

Packaging

- 1) In regards to packaging, the main focus of (ASTEMO)AM 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)AM may assist with the packaging design and development, but (ASTEMO)AM is not responsible or liable for the performance of the final pack except when (ASTEMO)AM supplied packaging is selected.

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

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- 2) The first PPAP shipment shall be shipped to (ASTEMO)AM in mass production style packaging. A completed (ASTEMO)AM "Packaging Approval Sheet" (PFORM- 40) must be attached to the package. The complete form shall also be sent to the Supplier's Supplier Quality Assurance (SQA) contact at (ASTEMO)AM noting the Estimated Time of Arrival (ETA). When the packaging is received at (ASTEMO)AM, 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)AM 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 owner's name and address and be equipped to meet (ASTEMO) AM 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 (ASTEMO)AM drawing 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.)
- 9) For electronic parts each reel, pack, sealed or ESQA bag, stick, etc. shall be labeled with (ASTEMO)AM 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 the pallet.
- 12) If there is to be any type of packaging change made, a revised (ASTEMO)AM "Packaging Approval Sheet" must be submitted by the Supplier to the (ASTEMO)AM 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)

(ASTEMO)AM 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)AM 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

No identifiers should be included in bar codes.

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) # 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 on page 4)

- 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)AM for approval.

Required Dimensions for Electronic Parts (see example #2 on page 4)

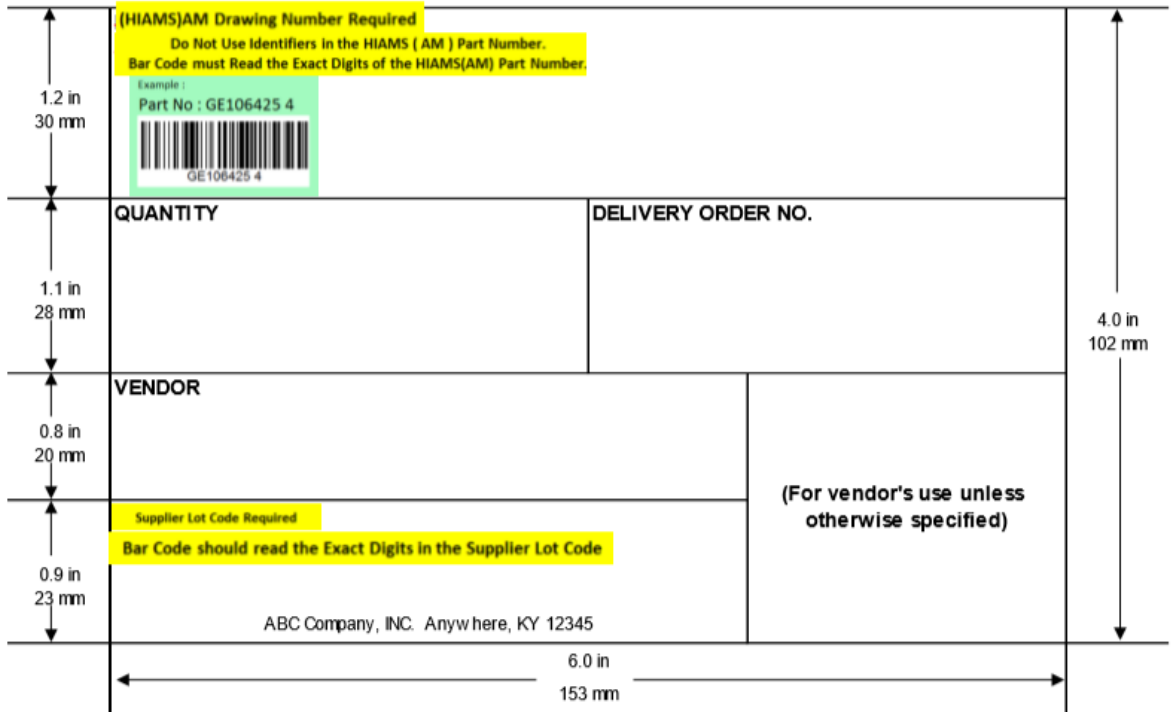
- Label size should be 4 inches (102mm) high by 6 inches (153mm) wide unless available space on reel/pack/bag/stick will not accommodate 4 by 6. In that case, Supplier should submit sample to (ASTEMO)AM for approval.

(ASTEMO)AM Package Label Requirements—continued

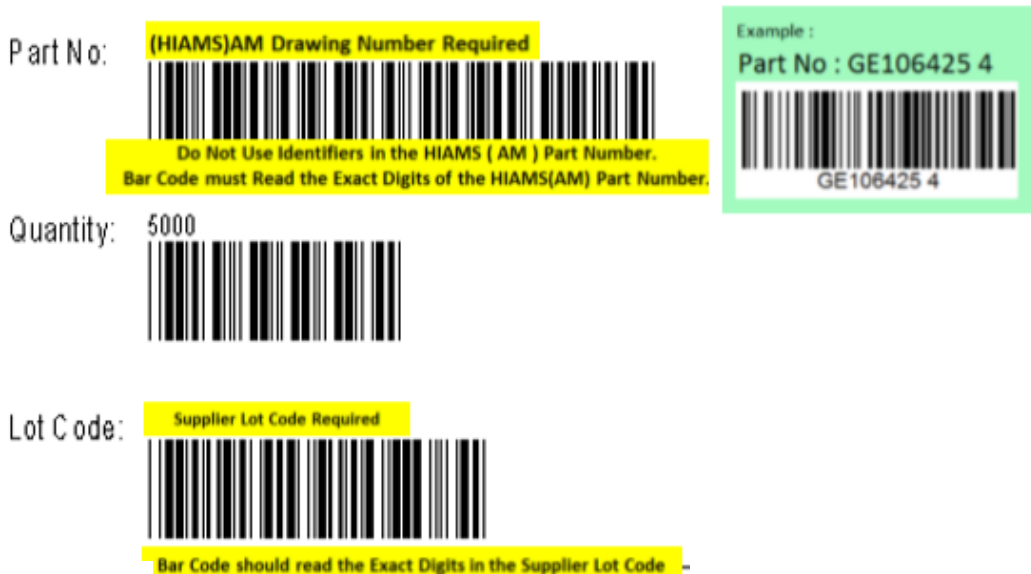
Instructions:

- 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.
- Use full (ASTEMO)AM part number as transmitted via EDI 830 & 862. Do not deviate from the (ASTEMO)AM part number.

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



Master Pallet/Container/Ropack/Box Label (Example #2)



Electronic Parts Special Requirements (example #3)
Place on each reel/sealed or ESQA bag/pack/stick.

Hitachi Electronic Parts Label

Part No: (HIAMS)AM Drawing Number Required
 Do Not Use Identifiers in the HIAMS (AM) Part Number.
 Bar Code must Read the Exact Digits of the HIAMS(AM) Part Number.

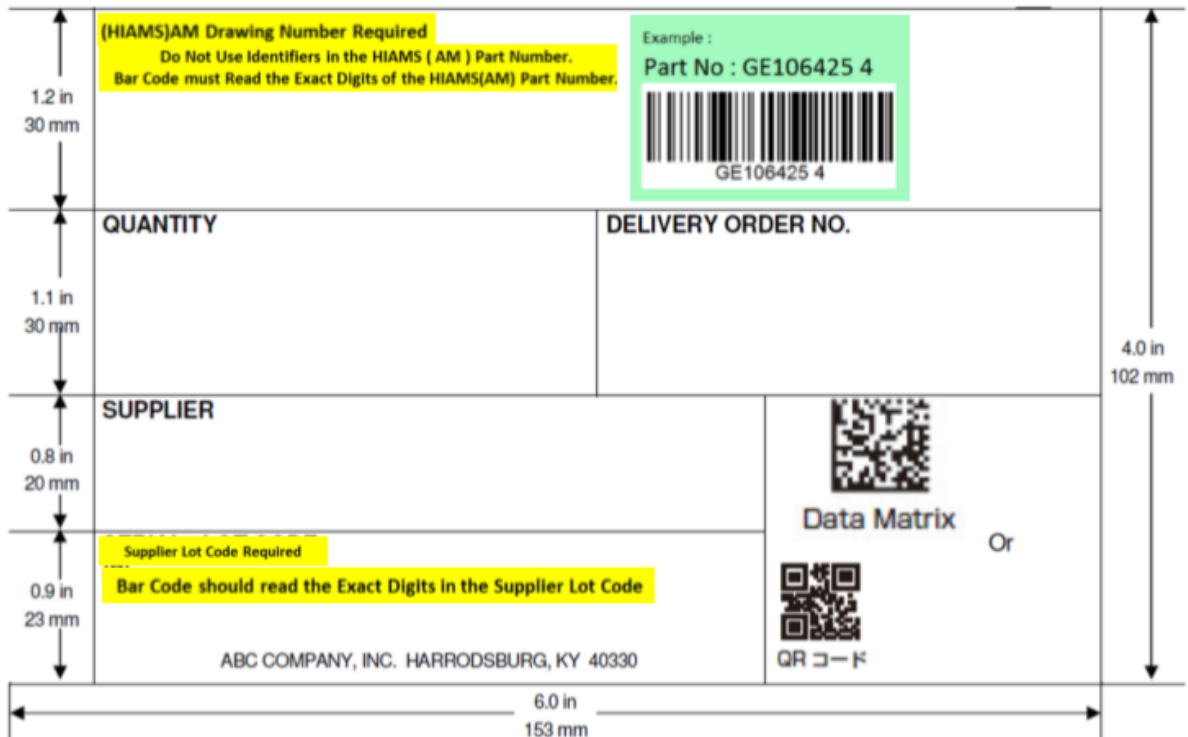


Quantity: 5000

Lot Code: Supplier Lot Code Required
 Bar Code should read the Exact Digits in the Supplier Lot Code

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.



Packing List Example

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 Vendor lot number		EACH	1.00	1
ULTIMATE DESTINATION: USA PRINTED BY SERGIO MURGUIA 28-JUN-17 17:21:14		SO: 2141287		

PL

2141287

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		

Hand Held Container														
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"/>	
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"/>	
						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

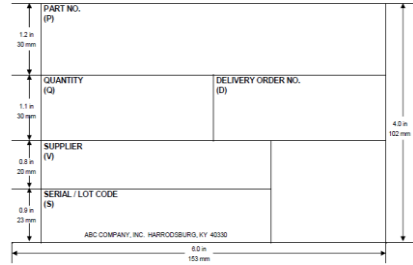
Photos (Tab 2 on data sheet)

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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