inch (13 mm) high. The bar code symbol SHALL be directly below the human readable characters, a minimum of 0.5 inch (13 mm) high, and contain the Data Identifier (P). The Part Number SHALL contain only the letters A - Z and the numbers 0 - 9 (no other characters allowed) in both the human readable and bar code representations and typically a 10 digit number designated by TGASK).

Unit of Measure/Quantity

Unit of Measure will be a two digit alpha numeric field which will be designated on the purchase order. The human readable quantity SHALL be bold and a minimum of 0.5 inch (13mm) high. The bar code symbol SHALL be directly below the human readable characters, a minimum of 0.5 inch (13mm) high, and contain the Data Identifier (U). The maximum length is nine (9) numeric characters plus the Data Identifier (U). The first two characters must be the Unit of Measure followed by the Quantity. (No space between Unit of Measure and Quantity.) The quantity for a Master Label SHALL indicate the total of all of the packages (I.e. 10 boxes with 20 each would show a quantity of 200 on the Master Label).

Purchase Order

Purchase Order Number must match the purchase order designated on the Vendor Release Schedule. (Blanket Order Number will not be acceptable.) The human readable Purchase Order Number SHALL be bold and a minimum of 0.2 inch (5 mm) high. The bar code symbol SHALL be directly below the human readable characters, a minimum of 0.5 inch (13 mm) high and contain the Data Identifier (R). The maximum length is nine (9) characters plus the Data Identifier (R) and typically a 4 or 5 digit number designated by TGASK on the vendor release schedule.

Kanban Number

The human readable Kanban Number SHALL be bold, a minimum of 0.8 inch (21 mm), located to the right of the quantity and typically a 4 ~ 6 digit number designated by TGASK. The barcode symbol SHALL be located directly below the human readable characters, a minimum of .5 inch (13mm) high, and contain the appropriate data identifier (K). The kanban number will be designated on blanket order or purchase order.

Lot Number

Each shipping container or pack SHALL contain a unique lot number which is related to the supplier's batch number. The same lot number may appear on more than a container or shipment if that container or shipment is part of the same production batch. For suppliers that do not produce in batch lots, then a unique lot number will be assigned for each shipment. Lot numbers SHALL be assigned by the supplier, not the customer, be completely traceable and SHALL not be repeated. The human readable Lot Number SHALL be bold and a minimum of 0.2 inch (5 mm) high. The bar code symbol shall be located directly below the human readable characters, a minimum of 0.5 inch (13 mm) high, and contain the appropriate Data Identifier (L). The maximum length SHALL NOT exceed nine (9) alphanumeric characters plus the Data Identifier. Both lot numbers should have their own master label if the supplier chooses to mix Lot Numbers on the same pallet.

Supplier Name

The Supplier Name, City, State and Zip Code SHALL be directly below the Serial Number bar code symbol and SHOULD be 0.1 inch (2.5 mm) high.

"Master Label" Text

The human readable "Master Label" text SHALL be bold, a minimum of 0.8 inch (21 mm) and located to the right of the Purchase Order and Lot Number fields (refer to sample Master Label - Figure #3 for placement).

LABEL LOCATION AND PROTECTION**Label Location**

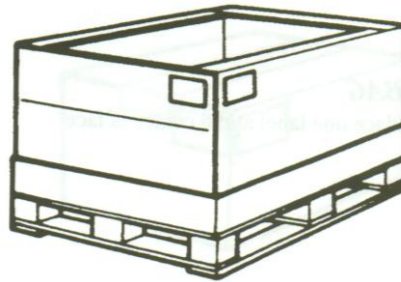
The bottom edge of the label SHOULD be parallel to the base of the package / container. The bottom edge of the label SHOULD be at least 20 inches (508 mm) from the bottom of the container whenever possible to make the label easily accessible for scanning. In most cases, two labels per package are required, refer to the label location examples for the location of labels for various types of packages. Strapping and taping SHALL NOT obstruct the label. If the specified label cannot be affixed to the package / container because of container size or design, special arrangements will be required by the Customer and Supplier.

Label Protection

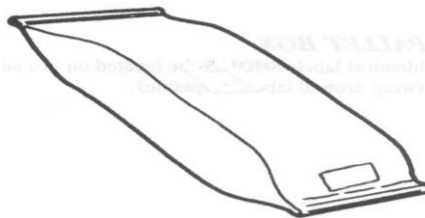
Label protection against moisture, weathering, abrasion, etc. may be required in harsh environments and is encouraged whenever practical. Laminates, sprays, window envelopes, and clear plastic pouches are examples of possible protection methods. In choosing any protection method, care SHALL be taken to assure the protected labels meet reflectivity and contrast requirements and can be scanned with non-contact scanning devices.

LABEL LOCATIONS ON VARIOUS SHIPPING PACKS**Pallet Box**

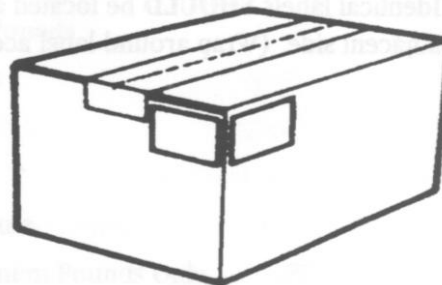
Identical labels SHALL be located on two adjacent sides, (wrap around labels acceptable).

**Bag**

Place one label at one end of the bag as shown.

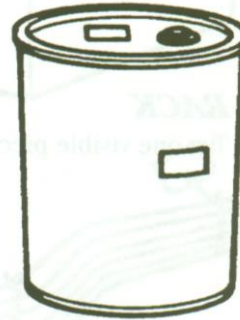
**Box or Carton**

Identical labels SHALL be located on two adjacent sides. (Wrap around labels acceptable). The upper edges of the labels shall be as high as possible up to 20 inches from the bottom of carton.



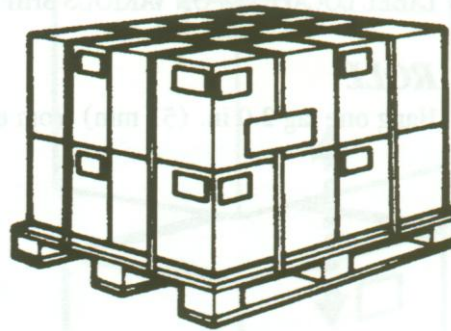
Drums, Barrels, Buckets or Canisters

Identical labels SHOULD be located on the top and near the center of the side.



Cartons on a Pallet

Each carton SHALL be individually labeled as described above. One Master Label may be used.



SIZE AND MATERIALS

Labels

The minimum label size SHALL be 4.0 inches (102 mm) high by 6.5 inches (165 mm) wide. The label paper SHALL be white in color with black printing. Adhesive types can be pressure sensitive or dry gummed as long as adherence to the package is assured and application is wrinkle-free.

Tags (Hang Tags)

The tag size SHALL be the same as for a label plus the material necessary to allow fastening. The tag SHALL be durable enough to assure readability at its destination.

QUALITY ASSURANCE REQUIREMENTS

An essential aspect of the bar code system is Quality. When labels cannot be scanned, the advantages of bar coding are lost.

TGASK has made bar coded labels on raw materials a vital part of its manufacturing process. It is the responsibility of its Suppliers to insure that labels meet TGASK and industry standards. It is TGASK's responsibility to alert Suppliers of persistent label non-compliance.

Regular audits will be performed for label content, print quality and the physical placement of labels to ensure continued success of the process.

TGASK will have equipment available to verify that the bar code symbols meet AIAG

standards.

The Print Quality Guideline in AIAG B-1, section 4.4, specifies the Supplier SHALL be responsible for providing a minimum shipping label symbol grade of 1.5 when the label reaches TGASK and a 2.5 (or higher) SHOULD be maintained at the time of printing.

BAR CODE SYMBOLOGY

Bar codes SHALL be Code 39 symbology and SHALL conform to the Bar Code Symbology Standard AIAG B-1.

Code Configuration

TGASK bar codes SHALL NOT contain any special characters other than the letters A through Z and the numbers 0 through 9 in bar coded representations. Examples of unacceptable characters would be spaces or dashes.

Check Digits

Check Digits SHALL NOT be added to the bar codes or human readable interpretation.

Code Density and Dimensions

The bar heights SHALL be 0.5 inch (13 mm). For each bar code symbol, the average width of the narrow elements SHALL be within the range of .013 to .017 inch (0.33 - 0.43 mm). The ratio of the average width of the wide elements to the average width of the narrow elements SHALL be 3 : 1, with an allowable range of 2.8 : 1 to 3.2 : 1. For optimum scanning, the leading and trailing quiet zone SHALL be at least 0.25 inch (6.4 mm). Intercharacter gap width SHOULD be the same as the width of average narrow elements, plus or minus the element width tolerance. Refer to AIAG B - 1 for more information on 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 AIAG B - 1, and SHALL meet at least one of the following Contrast requirements:

- 1.) Print Contrast Signal greater than or equal to 75%
- 2.) Minimum Reflectance Difference greater than or equal to 37.5%
- 3.) ANSI Print Quality Grade SHALL NOT fall below that stated in the 'Quality Assurance Requirements' in this document.

If you have any questions about TGASK's Labeling Standards, please contact the following person:






Steven C. Scott
501 Frank Yost Ln
Hopkinsville, KY 42240

Phone: (270) - 475 - 1441
Fax: (270) - 475 - 1494

Sample Label Layout Figure 1

PART NO. (P)	
UOM / Qty (U)	KANBAN (K)
PURCHASE ORDER (R)	DESCRIPTION (Part Name) (Second line)
LOT # (L)	DATE 08/10/00
(Supplier Name)	SUPPLIER NUMBER (Your vendor number)

Sample Package Label Figure 2

PART NO. (P) 1205000080	
	
UOM / Qty (U) EA500	KANBAN (K) 2112
	
PURCHASE ORDER (R) 52904	DESCRIPTION (Part Name) (Second line)
	
LOT # (L) 1003003	DATE 08/10/00
	SUPPLIER NUMBER (Your vendor number)
(Supplier Name)	

Sample Master Label Figure 3

PART NO. (P) 1205000080 	
UOM / Qty (U) EA500 	KANBAN (K) 2112 
PURCHASE ORDER (R) 52904 	MASTER LABEL
LOT # (L) 1003003  (Supplier Name)	

I understand the above label requirements and agree to the charges for nonconforming labels/shipments to TG Automotive Sealing Kentucky, LLC

Supplier Name	
Supplier Location	
Authorized Signature	
Position	
Date	