

Global Supplier Quality Manual

Google Chrome is the recommended web browser when viewing walbro.com

The latest revision of this document is available on the internet: http://www.walbro.com/supplier-portal/



Acknowledgment of Walbro Supplier Requirements

Suppliers must sign and return this page to Walbro Supply Chain. By signing this Acknowledgment form, the Supplier agrees and will comply with the following:

- 1) Global Supplier Quality requirements
- 2) Conflict Minerals Policy Statement (See section <u>10.6.16</u> For more information)
- 3) Walbro Declarable Substance List (WDSL) (See section <u>10.6.16</u> for more information)
- 4) Walbro's standard Purchase Order Terms and Conditions (Available on the <u>Walbro Supplier Portal</u>)

Quality Certifications to International Standards:

| ISO9001 | IATF 16949 | (| Other (Explain): | | |
|---------------------------|-----------------|-----|------------------|-----------------|--------|
| Expiration Date | Expiration Date | - | | Expiration Date | |
| Thank you for your cooper | ation | | | | |
| Company Name: | | | | | |
| Address: | | | | | |
| State & Country: | | | | | |
| Name: | Positic | on: | | | |
| Email: | Phone | : + | Country | Area Code | Number |
| x | Date: | | Code | | |
| Sign | ature | DD |) | MMM | YYYY |



Table of Contents

| Section | Description | Page | |
|------------|---|------|--|
| | Acknowledgment of Walbro Supplier Requirements | 2 | |
| | Table of Contents | 3-4 | |
| 1 | Introduction | 5 | |
| 2 | Abbreviations Used in this document | 5 | |
| 3 | Referenced Documents | 6 | |
| 4 | Expectations | 6 | |
| 5 | Key Components | 7 | |
| 6 | Feasibility Review | 8 | |
| 7 | Advanced Product Quality Planning (APQP) | 8 | |
| 8 | Walbro Provided Property | 8 | |
| 9 | Supplier Request for Deviation or Change (SRDC) | 9 | |
| 9.1 | Deviation Request | 9 | |
| 9.2 | Product or Process Change Request | 9 | |
| 10 | Production Part Approval Process (PPAP) | 9 | |
| 10.1 | Situations Requiring PPAP | 10 | |
| 10.2 | Significant Production Run | 10 | |
| 10.3 | PPAP Requirements | 11 | |
| 10.4 | Customer Owned Tooling | 11 | |
| Table 10.5 | PPAP Level Definition Table | 11 | |
| Table 10.6 | PPAP Submission and Retention Requirements Table | 12 | |
| 10.6.1 | Walbro PPAP Package Review Form | 13 | |
| 10.6.2 | Part Submission Warrant (PSW) | 13 | |
| 10.6.3 | Feasibility Review | 13 | |
| 10.6.4 | Engineering Change Documents | 13 | |
| 10.6.5 | Supplier Request for Deviation or Change (SRDC) | 13 | |
| 10.6.6 | Ballooned Drawing | 13 | |
| 10.6.7 | Dimensional Report Form | 14 | |
| 10.6.8 | Design FMEA | 14 | |
| 10.6.9 | Process Flow Chart | 14 | |
| 10.6.10 | Process FMEA | 15 | |
| 10.6.11 | Control Plan | 15 | |
| 10.6.12 | Measurement System Analysis Studies (MSA) | 15 | |
| 10.6.13 | Checking Aids/Fixtures | 16 | |
| 10.6.14 | Initial Process Potential Studies | 16 | |
| 10.6.14.1 | KCC Symbol Application & Requirements | 16 | |
| 10.6.14.2 | Acceptance Criteria | 17 | |
| 10.6.14.3 | Sample Size | 17 | |
| 10.6.14.4 | Multiple Tooling/Multiple Cavity Tooling | 17 | |
| 10.6.15 | Appearance, Material, and Performance Results | 17 | |
| 10.6.15.1 | Appearance Approval | 17 | |
| 10.6.15.2 | Material Certificate of Analysis | 18 | |
| 10.6.15.3 | Performance Test Results | 18 | |
| 10.6.16 | Records of Compliance with Walbro Specific Requirements | 18 | |
| 10.6.17 | Electronic Component Documentation | 19 | |
| 10.6.18 | Sample Parts | 19 | |



Table of Contents (cont.)

| 10.7 | PPAP Disposition | 19 |
|--------|--|----|
| 10.7.1 | Approved | 19 |
| 10.7.2 | <u>Rejected</u> | 19 |
| 10.7.3 | Interim Approval | 20 |
| 11 | Ongoing Quality Requirements | 20 |
| 12 | Packaging, Pallets, and Labels | 20 |
| 13 | Quality Assurance of Sub-Suppliers | 21 |
| 14 | Control of Nonconforming Products and Corrective Action Procedures | |
| 15 | Change Control | 22 |
| 16 | Traceability | 22 |
| 17 | Record Retention | 23 |
| 17 | Supplier Site Reviews & Assessments | 23 |
| 17.1 | Supplier Site Reviews | 23 |
| 17.2 | Supplier Assessments | 23 |
| | Revision Log | 24 |
| | Approval | 24 |



1. Introduction

The Global Supplier Quality Requirements Manual establishes the minimum quality requirements for suppliers of materials, parts and services used in production parts manufactured by Walbro Engine Management.

Suppliers to Walbro must follow the quality assurance requirements described in this document. The requirements of this Manual are based on AIAG APQP and PPAP manuals as well as Walbro specific requirements.

New suppliers must be certified to International Quality Standards such as ISO 9001 or IATF 16949. Suppliers to Walbro prior to July 2014 are considered "grandfathered" for existing business. New business will not be awarded to suppliers who are not certified to a Walbro accepted international standard.

2. Abbreviations used in this document

- (AIAG) Automotive Industry Action Group (www.AIAG.org)
- (IATF) International Automotive Task Force (www.iatfglobaloversight.org)
- (APQP) Advanced Product Quality Planning
- (PPAP) Production Part Approval Process
- (FMEA) Failure Mode and Effect Analysis
- (PSW) Part Submission Warrant
- (8D) Eight Discipline Problem Solving Methodology
- (SQE) Supplier Quality Engineer
- (SQM) Supplier Quality Manager
- (ISO[™]) International Organization for Standardization
- (ISPM) International Standards for Phytosanitary Measures
- (KCC) Key Control Characteristic
- (RMA) Return Material Authorization
- (SRDC) Supplier Request for Deviation or Change
- (WDSL) Walbro Declarable Substances List
- (IMDS) International Material Data System
- (CDX) Central Data Exchange



3. Referenced Documents

Referenced documents are available to the Supplier on the <u>Walbro Supplier Portal</u>. (https://www.walbro.com/supplier-portal/)

- Design/Manufacturing Feasibility Form
- Part Submission Warrant
- Dimensional Report Form
- Supplier PPAP Package Review Form
- APQP Tracker Form
- Supplier Request for Deviation or Change (SRDC)
- Failure Mode and Effects Analysis (FMEA)
- Control Plan
- Appearance, Material, & Performance Results Form
- WDSL Requirements
- Conflict Mineral Policy
- Records of Compliance with Walbro Specific Requirements
- PPAP and Engineering Sample Label Template

4. Expectations

Walbro has the following expectations of all suppliers:

- provide 100% quality parts/services with 100% on-time delivery.

- continually strive to enhance product quality and manufacturing productivity to meet increasing competitive pressure in our global economies.

- follow the laws and security guidelines of other countries as applicable.

- have a process to ensure compliance with all applicable government safety and environmental regulations.

- comply with the ISPM 15 wood packaging regulations.

- provide all documentation and information in English to ensure documents are transferable and understood within all Walbro facilities. This requirement applies to all requests for records and documentation submitted to Walbro as specified in this manual. This requirement can only be waived by the Walbro location receiving the documentation except as otherwise required in PPAP documents required for submission. Reference Section 10.3



- support Walbro in addressing customer failures related to supplier's product/service to include financial reimbursement and assisting the customer.

- demonstrate Quality Planning to promote continuous improvement, defect prevention and process optimization. Preferred Quality Planning methods for production parts are described in the AIAG APQP and PPAP manuals. Quality planning methods may include but are not limited to:

- Design Review(s)
- Feasibility commitment and studies
- Process capability analysis with statistical process controls
- Process flow charts
- PFMEA
- Control plans
- Operator and inspection instructions
- Packaging and Labeling plan
- Root cause analysis, corrective action and preventive actions
- read the Walbro Global Supplier Quality Requirements Manual, print, sign, date and return the Acknowledgment form. (see pg. 2)

Suppliers who fail to meet Walbro quality and delivery objectives may be placed on a new business hold.

5. Key Components

A Key Component is any component which relies upon any special or proprietary vendor processing or formulation which cannot be fully detailed or specified on the Walbro engineering drawing. Product Engineering shall determine which parts are Key Components. Key components will be

identified on the Drawing. Example:

4. THIS PART IS A KEY COMPONENT AND SUBJECT TO WEM POLICY NUMBER D.02.06



6 Design/Manufacturing Feasibility Review

Walbro requires feasibility reviews of products and processes to analyze and determine their ability to commit to all Walbro requirements (reference AIAG APQP manual). A Design/Manufacturing Feasibility Form is available on the <u>Walbro Supplier Portal</u>. The feasibility review must be reviewed and approved by a cross-functional team before new business will be awarded. At a minimum, the cross-functional team must include representation from Quality, Engineering, Manufacturing, and Management. The review must include key design and control features (Critical/Safety/Compliance).

The feasibility review must be submitted to Supply Chain with the quotation.

7 Advanced Product Quality Planning (APQP)

Walbro requires suppliers to use an APQP methodology (reference AIAG APQP manual). An APQP Tracker is available on the <u>Walbro Supplier Portal</u>. The APQP Tracker is used to manage the project through the launch and PPAP submission process.

The Supplier is responsible for all activities defined in the APQP Tracker. The Supplier must notify Walbro of any delays or deviations from the project plan. Walbro may require suppliers to jointly review the APQP status on a scheduled basis. In these situations, the Walbro APQP Tracker must be used to document the status of the project.

Walbro and the Supplier must agree that the part is ready for PPAP submission. (Reference Phase 5 of the APQP Tracker)

Suppliers are expected to make recommendations for changes to drawings or specifications upon initial design review and part quotation. Change requests (using SRDC form) shall be *submitted and approved* prior to the part qualification submission.

Engineering samples may be ordered for review or testing at Walbro. (Reference Phase 3 of the APQP Tracker) Engineering Samples must be clearly identified using blue labels (Reference Label Template on the <u>Walbro Supplier Portal</u>.

8 Walbro Provided Property

The Supplier shall exercise care with Walbro property while it is under the Supplier's control or being used by the Supplier. Walbro property provided for use or incorporation into the product shall be identified, verified, protected, maintained, safeguarded and calibrated by the Supplier. If any Walbro



property is lost, damaged or otherwise found to be unsuitable for use, the Supplier shall immediately report this to Walbro. Records shall be maintained by the Supplier.

9 Supplier Request for Deviation or Change (SRDC)

It is the Supplier's responsibility to make every effort to meet Walbro requirements prior to submitting a SRDC. All SRDCs shall be submitted to the Walbro plant Supply Chain/Purchasing representative providing for sufficient time for review by Walbro. All Deviation or Change requests must be approved by Walbro before they are implemented. Walbro reserves the right to reject any product or service that is supported by a Walbro approved SRDC, and Supplier shall be liable for any resulting loss or damage.

9.1 Deviation Request

A SRDC is initiated to request a temporary deviation to a Walbro drawing, engineering specification or quality standard that requires Walbro approval. Deviations will be approved for a specific time period or a quantity of parts. The request for deviation shall be accompanied by a corrective action plan. (8-D). Repair or rework operations are deviations from approved production processes; KCC's requiring repair or rework MUST be approved using the SRDC process prior to shipment.

9.2 Product or Process Change Request

Walbro must control the products and services provided by our suppliers based on approved and validated products and processes. Walbro requires notification and right of approval of any proposed changes **BEFORE** implementing such change. Notification is achieved by completing and submitting a completed SRDC to the assigned Walbro Purchasing/Supply Chain representative. An approved SRDC shall be followed by a PPAP per Walbro instructions.

No change, however small, shall be made to any product design, manufacturing process or packaging without the express written authorization of Walbro LLC.

10 Production Part Approval Process (PPAP)

The PPAP Submission Level is documented in the Purchase Order. **PPAP Level 3 shall always be the** default, unless otherwise specified in the purchase order. **PPAP's must be completed using** production released drawings defined in the Purchase Order.



The Supplier is responsible for all costs related to PPAP. PPAP costs should be considered in the overall cost of doing business. Walbro will NOT accept charges related to PPAP.

10.1 Situations Requiring PPAP

The Supplier is responsible for submitting PPAP for approval prior to the first production shipment in the following situations:

- New part or product,
- Correction of non-approved PPAP,
- Change of specification according to Engineering Change Notice (ECN) new rev level,
- Changed material or new design of previously approved part (change of specification),
- New, replaced, changed or reconditioned tools,
- Changes in production process (Suppliers or Sub-suppliers),
- Transfer of part or process to different plant or a different sub-supplier,
- Change of sub-supplier parts (The Supplier must submit PPAP),
- When the part has not been manufactured within the last twelve months (Level 2),
- When requested by Walbro due to quality issues, or
- Walbro may also request submission of PPAP due to other reasons when deemed necessary

If there are questions regarding PPAP requirements, contact the Walbro Supplier Quality Representative.

10.2 Significant Production Run

The significant production run must be completed with the equipment, gauging, material, operators and process settings intended for production product. The significant production run shall be from a minimum four-hour run or a minimum of 300 consecutive parts, whichever is greater. For multi-cavity tools, a minimum of 300 consecutive cycles is required. These minimums are required unless otherwise specified by the Walbro SQE.

A Walbro representative shall have the option to be present at the Supplier to witness the Significant Production Run.



10.3 PPAP Requirements

The requirements of PPAP document submission is determined by the PPAP level (Reference Table 10.5).

All documents shall be completed in English. The following must be submitted using the Walbro form:

- PPAP Package Review Form
- Part Submission Warrant
- Dimensional Results Form
- Appearance, Material, and Performance Results
- Records of Compliance with Walbro Specific Requirements

With approval from Walbro, all other PPAP documents that are AIAG compliant may be submitted in the Supplier's local language.

All PPAP requirements must be met prior to submission. Any non-conforming requirements must be documented on an SRDC approved by Walbro and submitted with the PPAP package.

All PPAP requirements must be completed regardless of submission Level. (Reference <u>Table 10.6</u> for submission and retention requirements)

For additional information regarding PPAP requirements, refer to AIAG PPAP manual and Supplier PPAP Package Review Form on the <u>Walbro Supplier Portal</u>.

10.4 Walbro Customer Owned Tooling

Suppliers are required to submit a level 3 PPAP for approval for parts produced from tooling owned by Walbro Customers.

10.5 PPAP Level Definition Table

- Level 1 Warrant only
- Level 2 Warrant with product samples and limited supporting data.
- Level 3 All requirements per <u>Table 10.6</u>(Default Level)
- Level 4 Warrant and other requirements as defined by Walbro.
- Level 5 Warrant, Certificate of Compliance, and other requirements as defined by Walbro.

Reference AIAG "PPAP" manual



Walbro Operating System

10.6 PPAP Submission and Retention Requirements Table

| | | Submission Level | | | | |
|----|--|------------------|----------------|----------------|---------|----------------|
| | Requirement | <u>Level 1</u> | <u>Level 2</u> | <u>Level 3</u> | Level 4 | <u>Level 5</u> |
| 1 | Walbro PPAP Package Review Form | S | S | S | S | S |
| 2 | Part Submission Warrant (PSW) | S | S | S | S | S |
| 3 | Feasibility Review Form | N/A | N/A | S | N/A | N/A |
| 4 | Engineering Change Documents, if any | R | S | S | S | S |
| 5 | Supplier Request for Deviation or Change (SRDC) | S | S | S | S | S |
| 6 | Ballooned Drawing | R | S | S | R | R |
| 7 | Dimensional Report Form | R | S | S | R | R |
| 8 | Design FMEA for (Suppliers that are Design Responsible)* | R | R | S | R | R |
| 9 | Process Flow Chart* | R | R | S | R | R |
| 10 | Process FMEA* | R | R | S | R | R |
| 11 | Control Plan* | R | R | S | R | R |
| 12 | 12 Measurement System Analysis Studies (MSA) | | R | S | R | R |
| 13 | 13 Checking Aids / Fixtures | | R | S | R | R |
| 14 | 14 Initial Process Potential Studies | | R | S | R | R |
| 15 | 15 Appearance, Material & Performance Results | | S | S | S | R |
| 16 | Records of Compliance with Walbro Specific Requirements* 1) Conflict Minerals Policy Statement | R | S | S | S | S |
| | 2) WDSL | | | _ | | |
| 17 | Electronic Component Documentation Certificate of Compliance | N/A | N/A | N/A | N/A | S |
| 18 | Sample Parts | R | S | S | R | R |

S= Submit with PPAP Package

R= The Supplier shall retain at appropriate locations and make available to Walbro upon Request *Reference AIAG PPAP Manual*

*Must be submitted to Walbro 30 days prior to PPAP Submission.



10.6.1 Walbro PPAP Package Review Form

Suppliers are required to complete the Walbro PPAP Package Review Form. This form was developed to assist suppliers in meeting Walbro PPAP requirements. Suppliers are required to use this form to review all PPAP requirements before submitting to Walbro. All PPAP requirements must be met prior to submission. PPAP documentation not meeting Walbro requirements must be corrected before submission. This form must be submitted in English.

10.6.2 PSW - Part Submission Warrant

Suppliers are required to use the Walbro PSW Form. The PSW must be completed in English. A copy of the PSW is located on the <u>Walbro Supplier Portal</u>.

10.6.3 Design/Manufacturing Feasibility Review

The Design/Manufacturing Feasibility Review will be completed, and submitted for Level 3 PPAPs only. (Reference Section 6)

10.6.4 Engineering Change Documents

Include any authorized engineering change documents for those changes not yet recorded in the design record but incorporated in the product, part or tooling. Examples could include a Engineering Change Request or Global Manufacturing Change Request.

10.6.5 Supplier Request for Deviation or Change (SRDC)

Include any completed and approved SRDCs. (Reference Section 9)

10.6.6 Ballooned Drawing

The ballooned drawing provides explicit reference between the dimensions on the drawing and the Dimensional Report. Requirements for a ballooned drawing are as follows:

- Utilize the Released Production drawing as referenced on the Purchase Order,
- all dimensions, notes, and materials on the drawing are assigned a unique number (Starting with 1),
- numbers must be circled, and
- results are reported using the unique number on the Dimensional Report Form and the Appearance, Material, & Performance Results Form.



10.6.7 Dimensional Report Form

Suppliers are required to use the Walbro Dimensional Report Form. Results must be documented in English. The Supplier shall record results of all dimensions (except reference dimensions) as noted on the ballooned drawing.

The following guidelines define how many parts are to be measured (100% lay-out). The results are recorded on the dimensional report form.

• 5pcs per single process / cavity

Multi-cavity tooling (if applicable)

- 2-4 Cavities 3pcs per cavity
- 5 Cavities or more 1pc per cavity

The Supplier shall retain 1 master sample per cavity until replaced by a new PPAP.

Changes or exceptions to the above sample requirements must be agreed upon by authorized Walbro Quality representatives before beginning the PPAP Process.

10.6.8 Design FMEA

If the Supplier is responsible for the design, the Supplier shall develop a Design FMEA. The FMEA format shall meet AIAG FMEA template requirements.

A single design FMEA may be applied to a family of similar parts or materials when agreed upon with Walbro.

10.6.9 Process Flow Chart

The Supplier shall develop a process flow diagram that clearly describes the production process steps and sequence. The process flow chart is a visual approach to describing and developing sequential or related work activities. It provides both a means of communications and analysis for planning, development activities, and manufacturing processes. All KCCs must be identified in the process flow using the symbols identified in section <u>10.6.14.1</u>

Process Flow Diagrams may be applied to a family of similar parts or materials when agreed upon with Walbro.

The process step number and description used in the Process Flow must match on the PFMEA and Control Plan

10.6.10 Process FMEA

The Supplier shall develop a Process FMEA including the criteria used to assign severity, occurrence and detection values. The FMEA format shall meet AIAG FMEA template requirements.

A single process FMEA may be applied to a family of similar parts or materials when agreed upon with Walbro. (A PFMEA Template is available on the <u>Walbro Supplier Portal</u>)

The process step number and description used in the FMEA must match on the Process Flow and Control Plan. Reference the AIAG Potential Failure Mode and Effects Analysis manual for additional information.

10.6.11 Control Plan

The Supplier shall develop a control plan that defines all methods used for process control. The control plan shall meet AIAG Control Plan template requirements.

The control plan describes the actions that are required at each phase of the process including receiving, in-process, out-going, and periodic requirements to assure that all process outputs will be in a state of control. During regular production runs, the control plan provides the process monitoring and control methods that will be used to control product and process characteristics.

A single control plan may be applied to a family of similar parts or materials when agreed upon with Walbro. (A Control Plan Template is available on the <u>Walbro Supplier Portal</u>)

The process step number and description used in the Control Plan must match on the FMEA and Process Flow. Reference the AIAG APQP and Control Plan manual for additional information.

10.6.12 Measurement System Analysis Studies (MSA)

A measurement system analysis is a mathematical method of determining how much the variation within a measurement system contributes to the overall measured process variability. An MSA is required for all Walbro Key Control Characteristics (KCCs) Refer to <u>section 10.6.14.1</u> for Walbro KCC symbols.

The suggested method to analyze the measurement system is a Gage R&R study. A Gage R&R (repeatability and reproducibility) study is used to understand how capable the gage's measurements within a process are, regardless of the operator. Using total tolerance, the percentage of the R&R should strive to be less than 10%. Gages are considered marginal if between 10% and 30%. Results greater than 10% require Walbro approval.

Samples shall represent the full range of process variation when feasible. A single MSA may be applied to similar measurement tools when agreed upon with Walbro.

Reference the AIAG Measurement Systems Analysis manual for additional information.



10.6.13 Checking Aids/Fixtures

If requested by Walbro, the Supplier shall submit any part-specific checking aid.

The Supplier shall certify that all aspects of the checking aid agree with part dimensional requirements. The Supplier shall document all released engineering changes that have been incorporated in the checking aid.

Checking aids can include fixtures, variable and attribute gauges, models, templates, and mylars specific to the product being submitted.

10.6.14 Initial Process Potential Studies

Process capability studies are performed to verify if the process is capable to produce product/articles according to the requirements set by Walbro. As a minimum, Initial Process Potential Studies must be completed for **K**ey **C**ontrol **C**haracteristics (KCCs) that are identified on the Drawing.

KCCs are noted on the drawings or specification with special symbol. The symbols and requirements are defined in the following table.

| KCC | Symbol | Applications | Requirements |
|-----------------------|--------------|---|---|
| Critical or Safety | \diamond | Potential Fuel Leak (Note: symbol should be placed at the leak specification, not the contributing parameters) Potential Engine Stoppage (Marine & Transportation Applications) Potential Uncontrolled Throttle Government Regulations / Emissions | One of the following control methods must be used: - 100% Test or Inspect - Material Certification - Statistical Process Control (SPC) CPK ≥1.67 |
| Major | $\widehat{}$ | 1. Known or Suspected areas of Process Control (where additional statistical focus is desired) | Evidence of statistical capability must be available with a CPK <u>></u> 1.33 |
| Control Feature | V | 1. Characteristics which cannot be measured for capability, but must be controlled | Condition must be acknowledged and addressed on PFMEA, Control Plan, and Tooling PM instructions Demonstration of controls on processes (parameter control, check frequency) |

10.6.14.1 KCC Symbol Application & Requirements

These symbols identify characteristics that affect fit, form and/or function of the part in its application. In addition, the Supplier may add additional characteristics as identified by PFMEA that need to be treated in the same manner as KCC's.

In some instances, Walbro Customer drawings may be placed on Walbro drawing title blocks. Key Control Characteristic symbols, definitions, and requirements may vary. Contact a Walbro Supplier Quality representative for requirements. <u>Table of Contents</u> Global Supplier Quality Manual | Page 16 of 1



10.6.14.1 KCC Symbol Application & Requirements (cont.)

KCCs shall be clearly identified in Control Plans, FMEAs, and Work Instructions.

10.6.14.2 Acceptance Criteria

Following are the criteria for evaluating initial process studies.

NOTE: Processes must be stable and in control to determine capability.

| Index <u>></u> 1.67 | The process meets requirements for Critical or Safety Characteristics |
|------------------------|---|
| Index ≥ 1.33 | The process meets requirements for Major Characteristics |
| | If the process does not meet the acceptance criteria, contact a Walbro Quality representative for a review of the study results and corrective action |

10.6.14.3 Sample Size:

The sample size for determination of capability is a minimum of 30 measurements unless otherwise specified. Samples must be randomly selected from the significant production run.

10.6.14.4 Multiple Tooling / Multi-Cavity Tooling:

A separate Capability analysis is required for each tool or cavity used to produce the same part number. Cavity traceability is required for monitoring quality performance.

10.6.15 Appearance, Material, & Performance Results

The Supplier is required to complete in English the Walbro Appearance, Material, and Performance Test Results Form. A copy of this form is available on the <u>Walbro Supplier Portal</u>.

10.6.15.1 Appearance Approval

Appearance approval results shall be documented when appearance requirements are noted on the drawing. Examples of requirements include color, gate locations, and other specifications when engineering approval is noted on the drawing.

10.6.15.2 Material Certificate of Analysis

Material tests and analysis shall be performed on all parts where material, chemical, and/or metallurgical requirements are specified. The material certificate of analysis must include the material tested, material specification and the test results.

Qualified laboratory test results are acceptable if the Supplier does not have the capability to perform all tests in-house. The laboratory shall be qualified for the type of measurements or tests conducted.

When a qualified laboratory is used, the Supplier shall submit the test results on the laboratory letterhead that includes the date of the tests and the standards used to run the tests.

10.6.15.3 Performance Test Results

The Supplier is responsible for performing any laboratory and/or functional tests required by the drawings or technical specifications. Examples of performance tests include hardness testing, torque testing, leakage testing, electrical function testing, etc. Laboratory and functional testing requirements must be included in the control plan.

10.6.16 Records of Compliance with Walbro Specific Requirements

The Supplier is required to use the Records of Compliance with Walbro Specific Requirements found on the <u>Walbro Supplier Portal</u>. The form must be completed in English.

Walbro specific requirements include the Walbro Declarable Substance List (WDSL) and the Conflict Minerals Policy.

Due to the increasing amount of legislation controlling substances, Walbro suppliers are required to provide full material declaration (FMD) for all parts and materials. The Supplier is responsible for entering this information into the appropriate database. The <u>Walbro Supplier Portal</u> contains information regarding these submissions (<u>http://www.walbro.com/supplier-portal/).</u>



10.6.17 Electronic Component Documentation

A Certificate of Compliance is required for suppliers of Electronic Components.

A document certified by a management representative of the Supplier that the electronic component meets the required specifications. Certificate of Compliance must include the following information:

- Date
- Manufacturer
- Reference Test Specifications
- Drawing
- Distributor Name
- Signature of Management Representative
- Title of Management Representative
- Official Company Letterhead

10.6.18 Sample Parts

Sample parts submitted to Walbro should be from a significant production run as defined in <u>Section</u> <u>10.2</u>. If required, additional sample quantities will be specified in the Purchase Order.

A minimum of 2 of the measured sample parts shall be submitted to the attention of the Walbro Quality Representative responsible for the PPAP. These samples must be identified and traceable to the results on the Dimensional Report Form.

PPAP Samples must be clearly identified using orange labels (Reference Label template on the Walbro Supplier Portal).

10.7 PPAP Disposition

Supplier PPAPs will be dispositioned by Walbro per the following:

10.7.1 Approved

Approved indicates that the PPAP meets all Walbro requirements and has been accepted. The Supplier is authorized to ship production parts as specified in the Purchase Order.

10.7.2 Rejected

Rejected indicates that the PPAP does not meet Walbro requirements. The Supplier must review and make corrections per the Supplier PPAP Package Review Work Instruction. The PPAP must be resubmitted with the corrections. The Supplier is not authorized to ship production parts until the PPAP is approved.

<u>↑Table of Contents</u>

10.7.3 Interim Approval

Interim Approval indicates that the PPAP has been approved until a specific date and/or for a quantity of parts. Interim Approval will be granted at the discretion of Walbro.

The Supplier must review and make corrections per the Supplier PPAP Package Review Work Instruction. The PPAP must be resubmitted with the corrections.

11. Ongoing Quality Requirements

Production parts may be shipped after PPAP approval per the Purchase Order and/or schedule requirements.

Suppliers of electronic components (parts approved by Level 5 PPAPs) shall provide a Certificate of Compliance with every shipment.

A Material Certificate of Analysis is required with every shipment for all other production parts.

12. Packaging, Pallets, and Labels

Suppliers must use packaging in accordance with Walbro packaging agreement. Note that different Walbro facilities may have different packaging requirements. It is the Supplier's responsibility to use the approved packaging and labeling method.

The Supplier shall ensure that all Walbro packaging is clean and free from dirt, debris, foreign materials and damage. All returnable packaging and dunnage that is not clean and free from dirt, debris, foreign material and damage is subject to rejection.

Pallets must comply with the ISPM 15 wood packaging regulations.

Barcode Labels must be compliant to AIAG B-10 Labeling Guidelines. Reference the AIAG Trading Partner Labels Implementation Guidelines. At a minimum, all labels must include the following information:

- Supplier Name
- Part Number
- Date
- Description
- Quantity
- Rev Level
- Lot Number



13. Quality Assurance of Sub-Suppliers

Walbro requirements shall be transferred to the sub-supplier as applicable.

Basic requirements for quality assurance of purchased parts and outsourced processes shall be established by the Supplier. These requirements must assure the quality of parts is properly controlled by its sub-suppliers. Sub-suppliers shall have a process to ensure compliance with all applicable government safety and environmental regulations.

For the special process (Heat Treatment, Painting, Plating, Welding, Soldering, Polishing, etc.) carried out at sub-supplier, suppliers must define process control parameters and frequency in agreement and collaboration with Sub-Suppliers to ensure fulfillment of quality requirements.

Suppliers must be able to provide an approved PPAP from all sub-suppliers when requested by Walbro.

14. Control of Nonconforming Products and Corrective Action Procedures

In the event that non-conforming parts or products are identified at Walbro, a reject notice will be generated and the Supplier will be notified via email. Walbro will provide reasonable detail in the email so that the Supplier can immediately begin containment actions and root cause investigation.

Suppliers are required to provide Return Material Authorization (RMA) for defective or suspect material. Suppliers may be responsible for costs associated with defective material including, but not limited to: freight, rework if required at Walbro Facilities and/or Walbro Customer locations, and all other costs to manage Supplier related defects.

Root cause investigations are to begin immediately upon notification of a non-conformance. The 8D is the preferred problem solving methodology to minimize the possibility of a reoccurrence. Suppliers are required to immediately inspect current inventory and work in progress for noted nonconformances and segregate accordingly. Suppliers are required to submit containment actions to Walbro within 24 hours, or next working day. Corrective actions are expected to be closed within 30 days.



In the event that non-conforming parts or products are identified at the Supplier, it is the Supplier's responsibility to submit a **Supplier Request for Deviation or Change**. The request must be approved prior to the Supplier shipping the parts.

When parts are shipped per an approved SRDC, the packaging must be clearly labeled with a description of the non-conformance and the SRDC tracking number.

Once a non-conformance has been corrected, the first shipment of corrected parts must be clearly labeled as the first shipment with corrected product and include the CAR/8D tracking number.

The Walbro Supplier Request for Deviation or Change form must be used. When approved by Walbro, the SRDC may be submitted in the Supplier's local language.

15. Change Control

When approved changes are implemented, a "Breakpoint" label must be placed on the next shipment. The notification must be clearly visible on all sides of packaging and orange in color. At a minimum, the notification must include the date of change, Supplier name, description of change, drawing revision and number of pieces with shipment. Changes can include but are not limited to drawing changes, specification changes, processes, and test methods.

16. Traceability

Suppliers shall establish and maintain documented procedures for identifying the product from receipt of raw material and components through production and delivery. Suitable methods of product traceability shall be maintained – including permanent part marking and recorded/stored data. Special attention shall be given to traceability for outside processing such as heat treatment, plating, coating, etc.

Mechanical and metallurgical properties shall be monitored by lot and retained per Record Retention requirements (See section 17).





17. Record Retention

Quality records shall be maintained so they remain legible and are available for review upon request. Records may be electronic or hardcopy. Records should include accurate, updated, and complete quality data as defined in the Control Plan. Records shall also be kept for warranty and field complaints.

Records of production materials shall be maintained for a minimum of seven calendar years or one year after the product is obsoleted. Walbro may require Suppliers to retain records for longer periods of time if necessary.

18. Supplier Site Reviews & Assessments

Walbro reserves the right to perform periodic on-site reviews or assessments of suppliers and subsuppliers. Further, the right to perform periodic on-site reviews or assessments of suppliers and subsuppliers extend to Walbro's customers.

18.1 Supplier Site Reviews

Walbro may review Supplier and sub-supplier facilities, quality systems, records and product ready for shipment. The Supplier and sub-suppliers' personnel, gauging, and test facilities shall be made available as requested during site reviews.

18.2 Supplier Assessments

Supplier Assessments can include the following:

- Full Assessment
- Process Audit
- Continuous Improvement Workshop



Revision Log

| Level | DATE | DESCRIPTION OF CHANGE |
|-------|-----------|--|
| Draft | 11/7/12 | Draft procedure |
| А | 6/5/13 | Initial Release |
| В | 1/1/15 | Major Revision, Updates and Additions |
| С | 8/13/15 | Corrections & Update |
| 0 | Jun 2019 | Updated format to match Walbro Operating System (WOS) format. No Content Revision. |
| 1 | 26-Jul-19 | Major Revision, new requirements, amended requirements, & formatting changes |
| 2 | 15-Jan-20 | Corrections, Additions and updates |
| | | |
| | | |
| | | |
| | | |
| | | |

Approval

Tim Grifka

2

15-Jan-120

Vice President Quality

Rev Level

Rev Date