

Packaging

- 1) In regards to packaging, the main focus of (Astemo)BK is to ensure that all parts will be protected against damage and contamination during transportation and storage at the most economic value possible. Returnable packaging shall be used where applicable. (Astemo)BK may assist with the packaging design and development, but (Astemo)BK is not responsible or liable for the performance of the final pack except when (Astemo)BK supplied packaging is selected.

For packaging testing standards, refer to ASTM standard D4169-05

WWW.ASTM.ORG

- 2) The first PPAP shipment shall be shipped to (Astemo)BK in mass production style packaging. A completed (Astemo)BK "Packaging Approval Sheet" (PMFORM- 40) (last two pages of this document) must be attached to the package. The complete form shall also be sent to the Supplier's Supplier Quality Assurance (SQA) contact at (Astemo)BK noting the Estimated Time of Arrival (ETA). When the packaging is received at (Astemo)BK, it will be evaluated by all involved departments for approval. If the package design is rejected, the packaging design must be improved, based on mutual agreement between (Astemo)BK and the supplier. If the supplier is unable to ship in mass production style packaging for the first PPAP shipment, they must obtain a deviation from the SQA contact.
- 3) Any hand-held container must weigh under 35 pounds.
- 4) Approved returnable packaging must be hot stamped with the owners name and address and be equipped to meet (Astemo)BK labelling requirements. Any damaged returnable packaged shall be returned to the owner by the regular freight route and labeled as "Damaged".
- 5) All returnable pallets (plastic) shall be 48 in. x 45 in. 4 entry and contain the name and address of the company that owns the pallet by either hot stamp or metal plate.
- 6) The maximum allowable height of any pack (pallet/boxes/containers, etc.) shall be 48 inches. The maximum width is 48 inches and the maximum length is 45 inches unless a larger than specified pack is approved by (Astemo)SQA contact.
- 7) All pallets shall be labeled with a master pallet label. See master label example #1 on page 3.
- 8) All boxes on a pallet shall be labeled with the complete scannable (Astemo)BK drawing number (Part Number), Delivery order number, quantity, and lot code data from the manufacturer. The serial/lot code number provided should be comprised of data needed by the manufacturer for lot traceability in the event of a quality issue. This serial/lot code should also be included on the packing list. (See packing list example #4 on page 5.) OEM part number shall be added to all individual totes or boxes when drawing has callout seen just below for pass thru items.
This is a pass thru component, please refer to sub supplier handbook Section 11 for packaging label requirement
- 9) For electronic parts each reel, pack, sealed or ESQA bag, stick, etc. shall be labeled with (Astemo)BK drawing number, quantity, and manufacturer lot data as outlined in #8 above.
- 10) A pallet containing more than one part shall be labeled with a "Mixed Load" label and a label showing the quantity of each part number on the pallet.
- 11) All parts shipped on a pallet must be stacked and shipped in a full layer (no pyramiding) to allow double-stacking for the most efficient use of space. If the packaging cannot be double-stacked, it is the responsibility of the supplier to place "DO NOT STACK" labels on the top and all four sides of pallet.
- 12) If there is to be any type of packaging change made, a revised (Astemo)BK "Packaging Approval Sheet" must be submitted by the Supplier to the (Astemo)BK SQA contact along with a sample pack for inspection. The new submission will be inspected and approved by the same process as the original. (Refer to #2 above)
- 13) It is the supplier's responsibility to transmit an accurate ASN (Advanced Shipping Notice) no later than 30 minutes after every shipment leaves the supplier's facility. All suppliers have the capability to transmit an ASN either by EDI or by Hitachi's SupplyWeb. Any shipment arriving at BK without an ASN will result in a delivery score deduction which will negatively affect the supplier rating. All deductions will require corrective action stating cause and countermeasure. Any issues must be escalated to Hitachi-BK PC&L before the shipment arrives.

(Astemo)BK Alternative Packaging Requirements

Alternative (Expendable) Containers

Any time returnable packaging is chosen, there must be an approved expendable alternative. If the approved returnable package is not available at the vendor's location, this alternative packaging must be used. A lack of returnable packaging is not a legitimate reason to miss shipment.

Alternative Pallet

The size and style of wooden pallets may vary and will depend on the size and weight of the parts. If pallet is full size, it shall be 48" W x 45" L x 5" H and be 4 way entry, notched stringer style.

(Astemo)BK Package Label Requirements

Bar Coding

Label Format

Bar code shall be Code 39 symbology and based on the AIAG Standard.

Bar codes shall be directly below all human readable characters.

No check digits shall be used with bar codes or human readable data

Data identifiers shall be included in bar codes.

Valid Data Identifiers

- part number (P)
- quantity (Q)
- vendor number (V)
- **delivery order number (D)**
- serial number/lot code
 - individual pack (S)
 - master load (4S)
 - mixed load (5S)

Required Dimensions for Master Label (see example #1 on page 3)

- human readable heights
 - part number height shall be 0.5 inch (13 mm)
 - **D.O. (Delivery Order Number) shall be 0.5 inch (13 mm)**
 - vendor number height shall be 0.2 inch (5 mm)
 - serial number height shall be 0.2 inch (5 mm)
 - vendor name height shall be 0.1 inch (2.5 mm)
- bar heights
 - all bar heights shall be 0.5 inch (13 mm)
- average bar width
 - narrow elements shall conform to range of .013 to .017 inch (0.33 to .043 mm)
 - ratio of wide to narrow elements shall be 3:1, with acceptable range of 2.81:1 to 3.2:1
- quiet zone
 - leading and trail zones should be at least 0.25 inch (6.4 mm)
- interchange gap
 - width should be same as average narrow element bar width.
- label size
 - 4 inches (102 mm) high by 6 inches wide (153 mm)

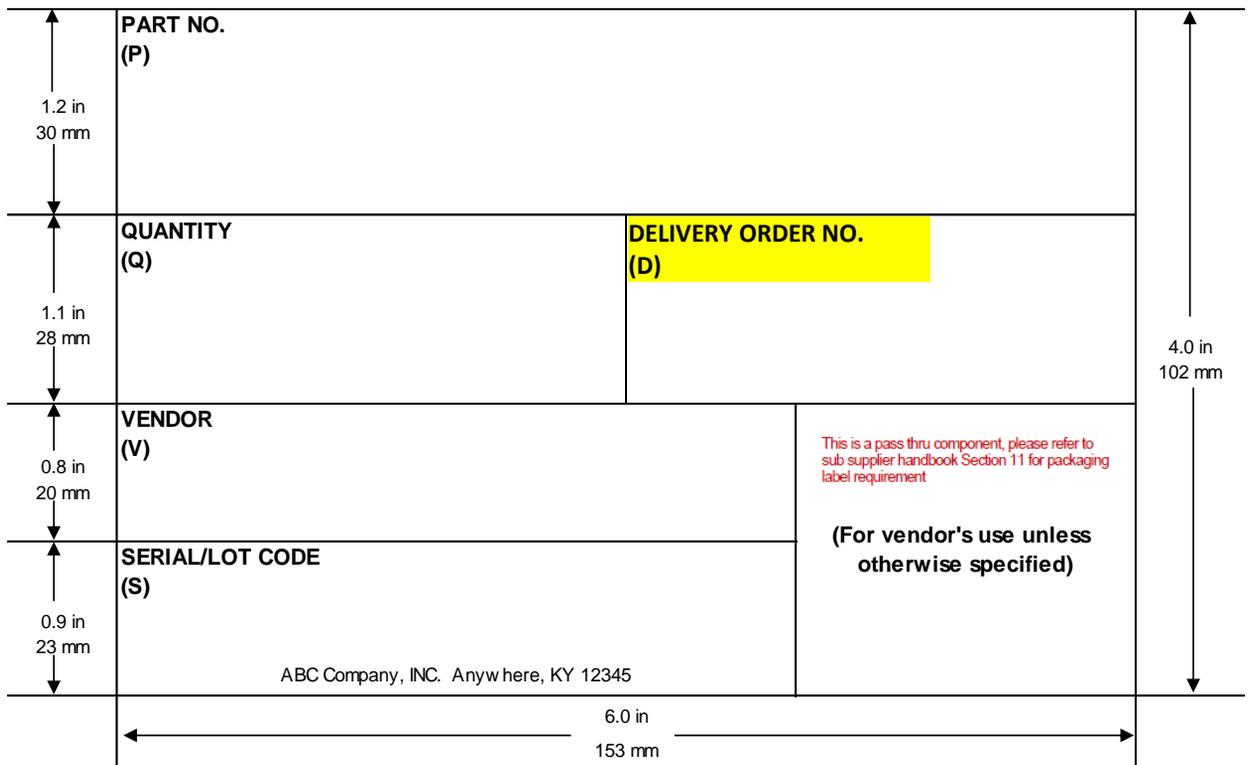
Required Dimensions for Container Label (see example #1 below)

- Label size should be 4 inches (102mm) high by 6 inches (153mm) wide unless container is too small to accommodate 4 by 6. In that case, Supplier should submit sample to (Astemo)BK for approval.

Instructions:

- There must be one master label per pallet/container/ropack
- Multiple parts included on one pallet/container/ropack requires multiple master labels on the same pallet/container/ropack.**
- If you ship multiple Delivery Order numbers on a pallet a Master Label is required for each D.O. and it must be affixed to the outside of the wrapped pallet.**
- Use full (Astemo)BK part number as transmitted via EDI 830 & 862. Do not deviate from the (Astemo)BK part number.
- All labels must be affixed to the outside of the container. They can not be laying inside the totes or on top of the material.**
- Suppliers are responsible for the removal of all old labels from returnable containers.**

Master Pallet/Container/Ropack/Box Label (Example #1)



| | |
|---|--|
| PART NO. (P) <h1>12345678</h1>  | |
| QUANTITY (Q) <h1>1000</h1>  | DELIVERY ORDER NUMBER (D) <h1>A012345</h1>  |
| VENDOR (V) <h1>123456</h1>  | <p style="color: red; font-size: small;">This is a pass thru component, please refer to sub supplier handbook Section 11 for packaging label requirement</p> <h2>VENDOR USE</h2> |
| SERIAL/LOT CODE (S) <h1>123456</h1>  <p>ABC Company, Inc. Anywhere, KY 12345</p> | |

Optional 2D Master Label Requirement

Some (Astemo) facilities have a 2D scan requirement for the Master Label. In that case, all specs stay the same except for the bar code requirement. Please check with the SQA contact of the (Astemo) site for which packaging is being supplied to ascertain if the 2D option is required.



Vendor Name Vendor Address

PACK LIST

| DATE | DOCUMENT NUMBER |
|-----------|-----------------|
| 28-JUN-17 | 1021057105 |

SHIP TO

HITACHI AUTOMOTIVE PRODUCTS
955 WARWICK ROAD, DOCK 4
HARRODSBURG, KY 40330 USA

CCN: 102 ML: 01 PACKLIST: 1021057105



ECT1

267787 01

| CUSTOMER ORDER | CARRIER | DELIVERY TERMS | BILL OF LADING NUMBER | |
|--|-------------------------------|----------------|-----------------------|-----------|
| R444167 | FedEx 2 Day Economy - Collect | FOB SHIPPING | | |
| ITEM/DESCRIPTION | | UOM | SHIPPED QTY | REFERENCE |
| FED-EX#: ***** RACHEL RILEY TEL:859 734- FAX:859 734- RACHEL.RILEY@HITACHI-AUTOMOTIVE.US ***** MANDI JONES TEL:859 734- FAX:859 734- MANDI.JONES@HITACHI-AUTOMOTIVE.US ***** CC: ALL ORDER CONFIRMATIONS TO: CHARLOTTE.ALLEN@HITACHI-AUTOMOTIVE.US ***** INVOICES AUTO-EMAIL TO: RACHEL.RILEY@HITACHI-AUTOMOTIVE.US 0001 BMP-1 A 2500200 001 BRD MKR PRB&RECP PROMISE DATE: 28-JUN-17 SO LINE: 0001 LOCATION: STOCK BIN: LOT NUMBER: 256790300010001 ULTIMATE DESTINATION: USA | | EACH | 1.00 | 1 |
| PRINTED BY SERGIO MURGUIA 28-JUN-17 17:21:14 | | SO: 2141287 | | |

D.O. number must be barcoded also.

LOT NUMBER: 256790300010001

Vendor lot number

PL

2141287

Upcoming Changes for Packing List

- Hitachi-BK will require all Suppliers to print the required packing list from SupplyWeb. All Suppliers have access. Please use the link provided from our homepage or this URL <https://supplyweb.hitachi-automotive.us/supplyWeb/account/login>
- Hitachi-BK will use this packing list to scan all receipts into the system for payment. This will ensure accurate up to date information is input in our system and ensure timely payment per the terms.
- The date of implementation will be January 2nd, 2019. If you have any questions or concerns please do not wait until the last minute. Any issues after January 2nd 2019 will result in a delivery performance issue

Packing List

Page 1 of 2

| Ship Notice | | | |
|---|---|---|---|
| Sold To | Ship To | Ship From | Supplier ID (V) |
| Hitachi Automotive Systems Americas, Inc. 955 Warwick Road Harrodsburg, KY 40330 UNITED STATES | (HIAMS) Berea South 993 301 Mayde Road Berea, KY 40403 UNITED STATES | Seymour Tubing, Inc. 1515 E. Fourth Street Seymour, IN 47274 UNITED STATES |  HA0020 |

| Shipper Details | | | | | |
|---|---------------------|------|--------------|-----------------------|---------------|
| Shipper ID (2S) | | | | Creation Date | Ship Date |
|  B91098 | | | | 09-13-2018 | 09-13-2018 |
| Route Code | AETC | SCAC | Vehicle Type | Vehicle Number | Transport |
| | | L&G | M | | Motor Carrier |
| Dock | AETC Responsibility | | Pro Number | Bill Of Lading Number | |
| | | | | B91098 | |
| Remarks | | | | | |

| Line Items | | | | | |
|------------|---|------------|--|---|------------|
| Line No. | UofM (3Q) | Model Year | PO Number | Eng. Lvl. | Lot Number |
| | Customer Part (P) | | Ship Qtys. (Q) | Pull Signals (15K) | |
| 1 | EA | | B005693 | | |
| |  7A16124-4510 | |  270 |  A285332 | |
| Remarks : | | | | | |

Hitachi Packaging Data Sheet

Hitachi Astemo Americas, Inc.
Packaging Data Sheet (PDS)

| | |
|------------------|------------------------|
| Part Number: | Supplier Name: |
| Part Name: | Contact Name: |
| Program Name: | Address: |
| Hitachi Contact: | City, State, Zip Code: |
| Phone: | Phone: |
| E-mail: | E-mail: |

| | | |
|--|--|---------------------|
| Ship Method: | Packaging Design/Purchase Responsibility: | Estimated SOP Date: |
| Land(Truck) <input checked="" type="radio"/> Sea <input type="radio"/> Air <input type="radio"/> | Hitachi: <input type="checkbox"/> Supplier: <input type="checkbox"/> | |

| Packaging Information | Outside Packaging Dimensions | | | | | | Weight(kg/lbs) | | | | | | Standard Number of Pieces/Pack (SNP) | |
|-----------------------|------------------------------|----|-------|----|--------|----|----------------|----|------|----|-------|----|--------------------------------------|------------|
| | Length | | Width | | Height | | Net | | Tare | | Gross | | Per Box | Per Pallet |
| | in | mm | in | mm | in | mm | lbs | kg | lbs | kg | lbs | kg | | |

| Component Dimensions (in and mm) | Length | | Width | | Height | | Weight | | Supplier Outside Process | | No <input type="checkbox"/> Yes <input type="checkbox"/> |
|----------------------------------|--------|----|-------|----|--------|----|--------|----|---------------------------------------|--|--|
| | in | mm | in | mm | in | mm | lbs | kg | If yes, how many days in the process? | | |
| | | | | | | | | | What is the quantity of packaging? | | |

| Pallet specifications | | | | | | Packaging Components | | Container / Box Label Information | |
|---|--|--|--|--|--|---|--|--|--|
| Material Type: <u>plastic</u> Heat Treatment: <u>no</u> Banded: <u>no</u> Wrapped: <u>yes</u> | | | | | | Bag <input type="checkbox"/> Polifoam <input type="checkbox"/> | | Box Label Information | |
| Pallet dimensions (inches & millimeters) | | | | | | Dividers <input type="checkbox"/> Silica Gel <input type="checkbox"/> | | | |
| Length <u>in</u> _____ Length <u>mm</u> <u>0</u> | | | | | | Bubble Wrap <input type="checkbox"/> | | Traceability method: | |
| Width <u>in</u> _____ Width <u>mm</u> <u>0</u> | | | | | | | | | |
| Height <u>in</u> _____ Height <u>mm</u> <u>0</u> | | | | | | Blister/Tray <input type="checkbox"/> | | Date <input type="checkbox"/> | |
| Pallet weight | | | | | | ESD Protection <input type="checkbox"/> | | Shift <input type="checkbox"/> | |
| Tare (lbs): _____ Tare (kgs): <u>0</u> | | | | | | Corner Support <input type="checkbox"/> | | Production line <input type="checkbox"/> | |
| Net (lbs): _____ Net (kgs): <u>0</u> | | | | | | Other (Specify below) <input type="checkbox"/> | | Mfg. Location <input type="checkbox"/> | |
| Gross (lbs): <u>0</u> Gross (kgs): <u>0</u> | | | | | | VCI Paper <input type="checkbox"/> | | Julian date <input type="checkbox"/> | |
| | | | | | | Other examples: VCI paper, Temperature Indicator, Humidity Indicator, Reel Diameter | | | |

Comments:

Notes:

Packaging Contingency Plan for returnable packaging: Supplier to propose alternate packaging or provide additional details on separate form. Refer to section 11 of the Supplier Handbook for additional packing and label instructions

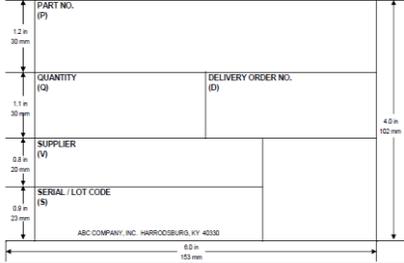
Internal Use Only:

| | | | | | | | |
|-------------|--------------|-----|----|----|----------------|------------|--------|
| | | | | | | | |
| Procurement | Pkg Engineer | SQA | DE | PC | Whse/Logistics | Production | QA PLT |

Hitachi Packaging Data Sheet

Photos (Tab 2 on data sheet)

Hitachi Astemo Americas, Inc.
Packaging Photos

| Part Picture | Label Picture |
|--|---|
|  |  |
| Container Photo (or sketch) | Interior Design Photo (or sketch) |
|  |  |
| Container Photo (or sketch) | Interior Design Photo (or sketch) |
|  |  |
| Pallet (requires 4 way entry, clearance high 5" (120 mm)) | |
| Packaging Description: Pallet holds 24 boxes and 96 parts | |
| Notes: | |

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