Powering Business Worldwide




SUPPLIER EXCELLENCE MANUAL

MOBILITY GROUP ADDENDUM

September 2025 Revision

Abstract

Requirements outlined on this document are in addition to the Eaton's Global Supplier Excellence Manual (SEM) which pertain only to those suppliers selling to Mobility Group. To confirm Awareness, please print and sign the cover page, and share with your Eaton's Mobility Group representative.

Title:
Date:
Signature:

Contents

1 Scope

This document is supplemental to the requirements already defined in the Eaton Global Supplier Excellence Manual (SEM). The intent of this document is to define for all external Tier1 direct material and service suppliers the minimum requirements, processes, and systems for doing business with Eaton Mobility Group (MG), formerly Vehicle Group (VG), as well as align to Eaton-MG Customer Specific Requirements.

The scope of this document applies to Eaton-MG production and relevant service part organizations, including aftermarket parts as applicable.

For Suppliers that supply Electrical programs only, with the exclusion of Automotive, and are already part of the Electrical Supply Chain, the Electrical Addendum is applicable.

All following requirements shall be addressed by the supplier's quality system, which are expected to be governed by ISO9001:2015 as a minimum, with additional requirements defined by IATF 16949:2016 (Refer to Section 4.1 Quality Management Requirements).

Note that each section in the Eaton Global Supplier Excellence Manual (SEM) has a corresponding section in this addendum document. In many cases there are no additional Eaton-MG specific requirements, so these are marked 'No additional requirements'.

2 Reference Material (No additional requirements)

3 Terms & Definitions (No additional requirements)

4 Expectations of the Supplier

Supplier's General Obligations - Supplier shall:

a) Control the product and production process, for the life of the product produced in order to enable the product produced to be Ship to stock.

b) Participate in Eaton's supplier quality and development program(s).

c) Permit Eaton to enter Supplier's facility at reasonable times to inspect the facility, goods, materials, and any property of Eaton or of Eaton's Customer covered by this Document. Eaton's inspection of the goods, whether during manufacture, before delivery or within a reasonable time after delivery, does not constitute acceptance of any incoming inspection, work-in- process or finished goods. Supplier shall include in all quotations the costing to reflect error occurrence detection (poke-yoke, error proofing devices, etc.) and defect outflow prevention to customers. Any controls implemented by supplier are the financial responsibility of the supplier.

d) Pro-actively communicate to Eaton any issues that could affect Eaton or its customers to the

appropriate buyer (i.e., supplier issues, capacity, quality issues).

e) Submit request for authorization of any proposed material, design, process changes or moves of production locations to appropriate Eaton buyer in advance prior to implementation (supplier to follow appropriate customer specific guidelines regarding process/material changes. For example, if the final customer is Ford, supplier to follow the SREA process with Eaton). Refer to Section 7.7 Change Management.

f) Have contingency planning strategies in place for all manufacturing facilities that ship to Eaton MG. (Reference IATF16949:2016 clause 6.1.2.3).

g) Have EDI capabilities for facilities that are shipping production parts, assemblies, components, and production material to Eaton MG. For additional information on EDI refer to http://www.eaton.com, Company, Selling to Eaton, Supplier Vis / EDI link.

4.1 Quality Management System Requirements

The Quality Management System requirements for all Suppliers of direct material, Sub-Tier special process suppliers and specific services are defined below:

Product / Service Type	Minimum QMS Requirements
Manufacture	IATF16949:2016
Special Processes Example: Welding, Chemical Process, Heat Treat, Non-Conventional Machining, Surface Enhancement, Materials Testing, Coatings (CT)	ISO 9001:2015 as a minimum is required. Eaton IATF waiver approval required.
Raw Material	
Distributors	
Calibration Services for inspection, test and applicable manufacturing equipment	ISO17025 or national equivalent laboratory accreditation (example: A2LA)

In addition to the requirements described above, all Suppliers are required to comply with the following:

a) Suppliers who are considered only for Aftermarket are required to have ISO 9001:2015 as a minimum certification therefore, no waiver sign-off for IATF is necessary under this condition.

b) Establish and maintain long-term proactive improvement program, risk identification and risk mitigation plan across a risk-based thinking approach. (Reference IATF 16949:2016 clause 7.1.3.1)

c) Suppliers are required to follow and be compliant to the automotive core tools from the AIAG manualsfor APQP, SPC, MSA, PPAP, FMEA latest revisions.

d) For Tier-1 Suppliers that are not ISO/IATF 16949 shall:

- Be compliant and maintain ISO 9001 third party registration.
- Request and obtain Eaton IATF waiver approval. Eaton-MG may, at its option, fully waive certain supplier locations from IATF 16949 certification.
- Update the completed and approved IATF 16949 waiver form in WISPER under the requesting supplier location's DUNS.
- Compliance to the Supplier Site Assessment (SSA) Self-audit and/or Onsite audits is mandatory.

e) Suppliers are required to submit and maintain all quality certificates, including CQI self-assessments and approved IATF 16949 waivers as applicable for each supplier location site in WISPER under the 'Capabilities' section of the 'Supplier Profile' module. Information on all certificates MUST match the name and address of record of the supplier site as shown in WISPER.

- Note: A "System Noncompliance" DMR may be issued in cases where a supplier's quality certificate(s) are expired or missing within WISPER.

f) Sourcing award decision priority, on new and continuing business, will be extended to suppliers that can achieve the highest quality standards, provided that their overall competitiveness and performance meet or exceed Eaton's expectations.

4.2 Eaton Assessment & Approval (No Additional Requirements)

In addition to the requirements in the Eaton Supplier Excellence Manual section 6.3, all suppliers are required to comply with the following:

- **Supplier Qualification**

The Supplier's goal is to become an Eaton Qualified Supplier as a part of its supplier selection process through the supplier assessment and qualification activities. To obtain this certification the Supplier shall:

a) Be in the top quartile on quality and delivery performance relative to suppliers' peers.

b) Attain the position of 'Strategic Growth' supplier classification.

c) Be active and compliant in the supplier audits & assessment.

- **Onsite Audits & Assessments**

Suppliers shall be active and compliant in the supplier assessment and qualification process. Refer to Section 8.3 Audits & Assessments.

If the supplier is distributor, an onsite assessment is recommended at its manufacturing plant or the facility. If new manufacturing plant is added, an onsite assessment shall be conducted for the distributor.

4.2.1 Supplier Site Assessment (SSA)

Suppliers are required to complete the SSA as per agreed timing plan or a maximum of 5 weeks, whichever is earlier from the request of SSA completion. Failure to comply to this request could risk potential loss of business or future opportunities with Eaton MG. If the supplier is distributor, SSA assessment is recommended to be conducted at the manufacturing plant or facility.

4.2.2 Supplier Sustainability Maturity Assessment (SSMA) (No additional requirements)

4.3 Right of Access (No additional requirements)

5 Planning

5.1 Business Continuity

In addition to the requirements in the Eaton Supplier Excellence Manual section 5.1, all Suppliers shall notify Eaton about any planned or unplanned production shutdown, if unplanned, expectation is to be notified within first 24 hours of production interruption. (SCR submission required submitted through Eaton's supplier change request form on the Supplier Portal at my.Eaton.com). Supplier shall define and implement the necessary actions to ensure product compliance with requirements after a planned or unplanned production shutdown period. That includes a startup checklist and an action plan defining risk mitigation activity(ies) needed/implemented. This should be submitted to Eaton for review and follow up before any shipments are made to Eaton after shutdown. (Reference IATF 16949:2016 clause 8.5.1.4)

Note that regarding the provisions addressed to Human Resource guidelines for drug screening and background checks, their applicability should take under consideration the local legislation avoiding any discriminatory conduct and/or illegal requirement. Eaton's Supplier Code of Conduct may also be applied as a form of clarifying applicable requirements.

5.2 Risk Management (No additional requirements)

5.3 Performance Expectations (No additional requirements)

6 Support

6.1 Infrastructure (No additional requirements)

6.1.1 WISPER (No additional requirements)

6.1.2 Supplier Visualization (No additional requirements)

6.2 Organization Knowledge & Competency

In addition to the requirements in the Eaton Supplier Excellence Manual section 6.2, suppliers shall demonstrate knowledge and competency on the following tools / systems:

- Automotive Quality Core Tools.
    - Advanced Product Quality Planning & Control Plan (APQP),
    - Production Part Approval Process (PPAP),
    - Failure Mode and Effects Analysis (FMEA),

- Statistical Process Control (SPC) and
- Measurement System Analysis (MSA).

- Have personnel trained and with access to create/upload Material Data Sheets in IMD-System (International Material Data System) or China Automotive Material Data System (CAMDS) for each supplied part and submit the evidence of the record, as required as per PPAP Request Letter, during PPAP Submission (new PPAP or re-validation PPAP).

6.3 Document Control & Retention

In addition to the requirements in the Eaton Supplier Excellence Manual section 6.3, all suppliers are required to comply with the following:

Production part approvals (PPAP) Documents, tooling records (including maintenance and ownership), product and process design records, purchase orders (if applicable), or contracts and amendments shall be retained for the length of time that product is active for production and service, plus 10-years as a minimum, unless otherwise specified in written by Eaton MG agreement at the time business is awarded.

7 Operation

7.1 Contract Review (No additional requirements)

7.2 Design & Development

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.2, all suppliers are required to support the following processes:

- **Design & Specification Feasibility Review (DSFR)**

  Supplier manufacturing locations are required to support a DSFR process and utilize a multidisciplinary approach, including a cross functional team to participate in a design review with Eaton engineers to ensure the supplier has the feasibility to produce the part and the manufacturing processes will be capable of consistently producing product that meets all the engineering and specification requirements of the Eaton design. This should include in-depth review of special characteristics, inspection controls, design error proof options, Pass Through Characteristics (PTC), Safe Launch Control Plan and supporting documentation such as technical specifications, tests, supplier-owned documents, and product validation standards.

  This is the opportunity for the supplier to highlight any potential design implementation concerns or opportunities for risk mitigation.

  The outcome of this design review will be a signed Feasibility agreement, with no issues, ‘Drawing & Specification Feasibility Review’ signed form to all design characteristics, specifications, special characteristics, and production released drawings.

- **Prototype Parts**

  Suppliers that are selected for serial production intend may be required to support design verification testing, or early build trials to deliver prototype parts. Prototype parts are any parts that are built on a

production process other than the final PPAP approved process. Prototype parts may be requested at different times during the product design cycle. Suppliers are responsible for the quality of the parts it produces and for any subcontracted services, including sub-tier suppliers specified by Eaton-MG unless otherwise specified.

In these cases, suppliers will be notified with a Prototype Sample Request Letter outlining specific expectations from Eaton-MG for the content of these submissions.

The requirements for the respective levels of prototype parts and sample submission include, but are not limited to:

- Support DSFR (Design Specification Feasibility Review) & technical discussions including detail description of the parts measurement control methods and material specifications, with the feasibility of the design and drawings / specifications sign-off so that parts meet the functional, reliability, warranty, cost, manufacturing, and assembly expectations of both Eaton and Supplier.
- Develop a prototype control plan to support the production, inspection and testing activity of parts manufactured according to the release stage of their technical documentation. The prototype control plan should include all product features and characteristics of the product with the objective to ensure parts are fully conforming to the specifications.
- Prototype parts at any level-release are expected to be fully conforming to Eaton drawing specifications and shall meet the following requirements:
  a) Be dimensionally and functionally correct based on the agreed drawing release.
  b) Be verified by the supplier for conformance to all dimensions and features according to the agreed drawing and technical specifications.
- Shipments of prototype parts must be clearly identified using a placard with the word 'PROTOTYPE' and clearly identified with the part number & revision version as a minimum.
- Prior to shipment, suppliers of prototype parts are required to complete:
  a) Measurement/verification of 100% of the characteristics/dimensions/features on 6 samples of the shipment.
  b) Measurement/verification of 100% of any Special Characteristics of all parts of the shipment quantity.
  c) All this information must be documented and retained and provided to Eaton-MG upon request.

7.2.1 Testing & Validation (No additional requirements)

7.2.2 Configuration and Data Management (No additional requirements)

7.3 Product Realization

7.3.1 Process Flow Chart (PFC)

7.3.2 Process Failure Modes and Effects Analysis (PFMEA)

7.3.3 Control Plan

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.3.3, all suppliers are required to comply with the following:

a) Provide on request by Eaton MG: measurement, test, and inspection data which demonstrates that control plan requirements, sample sizes, and frequencies are being met.

b) Sample Sizes and frequencies shall be determined based on risk and occurrence of failure modes.

c) Layout inspection (to all dimensional requirements) on at least 6 parts (each cavity, in case of more than one cavity) shall be performed in an annual basis as a minimum and documented in the Control Plan. (IATF 16949:2016 clause 8.5.1.1)

d) For 100% Visual Inspections, the Control Plan must include a periodic verification of the visual inspection, such as sampling audit and/or off-line inspection including the responsible to verify judgment in the method. (Refer to AIAG Control Plan & MSA manuals)

e) Supplier shall have a risk-based approach to review and update Control Plans, if any of the following:

i. At a set frequency based on a risk analysis (PFMEA)

ii. when any change occurs affecting product, manufacturing process, measurement, supply sources, production volume changes. Refer to Section 7.7 Change Management

iii. After a quality issue (DMR) complaint and implementation of the associated corrective action.

7.3.4 Measurement System Analysis (MSA)

7.3.5 Process Capability

7.3.6 Inspection

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.3.6, all suppliers are required to comply with the following:

a) Comply with all requirements of IATF 16949:2016 clause 8.6.4

b) Maintain process capability data on all Special Characteristics identified on Eaton engineering documents and any product characteristics mutually agreed by Supplier and Eaton.

c) Implement a Production Control Plan (IATF 16949:2016 clause 8.5.1.1)

d) Have incoming inspection of incoming material consistent with the risk and quality impact of the material. These inspections shall include variable data where appropriate and be used as a key indicator of supplier quality management. (IATF 16949 :2016 clause 8.6.4)

e) Capability data for any SCs shall be made available for review by Eaton MG upon request.

7.3.7 Capacity Analysis

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.3.7, for any new manufacturing or product technology, and for any changed manufacturing process or product design, suppliers shall validate through production runs, benchmarking studies, or other appropriate methods, their ability to make product to specifications at the required rate. Production Rate shall be defined on the PSW. Refer to Section 7.3.7 PPAP Run at Rate

Eaton MG reserves the rights to require evidence of capacity verification at any time upon request and verify the capacity analysis on-site when needed.

(Reference IATF 16949 :2016 clause 8.2.3.1.3)

The preferred format for this evidence is the Capacity Analysis forms within the Eaton 'Supplier APQP and PPAP Support Package.xlsx' which is available through the Eaton Supplier Portal (my.Eaton.com), Eaton Strategic Partnership, Supplier Quality, Supplier APQP Process.

7.3.8 PPAP

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.3.8, all suppliers are required to comply with the following:

a) Communicate all PPAP documentation in English unless otherwise specified by Eaton MG.

b) Suppliers making shipments without appropriate PPAP approval are subject to DMR per section 9.2 of Eaton Supplier Excellence Manual.

c) A "System Non-compliance" DMR may be issued in cases where a supplier's PPAP submissions are chronically late, found not compliant or adversely impact a production launch.

d) PPAP submissions shall follow AIAG standards and use standard (or equivalent) templates.

e) All PPAP documents are expected to be "living documents" and updated on a regular basis and whenever process changes are implemented. PPAP is required for all product or process changes. Refer to Section 7.7 Change Management.

f) Suppliers are expected to meet PPAP Submission target dates as per the PPAP Request Letter. For New Product Introduction (NPI) projects the PPAP submission date must be planned as a milestone in the supplier's APQP plan. Any issues resulting in delays or changes to the PPAP target date should be communicated and agreed with the Eaton Buyer and Supplier Development/Quality representative.

g) In addition to AIAG requirements, Eaton-MG has identified additional "MG-specific" requirements that are required to also be completed prior to PPAP submission. MG-Specific requirements shall be defined in the appropriate WISPER PPAP record, or a PPAP Request Letter (PRL). The Eaton-MG Quality representative will inform the supplier how to obtains the PRL, if applicable.

   For Distributors, PPAP documentation submitted to Eaton shall originate from their manufacturing facility or supplier, unless otherwise agreed upon by Eaton MG Supplier Development or the designated Quality Representative.

h) Eaton MG-specific requirements may include the following. Note that several are related to APQP and not PPAP, but are customer-specific requirements that are required with the PPAP in certain cases for approval to be granted:

i) For Aftermarket supplier parts, supplier should follow Aftermarket Part Approval process. Reach out to respective Category Manager or Supplier Development/Quality representative for requirements.

Element	Requirement
Packaging Approval	• A Packaging Approval Form (PAF) for all New Product Introduction (NPI) is required to be submitted by the supplier to the Eaton-MG Materials & Quality Management team for approval. • In case PAF is rejected, the supplier is responsible to revise the packaging configuration until it complies with Eaton-MG requirements. • An approved form is to be included with the Initial PPAP submission.
IMDS approval	• For each PPAP revision, suppliers shall register and enter product data into IMDS (www.mdsystem.com). (CAMDS- China Automotive Material Data System, when applicable). • Supplier IMDS entries must be APPROVED by Eaton prior to obtaining an approved PPAP disposition. Supplier shall include approved IMDS node number in PSW. (CAMDS- China Automotive Material Data System, when applicable) • The data must be submitted to the respective Eaton Plant IMD/CAMD-system organization ID# as mentioned in the PPAP request letter. • Process Manuals defining minimum requirements for submitting Material Data Sheet can be found in the landing page of the Eaton MG: Vehicle (eaton.com)
Engineering samples	• Ship samples along test reports for verification to the specified location listed in the PPAP request letter as requested.
Dimensional samples	• Dimensional validation samples & data (may include a requirement for 6-piece dimensional layouts for each cavity, if applicable.)

Metallurgical samples	• the Supplier may be required to submit evidence of compliance with the metallurgical specifications for the PPAP. This is standard for components with requirements for heat-treatment. • 1st party (Supplier) Metallurgical approval is acceptable for PPAP approval, unless 2nd or 3rd party metallurgical approval is required by the business unit. • If 2nd or 3rd party metallurgical approval is required, then the Eaton Materials Engineering Team must approve prior to PPAP approval. If a component is already approved by the Eaton Materials Engineering Team, then the Supplier shall submit the previous approval as the required documentation. • If Dimensional Results, Metallurgical Analysis, and Engineering Testing are completed by an External Laboratory should be ISO17025 accredited laboratory or national equivalent laboratory accreditation (example: NABL).
Engineering Test Results	• Evidence of engineering / validation testing results
Run At Rate or Capacity Analysis. Refer to Section 7.3.6 Capacity Analysis	• Each PSW requires a statement of the production rate utilized during the PPAP run. As evidence to support this statement, a capacity study, or formal Run at Rate evaluation must be conducted by the supplier to evaluate their ability to make product to specifications at the required rate and results be shared upon request. Eaton-MG will verify the Run at Rate evaluation on-site before final PPAP approval based on Risk Assessment. • This evaluation may be conducted on-site or submitted as a self-assessment at the discretion of the responsible PPAP Approver. This activity should be completed under PPAP conditions upon the PPAP trial runs. • If Eaton start up volumes are low, the supplier Run at Rate may be delayed up to 3 months after Eaton SOP if this does not conflict with customer requirement. However, the supplier is still required to define the production rate performed during the PPAP run on the PSW.
CQI self-assessment	• Suppliers shall be required to submit evidence of completion & maintenance of AIAG CQI assessments when the PPAP involves a Special Process (Refer to Section Special Processes). This requirement shall be extended to the sub-tier supply base.

PTC and WD	• Ensure all Pass-Through Characteristics (PTC) and Weak Detections (WD) are documented in the Product Engineering drawing, DFMEA, PFMEA, Supplier control plans (Review/Align Severity and Detection ratings, ensure adequate process controls are in place, adequate measurement techniques, etc.) • Pass Through Characteristics: Review all PFMEA items with Severity => 8, validate control method, frequency, capability, error proofing, and if a poke yoke is required or 100% control. • Weak Detection: Review all PFMEA items with Detection => 5, validate control method, plans to reduce detection rating, or improve capability.
OEE	• Submit Overall Equipment Effectiveness (OEE) Documents when requested.
Production Readiness Review	• Suppliers may be required to submit evidence of the Production Readiness Assessment completion. The purpose of this assessment is to assist, document and verify the supplier's effort during the APQP and prior the PPAP submission to ensure risk factors has been addressed and completed.

• Special Characteristics Requirements

a. Refer to 'Appendix A: Requirements for special characteristics' for specific requirements regarding features designated as Special Characteristics. Terms: 'key', 'critical', 'safety', 'significant' or 'pass through', designated by symbols in the Design Record are generally referred herein as 'Special.

• Capability Studies

a. Cpk Capability studies must be completed on a minimum of 30 pieces selected at random from the Significant Production run for all Special Characteristics (SC).

b. Acceptable initial process study results must be demonstrated and submitted on request for each Special Characteristic and for any other characteristics requested, using the calculations defined in the AIAG PPAP and Statistical Process Control manuals.

c. Initial process study results for special characteristics must demonstrate stability, with a minimum capability index (Cpk) to be acceptable; Refer to Appendix A 'Requirements for Special Characteristics' for acceptable (Cpk) ranges.

d. Capability data should be maintained throughout the products life, as Compliance data for any

SCs shall be made available for review by Eaton upon request.

e. In certain cases, Eaton may request data to be presented in a specific format. In these cases, the format will be defined in the PPAP request.

- **Material & Substance content reporting (MDS)**

a. Suppliers are required to ensure compliance regarding content of chemical substances and shall submit a Material Data Sheet (MDS) consisting of a declaration of all included materials and substances and their weight.

b. The MDS is a living document and shall always reflect the true content of the delivered parts or components supplier to Eaton.

c. MDS submission is expected to be done at the time initial samples are available and representative of the final intended production and manufacturing location.

- **Deviations**:

a. Any PPAP submission impacted by a deviation shall have the Eaton MG approved deviation submitted with the PPAP submission to obtain interim approval.

b. Deviations are temporary in nature and require corrective actions to bring the product or process back into compliance with Eaton specifications. No Permanent Deviations are accepted.

c. Suppliers shall complete the required deviation request form and submit to their Commodity Manager and/or Operational Buyer for processing.

- **MSA**:

a. MSA documentation is required to be submitted for all gauges identified on the control plan. “Family” MSA information may be acceptable for gauges used on non-SC features.

b. MSA GR&Rs total variation results are expected to be <10% at PPAP. Results between 10% - 30% must be authorized by an Eaton MG Quality representative, and potentially require Eaton customer approval.

c. Results >30% are not acceptable and must be resolved prior to PPAP approval.

d. Results to be obtained using ANOVA method, unless otherwise instructed by Eaton MG.

- **Cleanliness Requirements**

Per the part and process cleanliness requirements of IATF 16949:2016 clause 7.1.4.1, Eaton may apply elevated cleanliness requirements to certain components or assemblies. Normally these requirements are defined in the component drawing or associated specification. Suppliers are expected to be aware of and comply with any cleanliness requirements.

Packaging can play a large role in the cleanliness and protection of the parts within. Suppliers are expected to be ensure that packaging provides adequate protection and prevent contamination of the parts within during storage and shipment.

- **Laboratory accreditation:**

  a. Functional verification/testing of product or other customer specific verification may be required in addition to receiving a PPAP approval disposition prior to production launch.

  b. Dimensional Results, Metallurgical Analysis, and Engineering Testing must be completed by a qualified laboratory. The qualified laboratory shall have a laboratory scope and documentation showing capability to perform the required inspection and test as defined by the customer.

  c. A supplier that does not have appropriate internal laboratory capabilities to perform the required inspection or test is responsible to contract a third-party accredited laboratory to complete the requirement. (Reference IATF 16949:2016 clause 7.1.5.3)

  d. Third party results must be submitted on the accredited laboratory letterhead or normal laboratory report format per AIAG requirements. Results that are not submitted under an appropriate accredited laboratory scope may be subject to Eaton verification at the supplier's expense.

- **PPAP Re-Validation**

  a. All suppliers are required to complete an Annual PPAP revalidation, PPAP documentation shall be maintained by suppliers and submitted upon Eaton's MG request. PPAP will adhere to AIAG standards and should include, as a minimum:

     - Full Layout Inspection and functional testing on at least 6 samples for each cavity, if applicable.
     - CQI-self assessment(s) documents (Less than 12 months old) when applicable.
     - Signed PSW

  b. Suppliers shall notify the appropriate Eaton MG Supplier Quality representative immediately if there are any functional/material test failures or out of specification conditions identified during the Re-validation.

Safe-Launch activity

In addition to Eaton's Supplier Excellence Manual section 7.3 requirements, unless otherwise specified by Eaton MG, Suppliers shall support Safe-Launch activities as a deliverable for APQP risk management practices. Safe Launch activities include, identify, and correct potential issues prior and

during 90 days of production from Eaton Start of Production (SOP) until agreed exit criteria is met. The goal is to validate supplier's efforts to gain control of its processes during ramp-up, to quickly identify and correct quality issues and prevent shipment of non-conforming parts to Eaton MG.

Note that exit criteria is for 90 days after Eaton SOP or minimum of 10 shipments with Zero defects or Eaton plant complaints. If the supplier is unable to meet the exit criteria or if the supplier's early containment activity continues to identify non-conformances within the Safe Launch period, the 90 days starts again with the expectation that the supplier continue the necessary containment measures to insulate Eaton receiving location(s).

Safe-Launch activities include, but are not limited to:

Element	Requirement
Early Containment Area	Implement an off-line Early Containment Area (Safe-Launch) as a simulation of your customer that consist of additional controls, inspection, audits, and testing as needed to identify non-conformances during the production process with the goal of zero-defects for 90 days post SOP.
Safe Launch Control Plan	Document in an Early Production Safe Launch Control Plan the results for prompt implementation of containment and corrective actions when non-conformances are discovered using a problem-solving discipline. The Production Control Plan sample sizes and frequencies shall be adjusted based on risk and occurrence of failure modes to ensure Eaton receiving location(s) are adequately protected from receiving non-conforming product. Refer to Section 7.3.2 Control Plan.
Statistical Process Controls (SPC)	Use of SPC charts and Process Capability studies (Cpk) on Special Characteristics, CTQ and characteristics deemed 'Key' with the expectation that the supplier measures and assess their process performance in a way that suitable allows them to understand and reduce their variation, and to ensure conforming parts are provided to Eaton Plant(s) and its customer about the mean.
PTC and WD Reviews	Review PTC (if any) and WD (weak detection) as early as possible as input to Safe Launch CP. Link with D/PFMEA
Traceability	Robust batch and component traceability of all shipments including outsourced operations.

Metallurgical and Cleanliness studies	Perform ongoing metallurgical or cleanliness reports as per the agreed Safe Launch Control Plan.
Onsite Process/Product reviews	Support periodic on-site visits by Eaton MG Supplier Development & Quality engineers.
Capacity requirements - R@R verification	Run At Rate confirmation through production runs to validate the ability to make product to specifications at the required rate. Focus on utilization for bottle necks. Assure true scrap analyze is included
CQI Special Process	Ensure CQI special process self-assessments are completed. This includes all sub-suppliers and/or outsourced operations as applicable
Supplier Day	Participation on Eaton's Supplier Day prior to Launch when requested. Typically, it's organized at Eaton manufacturing plant. Consist of Product Knowledge application, APQP risk mitigation workshop, line tour. Suppliers and Eaton interact in cross-functional workshop with focus on rising quality awareness and risk mitigation.

Special Processes

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.3, all suppliers are required to comply with the following:

a) Suppliers are expected to be aware of AIAG CQI Special Process Assessment requirements based on Eaton engineering specifications, and perform the applicable assessment as required.

b) Tier 1 suppliers are also responsible for the CQI of their sub-tier suppliers. (Refer to section 7.6 Sub-Tier Management requirements)

c) Suppliers of components which have the requirement for a special process shall complete the applicable CQI Special Process Self-Assessment on, at least, an annual basis. Eaton MG may request evidence of compliance at any time or may conduct an on-site validation of the CQI.

d) Copies of CQI self-assessment (cover page as a minimum) shall be required with all PPAP submissions. Eaton MG reserves the rights to request the full assessment at any time.

e) The following is a listing of required special process assessments defined by AIAG:

- CQI-9 - Heat Treat System Assessment
- CQI-11 - Plating System Assessment
- CQI-12 - Coating System Assessment
- CQI-15 - Welding System Assessment
- CQI-17 - Electronic Assembly Manufacturing-Soldering System Assessment
- CQI-23 - Molding System Assessment
- CQI-27 - Casting System Assessment
- CQI-29 - Brazing System Assessment
- CQI-30 – Rubber Processing System Assessment

(Reference IATF 16949:2016 clause 9.2.2.3)

f) Applicability and effectiveness of these processes shall be determined utilizing the most current version of the AIAG CQI documents.

g) Supplier's Auditor qualifications should comply with the requirements outlined in the specific AIAG CQI documents.

7.4 Production & Service Provision

7.4.1 Product Identification (No additional requirements)

7.4.2 Product Traceability

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.4.2, all suppliers are required to comply with the following:

Supplier shall establish and maintain systems that provide for traceability of the product, including, but not limited to:

a) Single lots of products will be packaged and identified separately with a different lot number.

b) Placing the lot number on:

i. The packing slip,

ii. The individual container label, note that a specific format may be required on the label. This format will be defined by Eaton if required.

iii. Inspection results.

Traceability shall align and comply with part marking defined on any applicable component drawings or engineering specification.

(Reference IATF 16949:2016 clause 8.5.2.1 / ISO9001:2015 clause 8.5.2)

7.4.3 Product Preservation

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.4.3, all suppliers are required to comply with the following:

- **Delivery Conditions (Reference IATF 16949:2016 clause 8.4.2.4)**

a) Supplier shall select packaging (in accordance with Eaton specifications) as well as the logistic carrier to guarantee the quality of the delivered parts.

b) Each package's labeling must enable a rapid identification of the delivered material (corporate name, Eaton part number, lot number, quantity, date and revision, Eaton order number)

c) Supplier shall monitor On-Time Delivery. It is Eaton's expectation of 100% On-Time Delivery from Suppliers.

- **Handling**

All material shall be managed in such a way as to ensure that it shall be free of contaminants, corrosion, and foreign debris until the material are consumed by the targeted using facility or as otherwise specified by the purchasing contract. (ISO 9001:2015 Clause 8.5.4)

- **Packaging**

A Packaging Approval Form (PAF) is required to be submitted by the supplier and approved by Eaton MG Materials & Quality Management team . The approved form is to be retained with the PPAP documentation. The required form can be found within the Eaton 'Supplier APQP and PPAP Support Package.xlsx' which is available through the Eaton Supplier Portal (my.Eaton.com), Eaton Strategic Partnership, Supplier Quality, Supplier APQP Process. (Reference IATF 16949:2016 clause 8.5.4.1)

7.4.4 Preventative Maintenance Plan (No additional requirements)

7.5 Control of Non-Conformance (No additional requirements)

7.6 Sub-Tier Management

In addition to the requirements in the Eaton Supplier Excellence Manual section 7.6, all Tier 1 suppliers are required to comply with the following:

a) Ensure that the quality performance of each of its sub-tier supplier's meets the Eaton MG quality requirements and expectations.

b) Control the quality of sub-tier suppliers and provide evidence of sub-tier suppliers quality systems, including quality systems certificates, product validation, material certificates, annual layouts and other items upon Eaton MG request. (Reference IATF 16949:2016 clause 8.3.4.4)

c) Assure traceability of the parts received from sub-tier suppliers to a specific lot produced. (Reference IATF16949:2016 clause 8.5.2.1 / ISO9001:2015 clause 8.5.2).

d) Perform supplier quality audits and assessments at their sub-suppliers with the goal of supplier conformity with IATF16949:2016 and any customer-specific requirements.

e) Tier 1 Suppliers who are only ISO9001:2015 are expected to ensure that outsourced processes at their sub-supplier(s) are controlled and conform to requirements (Reference ISO9001:2015 clause 8.4)

Note: The requirements above described includes Directed-Buy suppliers. Unless otherwise specified on Eaton Purchase Order (PO) Terms or agreed at the time of Business Award.

7.7 Change Management

In addition to Eaton Supplier Excellence Manual section 7.7, suppliers shall comply with the following with respect to effective change management:

a) Supplier is required to perform process change management entry and annual training for all Quality/Customer employees involved in Eaton production as minimum. Training records shall be maintained in employee skill matrix.

b) Eaton MG requires all supplier-led changes to be submitted for approval thru the Eaton Corporate Supplier Change Request (SCR) system, which is accessed via the Eaton Supplier Portal (My.Eaton.com).

c) Suppliers are expected to ensure that the process documents (i.e., PFMEA, Control Plan, etc.) affected by any change are updated on a continual basis as appropriate.

d) In most cases, a PPAP request will be issued to formalize the approval of the implemented changes.

e) Proposed changes shall not be implemented in production prior to approval by Eaton.

f) Failure to notify or comply with Eaton's Change Management Portal (SCR) requirements will result in systematic DMR.

Reference IATF 16949:2016 clause 8.5.6.1

8 Performance Evaluation (No additional requirements)

8.1 Performance Measures

In addition to the requirements in the Eaton Supplier Excellence Manual section 8.1, all suppliers are required to comply with the following:

a) Suppliers that do not meet the quality requirements of Eaton may be subject to required participation in a number of supplier performance improvement processes that may include Eaton on-site support or validation and/or supplier review at an Eaton location such as:

   i. Focus Supplier (previously Focus Five) – Requires supplier participation in systemic process improvement focused activities to be completed in a defined time-period.

ii. Controlled Shipping – Level 2 – Requires supplier to contract third party for implementation of 200% containment for a specific non-conformance.

iii. Process Audits – Requires supplier participation in an on-site process review with identified corrective actions monitored through closure. This audit may also be utilized as a proactive or reactive tool. (Refer to section 8.3 regarding Audits & Assessments)

b) Suppliers that do not achieve acceptable implementation of corrective actions within these processes or refuse to participate may be required to meet with Eaton MG Senior Leadership, be subject to Eaton implemented containment actions at the supplier's expense, and/or placed on "No New Business" status.

c) In cases where Supplier Performance is adversely impacting Eaton plant operational performance. Eaton-MG will decide to place the supplier on New Business Hold (NBH) and can submit an IATF performance complaint against the organization based on the issues leading to the special status.

8.2 Business Reviews (No additional requirements)

8.3 Audits & Assessments

Supplier shall allow and support Eaton MG Supplier Development & Quality representatives to validate any of the following assessments on-site as applicable at the appropriate supplier facility(ies) on a periodic basis (3 years minimum). Audits and assessments may be scheduled due to risk analysis, performance, supplier selection or customer requirements.

1. SSA Onsite – a system level assessment using the SSA self-assessment as a basis for validation of the SSA Min. Requirements questions compliance along key elements of the Supplier´s Quality and Manufacturing systems.
2. AIAG CQI – a process-specific assessment published by the AIAG to validate a supplier's adherence to industry-standard practices and measures for a special process.
    - Heat-Treat CQI-9
    - Plating CQI-11
    - Coating CQI-12
    - Welding CQI-15
    - Soldering CQI-17
    - Plastic IM CQI-23
    - Casting CQI-27
    - Brazing CQI-29

- Rubber CQI-30

3. Supplier Manufacturing (SMA) – a systems assessment developed by MG SDE to evaluate a supplier's quality systems; a deeper dive than SSA.
4. Technical Assessment (T/A) – a process-specific assessment developed by MG SDE to validate a supplier adherence to practices and measures for the respective process which are deemed important by MG SDE.
5. Process Audit – an Eaton audit format available in WISPER which can be applied to validate a supplier's quality systems with respect to a specific process.
6. VDA 6.3 Process Audit – a process-based audit standard developed by VDA QMC and the German automotive industry to evaluate a supplier's quality and manufacturing systems.
    - Note: Audit reviews and Revalidation Assessments will be conducted based on the supplier classification (A, B, C ranking) in accordance with VDA document requirements.

Note that under certain circumstances in which an on-site visit cannot be performed, additional virtual tools may be used to assess supplier conformance.

• Supplier Health Checks evaluation

A separated activity focused on random "health check" could be performed during any of the Eaton representative visits. This evaluation is aimed to build supplier-Eaton relationship strength and operational awareness through early diagnosis of problems based on supplier performance, Eaton lessons learned, cross-functional team inputs and industry benchmarks.

The Health Check results will be shared with the expectation of empower preventive activities across supplier commitment and accountability to continuous development of capabilities. Elements to check may include, but are not limited to:

- Employee Skill matrix (Focus on product knowledge, process change, Problem solving, Quality core tools, etc.)
- Safety measures on shop / risks identified for supplier plant.
- Last process changes – employees' awareness and execution
- Sub-tier supplier management – last CQI review
- Scrap pareto & action plan
- Process capability review – SPC random charts verification (if applicable)
- Preventive maintenance highlights
- Eaton tooling life and shared capacity check
- Component lay-out inspection (if applicable)

• Supplier Tooling Audits

Suppliers are required to regularly evaluate and monitor tool usage conditions and support Eaton owned production tooling audits with the expectation to assure optimal operational conditions using a proactive approach to prevent tool related quality defects, delivery disruptions and manage tooling replacement in a structured manner.

- Self-assessments: As a supplier to Eaton, you are expected to incorporate Supplier Tool Verification (STV) self-assessment along your preventive maintenance system to monitor, report and mitigate risks aimed to maintaining a high level of service and supply continuity.
- On-site Audit: You may be contacted by an Eaton SDE or Quality representative to participate in an on-site verification audit of the defined tool and supplier's tooling preventative maintenance system. A detailed review of your STV self-assessment, with the completed tooling checklists will be reviewed with supplier at the tool supplier's facility.

All Eaton owned tools which are located at a supplier site should be maintained and recorded within Eaton's supplier tooling database which is managed centrally by Supplier Tooling Management (STM) Team. Eaton owned production tooling audits include, but are not limited to:

- Stamping Tool
- Casting Tool
- Machine Fixture
- Plastic Injection Mold
- Test Fixture

8.4 Supplier Internal Audits

See section 7.3 regarding 'Special Processes'.

8.5 Supplier Management Review (No additional requirements)

8.6 Performance Recognition (No additional requirements)

9 Improvement

In addition to the requirements in the Eaton Supplier Excellence Manual section 9, all suppliers are required to comply with the following:

a) Establish and maintain effective manufacturing practices and procedures to ensure a continuous flow of defect free parts to Eaton.

e) Establish and maintain a system to continuously improve the quality of its products.

f) Suppliers are expected to utilize continuous improvement tools (Lean, Six Sigma, Value Stream Mapping) and partner with Eaton MG on capturing potential process improvements, design improvements, and pricing. Partner events may include special VA/VE, Process Value Stream Mapping, Kaizen, etc.

g) Monitor its quality performance, on-line, through Eaton's WISPER system.

h) Eaton MG expects suppliers to drive continuous improvement into their business and

manufacturing operating systems. With this philosophy, Eaton MG supports a "drive for zero" communication on supplier performance: Zero ZMPD (PPM to our customers); Zero DMR's (No Eaton plant line disruptions); Zero PPM.

9.1 IDEAS (No additional requirements)

9.2 Preventative & Corrective Action

In addition to the requirements in the Eaton Supplier Excellence Manual section 9.2, all suppliers are required to comply with the following:

a) **24 Hour Containment –** Upon notification of a DMR in WISPER, the supplier is required to provide immediate containment, sorting, replacement, and certification activities on all suspect product(s) at the affected Eaton and/or Eaton customer facilities to isolate and remove all nonconforming products from the supply chain. This containment may be done by one or more of your employees or by an Eaton approved 3rd party containment organization at your company's expense.

- Note 1: If the supplier chooses to perform the containment action itself and requires assistance from a temporary labor firm, a representative from the supplier must be on-site to manage all the temporary firm's activities.
- Note 2: Failure to provide certified product within the required 24 hr. timeframe may result in containment to be initiated by Eaton at supplier's expense.
- Note 3: Eaton may initiate containment prior to 24 hours at the supplier's expense to sustain immediate production needs.

Controlled Shipping – Level 1 (CS1). CS1 must be implemented at the supplier's facility beginning immediately after the DMR is received. The results of the CS1 inspection must be sent electronically to the Supplier Quality Representative who issued the DMR prior to the next shipment of parts. You are required to continue to send the CS1 results to Eaton until the DMR is closed. Additionally, the CS1 results should be posted in the WISPER system for review prior to 8D closure. If CS1 inspection is determined ineffective (escape of the same defect to Eaton during the quarantine period), a mandatory CS2 inspection will be required at your location and expense by a 3rd party.

b) **Root Cause Analysis -** This is part of the 8D reporting that is to be submitted via WISPER, within 4 calendar days of the DMR being issued by Eaton.

c) **Permanent Corrective Action**- The corrective action plan must be identified and reported within the WISPER 8D, within 14 calendar days of the DMR being issued by Eaton.

d) **Thirty (30) day Automatic Return.** Material on Quality Hold that does not have an approved

mitigation plan by the supplier (e.g., certification action identified, RMA for return, etc.) may be returned to the supplier after 30 days from DMR issuance at the supplier's expense.

A supplier that does not provide corrective actions within the required timeline or does not reconcile a rejected Eaton response to DMR within 7 days of the rejection, may have the DMR closed and a new DMR opened for the issue at supplier's expense. (Reference IATF 16949:2016 clause 8.7, 10.2, 6.1.2.2) (ISO 9001: 2015 clause 8.7)

Additionally, Eaton MG will use the below criteria given priority due to significant issues with the expectation that suppliers provide enhanced DMR responsiveness in support of the guidelines described above and take action accordingly.

- HI-DMR: High Impact DMR's are issued under certain conditions to raise the awareness and priority of significant issues. The 'High Impact DMR' checkbox in section 'IV) DMR Approval' of the WISPER DMR form will be checked to identify them from a normal DMR. Conditions under which a High-Impact DMR will be issued:
    - Eaton Customer complaint
    - Material shortage / Line Down
    - Repeat DMR>= 1 in 12 months
    - Safety Critical Component issue.
- Warranty DMR: DMRs will be issued for warranty issues with the expectation that suppliers will help analyze and identify root cause. Cost of Poor Quality (COPQ) incurred will be documented accordingly. Review, approval, and closure of the issue resolution process will be documented through WISPER, in concurrence with the supplier.

9.3 Supplier Development (No additional requirements)

Appendix A: Requirements for special characteristics

In alignment with IATF 16949:2016 clause 8.2 & 8.3, Eaton MG has established several Special Characteristics (SC) designations to define requirements for appropriate controls on critical features:

a) Drawings published after Jan 2017, SC's are identified in the below Table. (▽, C1, C2, C3, P).

Classification - Description	Designation	Control

Special Required Characteristic (Safety and Government Regulatory)	▽	Error proofed or other manufacturing/design controls to verify compliance of all parts
Special Design Characteristic	C1-Level 1	Cpk > 2.0 (Short Term e.g., for PPAP) SPC with Cpk > 1.67 (Long Term) See (b) if not capable
	C2-Level 2	Cpk > 1.67 (Short Term e.g., for PPAP) SPC with Cpk > 1.33 (Long Term) See (b) if not capable
	C3-Level 3	Cpk > 1.33 (Short Term e.g., for PPAP) SPC required (Long Term) See (b) if not capable
Special Process Characteristic Shall also be marked in the PFMEA	P	Controlled through the process parameters. Feature identified on control plan aligned appropriately to PFMEA risk

b) When capability indices show the process to be non-capable,100% inspection (or error proofing) is required (refer to AIAG MSA manual). Implementing error proofing or 100% inspection does not relieve the supplier of continuing to measure process capability in an effort to drive variation reduction. The supplier shall submit to an Eaton Quality representative a corrective action plan and a modified control plan that provides for 100% inspection or error proofing. Variation reduction efforts shall continue until the acceptance criteria are met or until an Eaton Quality representative approval is received.

c) For each SC, the supplier shall ensure that a capability study is established and submitted in PPAP as required. Capability data should be maintained throughout the products life and shall be made available for review by Eaton upon request.

d) Suppliers are required to submit SPC data at Eaton's request. Refer to the latest version of the AIAG SPC manual for guidelines on how to conduct SPC study. Eaton's written approval for shipment may be required if Cpk is outside the acceptable limits. It is the supplier's responsibility to ensure this data is available for each shipment.

e) In the event of failing to achieve the requirements of Special Characteristics, supplier shall implement containment on any actual or suspected non-conforming product, including shipments already made to Eaton MG. Note: this is typically accomplished by incorporating poke-yoke systems to the manufacturing and material handling processes to ensure quality.

f) Supplier shall immediately notify its Eaton plant Supplier Quality Engineer representative if at any

time, including during product/process development, there is any reason to believe that the product may not meet the capability required by Eaton.

g) For all drawings where TES-001 applies, Pass Thru Characteristics (PTC) that are not designated as a SC and identified during activities from the APQP process shall be indicated on the appropriate PFMEA and Control Plan and be considered as SC. (CPC)

h) For drawings created prior to Jan 2017, Special Characteristics may be designated using methods that may be different from what is shown in Table 1.

   a. Some examples of these legacy drawing characteristics are shown in tables 2, 3, & 4 , but still for Special characteristics kindly follow control requirements mentioned in table under 9.3.a

   b. These examples are NOT comprehensive so keep in mind there may be SC's defined that do not appear in this document.

(Reference Truck addendum)

Definition	Designation	Control
Key Control Characteristics	KCC	CpK≥1.67 or 100% inspection
Manufacturing Key Characteristics	MKC - Level A	CpK≥1.33 or 100% inspection. Inspection with variable gage is preferred.
	MKC - Level B	CpK≥1 or 100% inspection. Inspection with variable or attribute gage.
	MKC - Level C	CpK≥1 or 100% inspection

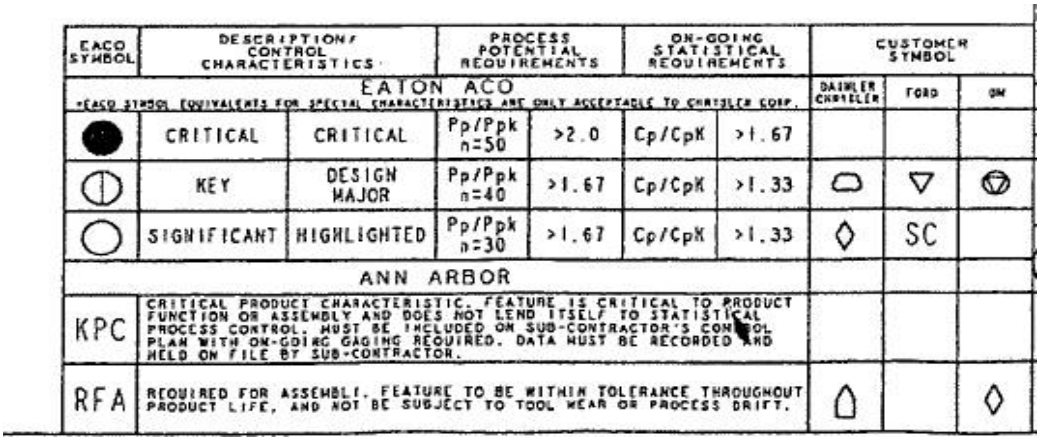
Table 2

(Reference VG Auto Drawing)

EATON SYMBOL	CLASSIFICATION - DESCRIPTION	Cp/Cpk SHORT-TERM	Pp/Ppk LONG-TERM
●	CRITICAL - VARIATION COULD AFFECT SAFETY OR REGULATORY COMPLIANCE	>2.0	>1.67
◐	KEY - VARIATION COULD AFFECT CUSTOMER SATISFACTION WITH PRODUCT	>1.67	>1.33
○	SIGNIFICANT - VARIATION COULD AFFECT INTERNAL PROCESSING OPERATIONS	>1.67	>1.33
(KPC)	KEY PRODUCT/PROCESS CHARACTERISTIC DATA MUST BE RECORDED AND KEPT ON FILE MUST BE INCLUDED ON SUB-CONTRACTOR'S CONTROL PLAN WITH ON-GOING GAGING REQUIRED	SPC NOT REQUIRED	
(RFA)	REQUIRED FOR ASSEMBLY MUST NOT CHANGE WITHOUT APPROVAL FROM EATON MANUFACTURING ENGINEERING	SPC NOT REQUIRED	

Table 3

Please note that for certain transmission drawings, SCs may be designated in separate "CTQ" drawings (e.g., 5588500 - 5588538 etc.). Contact an Eaton SCM or Quality representative if you have questions about this.



EACO SYMBOL	DESCRIPTION/ CONTROL CHARACTERISTICS		PROCESS POTENTIAL REQUIREMENTS		ON-GOING STATISTICAL REQUIREMENTS		CUSTOMER SYMBOL		
EATON ACO *EACO SYMBOL EQUIVALENTS FOR SPECIAL CHARACTERISTICS ARE ONLY ACCEPTABLE TO CHRYSLER CORP.							DAIMLER CHRYSLER	FORD	GM
●	CRITICAL	CRITICAL	Pp/Ppk n=50	>2.0	Cp/CpK	>1.67			
◐	KEY	DESIGN MAJOR	Pp/Ppk n=40	>1.67	Cp/CpK	>1.33	⬭	▽	⊖
○	SIGNIFICANT	HIGHLIGHTED	Pp/Ppk n=30	>1.67	Cp/CpK	>1.33	◇	SC	
ANN ARBOR									
KPC	CRITICAL PRODUCT CHARACTERISTIC. FEATURE IS CRITICAL TO PRODUCT FUNCTION OR ASSEMBLY AND DOES NOT LEND ITSELF TO STATISTICAL PROCESS CONTROL. MUST BE INCLUDED ON SUB-CONTRACTOR'S CONTROL PLAN WITH ON-GOING GAGING REQUIRED. DATA MUST BE RECORDED AND HELD ON FILE BY SUB-CONTRACTOR.								
RFA	REQUIRED FOR ASSEMBLY. FEATURE TO BE WITHIN TOLERANCE THROUGHOUT PRODUCT LIFE, AND NOT BE SUBJECT TO TOOL WEAR OR PROCESS DRIFT.						⌂		◇

Table 4

Error proofing (Reference IATF 16949:2016 clause 10.2.4)

As noted in Table 1, Error Proofing (Poke-Yoke) is expected for Special required characteristics (▽) and Special design characteristics C1 and C2.

a) If error proofing is not feasible for implementation, then controls to verify compliance of all parts are required (i.e., 100% inspection). Implementing error proofing or 100% inspection does not relieve the supplier of continuing to measure process capability in an effort to drive variation reduction.

b) These features must be identified on the appropriate PFMEA and Control Plan.

c) After production launch, Error Proofing requirements are to be implemented for any Zero Mile Product Defects (ZMPD) or quality Spills.

Revision change history

Rev	Revision Date	Updated By	Approved By	Key Sections updated
H	24-Sep-2025	MG Supplier Development & Quality	Mariana Luna	1 – Added in scope ' For Suppliers that Supply electrical programs only, with the exclusion of Automotive, and are already part of electrical supply chain, the electrical addendum is applicable'. 7.3 –Removed 'No Additional Requirements from 7.3.1, 7.3.2, 7.3.4 & 7.3.5 7.3.8. – In point 'g', PPAP requirements related to distributors are added.

G	1-Sep-2025	MG Supplier Development & Quality	Mariana Luna	4.2 – Under onsite Audit & Assessment added a point 'If the supplier is distributor, an onsite assessment is recommended at its manufacturing plant or its facility. If new mfg plant is added, an onsite assessment shall be conducted for the distributor' 4.2.1 – Added new point for SSA assessment for distributors. 7.7 -Added point f 9.3.h- Added point for SC, 'kindly follow control requirements mentioned in table under 9.3.a.'
F	20-Sep-2024	MG Supplier Development & Quality	Mariana Luna	4.1 a- Added new point for Aftermarket requirement. Points from 4.1 b to 4.1 f shifted one point down as new point 4.1 a added. 7.3.8 i – Added new point for Aftermarket PPAP process.
E	1-Sep-2024	MG Supplier Development & Quality	Cobos	4.1 added QMS table, 4.2.1, 6.2, 7.2 DSFR & Prototype (New), 7.3.3, 7.3.8 added table, Safe-Launch Activity, Special Process CQI-29 and CQI-30 added, 8.1, Appendix A Special Characteristics.
D	Sep-2022	VG Supplier Development & Quality	Cobos	Added Cover Page, 4.1, 4.2.1, 4.2.2, 6.3, 7.3.2 (New), 7.3.6, 7.3.7, Safe-Launch Activity, Special Processes, 7.6, 7.7, 8.3, Added additional references to IATF 16949 clauses.
C	Sep-2021	VG Supplier Development & Quality	Cobos	4.2.1, 6.3 (New), 7.3.5, 7.3.7, Safe-Launch activity, 8.3.1 (New), 8.3.2 (New), 9.2
B	Sep-2020	VG Supplier Development & Quality	Cobos	Added Table of Contents, 4.1, 4.2, 4.2.1, 4.2.2, 4.2.3 (new), 5.1 (new), 6.2 (new), 7.3.7, Safe-Launch activity, Special Processes, 7.6, 7.7, 8.1 (eliminated), 8.3, 9.2, Supplier Qualification
A	Aug-2019	VG Quality	Hudnall	Updated to Eaton logo style
0	May-2019	VG Quality	Hudnall	Initial release of MG document combining both Auto and Truck guidance. Added new requirements for Warranty claims.

End of Document