

3.5.2.1 Governors America Corp. follows a 3 step qualification process that includes 1) Prototype, 2) Manufacturing/Pre-production, and 3) Production Release.

3.5.2.1.1 New Design - The supplier may be asked to participate in all 3 qualification steps and provide samples following the guidelines in Sections 7 and 6.5.

3.5.2.2 Legacy Designs – samples will be requested following the guidelines in Section 7 and 6.5 before shipments are released.

3.5.2.3 Based on part complexity risk, the Supplier may be required to provide Process Flow Diagram, Control Plan, Cpk Process Data, and/or Inspection guides as part of the Product Approval.

3.5.2.4 After approval, the supplier is responsible for maintaining the process as fixed.

3.5.3 Test Services / Calibration.

3.5.3.1 Not applicable.

3.6 Continuous Improvement

3.6.1 Governors America Corp. is a strong supporter of supplier continuous improvement, lean and six sigma initiatives that focus on:

3.6.1.1 Cost reduction through improved efficiency or scrap / rework reduction.

3.6.1.2 Reduced lead times.

3.6.1.3 Improved quality.

3.6.2 For projects with potential positive impact to Governors America Corp. products, Governors America Corp. welcomes an invitation for team participation.

3.6.3 Any material or process changes will require re-approval and Governors America Corp. will assist to expedite the re-approval.

3.6.4 Interactions for evaluation

3.6.4.1 Customer Surveys

3.6.4.2 First Article Inspections

3.6.4.3 Verbal Feedback

4.0 Assembly and Part Traceability

4.1 Supplier Control

4.1.1 The supplier shall maintain a supplier approval program for all raw materials, components, and services used for Governors America Corp. purchase orders.

4.1.2 Governors America Corp. Design Controlled Products.

4.1.2.1 The supplier is responsible for flow down of Governors America Corp. specifications to the sub-tier level through their PO agreements.

4.1.2.1.1 The supplier is responsible to ensure sub-tier supplied materials are purchased to and meet/exceed Governors America Corp. specification.

4.1.2.1.2 The supplier shall have in place a receiving program to effectively verify and document incoming materials meet Governors America Corp. specification.

4.1.2.1.3 The supplier shall maintain sub-tier agreements to permit Governors America Corp. visitation and auditing access as referenced in Section 2.5

4.1.2.2 When specified by Governors America Corp., the supplier is required to purchase from only Governors America Corp. approved source(s).

4.1.2.2.1 The supplier is required to meet the requirements of sections 4.1.2.1.1, 4.1.2.1.2, and 4.1.2.1.3.

4.2 Part Identification and Traceability

4.2.1 The supplier shall have in place procedure(s) defining the methods of part traceability from raw material/sub-component level through released finished product.

4.2.2 All Governors America Corp. part specific identification and traceability marking directives are to be followed by the supplier.

4.3 Part Cleanliness

4.3.1 The supplier shall incorporate processing steps to ensure machined surfaces and enclosed areas are clean and free of contaminants such as chips, burrs, and oil.

4.3.2 The supplier shall ensure electronic components are managed in appropriate ESD environment to prevent damage.

4.4 Inspection Operation

4.4.1 The in-process and final inspection are to be defined by the approved product fixed fabrication process.

4.4.2 The supplier can add interim inspection operations if beneficial to product reliability.

4.4.3 Inspection operations cannot be removed unless approved by Governors America Corp. and may require production re-approval.

4.4.4 Fixtures, static gages, and variable gages used for any inspection activity are to be controlled through the supplier's calibration program.

4.4.6 Recommended lighting at inspection: 100 lux minimum.

4.5 Calibration

4.5.1 The supplier shall have in place procedure(s) defining their calibration program.

4.5.2 The supplier shall maintain records and results of calibration and verification activities.

4.5.3 All fixtures, static gages, and variable gages used for inspecting Governors America Corp. product shall be identified with calibration status.

4.5.4 Calibration shall be traceable to the national standard based on the supplier's country of origin.

4.5.6 Recommended outside service calibration accreditation: ISO17025: (latest revision) or equivalent.

4.5.7 It is the responsibility of the supplier to maintain calibration for Governors America Corp. purchased inspection fixtures and gages.

4.5.8 If an inspection fixture or gage is found out of calibration and the gage was used to release Governors America Corp. product, Governors America Corp. is to be notified **within 48 hours of the event.**

4.6 Work Environment

4.6.1 The supplier shall maintain a work environment that is compliant to all government regulations covering, health and safety, ethical, and environmental regulations.

4.6.2 Product shall be handled and stored in a manner to prevent storage damage, in-process transportation damage, damage during assembly, and damage during finished product packaging.

4.6.2.1 For electronic components, a documented ESD control program shall be established. The supplier shall maintain employee training records to support implementation of this program.

4.6.3 The supplier shall maintain organized work stations so that before operation and after operation product cannot be mixed.

4.6.4 Work stations shall be well lit to accommodate operator visual inspection.

4.6.4.1 Recommended lighting: 100 lux minimum.

4.6.5 The supplier shall have a documented preventive maintenance program.

4.7 **Governors America Corp. Purchased Tooling, Fixtures, and Gauges**

4.7.1 All Governors America Corp. purchased tooling shall be identified with serialization and/or Governors America Corp. name identification affixed to the tooling.

4.7.2 When not in operation, Governors America Corp. shall be stored in an identified secure location that precludes physical and environmental damage.

4.7.3 If Governors America Corp. purchased tooling is damaged, Governors America Corp. is to be notified **within 48 hours of the event**.

4.7.4 It is the responsibility of the supplier to notify Governors America Corp. when tooling is approaching end of life. Upon notification, Governors America Corp. will provide tooling directives based on impact to product critical to quality characteristics.

5.0 **Inspectors**

5.1 The supplier shall maintain training records for all employees performing receiving inspection, first-piece, in-process, final inspection, and verification/compliance testing activities for all Governors America Corp. products.

6.0 **Packaging and Shipment**

6.1 Reference the PO for any special packaging requirements.

6.2 The Packing List shall be placed in pouch in visible location on shipment.

6.2.1 The Pack List must:

6.2.1.1 Cross reference to the PO.

6.2.1.2 List all part numbers and quantities in the shipment.

6.2.1.3 Identify if a line item is a partial shipment.

6.3 Part Packaging:

6.3.1 Packing shall hold parts secure to prevent functional and cosmetic damage.

6.3.2 For electronics, ESD shielding bags and/or ESD bubble shall be used. ESD labeling to be applied to the packaging.

6.3.3 All packaging shall be clean.

6.3.4 Product packaging / carton labeling shall legibly identify product held within.

6.4 For pallet shipments, only structurally sound pallets shall be used for shipping product to Governors America Corp.

- 6.4.1 Boxes shall be stacked within the profile of the pallet and secured with either banding or shrink wrap.
- 6.5 **Release Authorization, if specified on the PO:**
 - 6.5.1 Reference Section 7.0
 - 6.5.2 Include a copy of the completed final inspection report inside the box containing the parts.
 - 6.5.3 On the exterior of the carton identify final inspect report enclosed.
- 6.6 **C-TPAT (Customs-Trade Partnership Against Terrorism), if specified on the PO:**
 - 6.6.1 LTL (less than truckload) shipments - security tape and serialized labels to be applied to cartons to identify a pilfering/breach incident.
 - 6.6.2 For dedicated truckload/container shipments – seal(s) to be applied to the truck/container doors.
 - 6.6.3 All serialized label and seal numbers to be written on the Packing Slip. A copy of the Packing Slip to be faxed/emailed to Governors America Corp Purchasing Dept at time of departure for our verification at time of receipt.
 - 6.6.4 When the PO is ready to ship, Governors America Corp is to be notified to arrange carrier pickup.
 - 6.6.4.1 The Supplier is responsible for maintaining a record of the carrier, driver’s name, and verifying the transportation is good condition and secure at departure.
- 6.7 **NIST (National Institute of Standards and Technology) Traceable**
 - 6.7.1 Certificates of work completed to include traceable to NIST standards.

7.0 Release Authorization

- 7.1 For new orders, design changes, process changes, and/or instances of non-conformance, Governors America Corp Purchasing or Engineering Dept, may request qualification samples with a copy of the completed final inspection report before approving release of a shipment.
- 7.2 The Governors America Corp. Purchasing or Engineering Dept will specify the sample size quantity and reporting requirements.
- 7.3 The supplier shall provide a samples representative of the production processes and production lot, including a first article inspection report.
- 7.4 The supplier shall number the samples to cross reference to the submitted inspection report(s).
- 7.5 Reference Section 6.5 for shipment requirements.

8.0 Corrective Action Requirements for Suppliers

- 8.1 Overview.
 - 8.1.1 Governors America Corp. will notify suppliers of problems regarding quality, delivery, packaging, and/or servicing in writing. The format used by Governors America Corp. is a **Quality Alert Notification**. Based on the risk associated with the finding, Governors America Corp. will identify if:
 - 8.1.1.1 the completion of a formal **Supplier Corrective Action Request (SCAR)** is required to address the finding

(Ishikawa) Analysis, or 8D methodology is encouraged by Governors America Corp. for root cause, corrective action, and to prevent re-occurrence.

8.4.3.1 Templates are available from Governors America Corp. if needed.

8.5 Non-conforming product received at Governors America Corp.

8.5.1 In the event non-conforming product is identified at Governors America Corp. facility or identified/returned from the field, reference sections 8.1.1, 8.1.2, 8.2.4.1.

9.0 Default Inspection Specifications

9.1 The following specifications and critical inspection criteria are considered as default if criteria is not specified in the print package.

9.2 If process capabilities cannot meet the print package requirements or the default inspection specifications, Governor's America Corp. is to be notified via submitted deviation request.

Specifications

Commodity	Specification	Title
Printed Circuit Boards	IPC-A-600(latest revision) – Class2	Acceptability of Printed Circuit Boards
Plastic Molded Parts	ES1038 Rev A	Acceptance Criteria for Plastic Molded Parts and Other Surface Finishes
Castings and Machined Surfaces	ES1035A	Actuator Component(s) Finish Specifications

Critical Inspection Criteria

Dimensional	Three Places	.XXX = +/- 0.005in (+/-0.13MM)
	Two Places	.XX = +/- 0.010in (+/-0.25MM)
	Angles	+/- 1 Degree
	Break Edges	0.005 - 0.015
	Surface texture	Ra 125µIN (3.2µm) uniform finish
Finish	General***	Clean, no debris, no spotting or rust on finish. Uniform finish. Cosmetic blemishes visible at ½ arm's length in 100 lux are subject to rejection.
	Electronic Displays***	Uniform and complete character segments. Backlight fully functional.
		No cosmetic blemishes visible when display is powered.
	Wire Harnesses	Harness colors and print match specification. No damage to insulation. Connections exhibit no damage, discoloration, or rust.
	Edges – External and Internal	No Burrs Permitted.
Threaded Holes	Pass Go / No-Go Thread Gauge Inspection. Uniform Thread Finish with no chipped edges or machining debris in threads.	
Machined Diameters	Any variation cannot exceed assigned tolerance.	

	Tumble Debur	Uniform finish across all surfaces.
	Anodize / Plated Finish	Uniform finish and color on all surfaces. Adhesion – pass tape test.
	Silkscreen	Uniform print with no smears.
		No double print, no heavy print with fill ins.
		No incomplete or missing print.
		Print registration and alignment to surface features. Adhesion – pass tape test.

***** Governors America Corp strives to provide a product final finish that complements a reliable product that always performs to the standard, therefore cosmetic defects are treated equally as physical non-conformances.**

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