HARLEY-DAVIDSON MOTOR COMPANY SUPPLIER QUALITY MANUAL

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HARLEY-DAVIDSON QUALITY MISSION

The Harley-Davidson Motor Company has a long-standing history of building highly desirable motorcycles, parts and accessories, and delivering premium brand experiences that deliver to our customer's expectations. Our commitment to continuing this tradition is reflected in the Harley-Davidson Quality Mission Statement:

"Customers for life...Harley-Davidson values the deep emotional connection that is created with our customers through our products, services and experiences. We are fueled by the brand loyalty and the trust that our customers place in us to deliver premium quality and the promise of a fulfilling lifetime ownership experience. We exemplify this commitment by embracing a culture of personal responsibility and stewardship for quality in everything we do."

Harley-Davidson's commitment to delivering high quality motorcycles, parts and accessories directly results in customers who are some of the most satisfied and loyal in the world. To continue to earn our customer's loyalty, we must ensure that the quality of our products and services continues to be the best it can be, and that we serve our customers to ensure their experiences stand out above the rest.

Delivering high quality products that meet customer expectations requires all of us to continuously improve on our business processes and the quality of our products with a continuous improvement mindset, always driving for improvement and increasing efficiency in everything we do. With your commitment, Harley-Davidson customers will remain loyal, and our business will continue to be a global leader in fulfilling dreams and providing extraordinary customer experiences.

PURPOSE

The purpose of the Harley-Davidson ("H-D") Supplier Quality Manual ("manual") is to define Harley-Davidson's expectations and supplier responsibilities in support of Harley-Davidson's business strategy and quality mission. The requirements in this manual extend from new part development through part obsolescence, otherwise known as the full lifecycle of a part.

SCOPE

Requirements specified in this manual apply to all suppliers that produce original equipment (OE) and Part and Accessories that are sold, directly or indirectly, to H-D; this includes Parts and Accessories as well as all components used in final assembly of OE motorcycles. It is the responsibility of each Tier 1 Supplier to propagate these requirements throughout their supply chain, including all sub-tier suppliers, and to ensure their compliance with the requirements in this manual. Nothing in this manual limits any of the rights or remedies of H-D under the Master Supply Agreement or other supply contract between H-D and the Supplier.

MANUAL LOCATION and CONTROL

This manual is distributed via H-D's Supplier web portal, the Harley-Davidson Supplier Network (<u>H-DSN.com</u>) and may be updated and revised from time to time by H-D. Suppliers are expected to remain up to date on H-D requirements by frequently visiting H-DSN. Printed copies of this manual are considered uncontrolled documents; the version of this manual found on H-DSN at any point in time is the binding document. Questions regarding this manual should be directed to your Supplier Development Engineer or your Category Manager.

QUALITY SYSTEM REQUIREMENTS

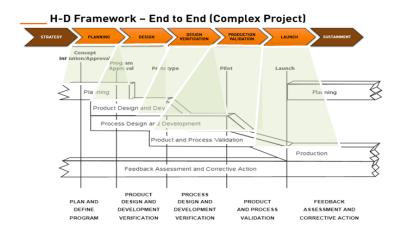
As a condition of doing business with H-D, Tier 1 suppliers must have a current, certified Quality Management System in place by an accredited registrar. This is typically certification to the ISO9001 or IATF16949 standards. Suppliers who are not certified are expected to have a compliant Quality Management System and be working toward certification. At the discretion of Harley-Davidson, a Supplier Systems Evaluation, a VDA audit, or an onsite audit may be conducted at the supplier to evaluate the risk at a supplier.

All suppliers must comply with the Harley-Davidson quality expectations set forth in this manual. Suppliers are fully responsible for the quality of their products, including parts received at Harley-Davidson manufacturing plants or distribution centers as well as warranty related to any supplied part. Suppliers shall reference Automotive Industry Action Group (AIAG) documents, including the Production Part Approval Process (PPAP), Failure Mode and Effects Analysis (FMEA), Advanced Product Quality Planning (APQP), Measurement Systems Analysis (MSA), and Statistical Process Control (SPC).

H-D reserves the right to conduct onsite audits of suppliers and their sub-tiers to assure compliance with this manual and all quality and process documentation. Suppliers shall require their sub-tier suppliers to allow these audits preferably with a representative from the Tier 1 supplier in attendance.

ADVANCED PRODUCT QUALITY PLANNING (APQP)

Harley-Davidson's Product Development Methodology, known as "MX", is a phase gate methodology that ensures that we create, design and deliver great motorcycles. MX aligns to the APQP tools as defined by the Automotive Industry Action Group ("AIAG"). The graphic below demonstrates how MX meshes with Advanced Product Quality Planning per AIAG:



H-D expects that each supplier demonstrates competency in Advanced Product Quality Planning as part of its Quality Management System. This includes the use of cross-functional teams, upfront planning, and quality tools including, but not limited to:

- Manufacturing Feasibility
- Identification of Key Product/Process Characteristics
- Process Flows
- Process/Design Failure Modes and Effects Analysis (P/DFMEA)
- Control Plans
- Measurement Systems Analysis (MSA)
- Statistical Process Control (SPC)
- Production Part Approval Process (PPAP)
- After Action Review (AAR)

Each supplier shall incorporate and maintain the APQP results throughout the complete manufacturing process, which includes but is not limited to:

- Work instructions
- Gages and Checking Aids
- Equipment design and maintenance program
- Testing strategies
- Material handling and storage
- Packaging, labeling, and shipping
- Facility layout and maintenance

- Employee training
- Sub-Tier Supplier control

PRODUCTION PART APPROVAL PROCESS (PPAP)

It is a requirement that all suppliers follow proper Advanced Product Quality Planning methodology as part of their Quality Management System, including PPAP as an output of that methodology. The purpose of the PPAP is to demonstrate Harley-Davidson's design and product specifications will be met and controlled by each supplier's manufacturing process; it provides documented evidence of APQP.

Suppliers are required to comply with the current edition of the AIAG *Production Part Approval Process (PPAP)*Manual. For additional requirements and expectations, refer to the <u>PPAP Submission Guide</u>, located in the *Doing Business with Harley-Davidson* manual on H-DSN.

H-D requires a PPAP submission for any new product or any process change. Submission requirements will be determined by an H-D representative and communicated via an PPAP Submission Checklist with applicable elements. Each supplier is responsible to maintain all of the applicable elements of the PPAP regardless of what is defined on the PPAP Submission Checklist for PPAP submission.

The supplier must notify H-D in advance in writing of any planned changes, whether part design, process, or site. Refer to the AIAG *PPAP Manual, Section 3, Customer Notification and Submission Requirements* for additional submission requirements. The supplier is required to obtain H-D's written approval prior to proceeding. A Product Deviation Notice (PDN) will be required if a change is put in place prior to PPAP approval, refer to the PDN section of this Manual for further detail.

The supplier shall provide a PPAP submission to H-D and must obtain written approval of that submission from H-D before shipment of production quantities of product. Parts cannot be PPAP approved without part drawings that are fully approved and authorized by H-D Engineering. It is the supplier's responsibility to ensure they submit the latest authorized drawing revision. For questions on the latest authorized drawing revision, contact your New Product Supply Management contact.

Tier 1 suppliers are required to manage all PPAP submissions and approvals with their sub-tier suppliers. All sections of any sub-tier supplier PPAP submission must be available for review upon request by H-D.

The supplier is required to retain a copy of the approved PPAP documentation and master product samples for each product in a manner that prevents document deterioration from Product Launch + 15 years after the last production run. This documentation shall be made available to H-D upon request.

SAFE LAUNCH STRATEGY

To ensure a proper focus on part quality coming into launch, all suppliers are expected to have a safe launch strategy in effect for any new product provided to Harley-Davidson. The supplier is responsible for the creation and execution of this plan and should be striving towards a zero-defects mentality. Any late changes (dimensions, material substitutions, etc) shall have increased verification as a segment of this plan. The safe launch plan will cover at a minimum the requirements outlined below in alignment with the Harley-Davidson component risk rating, but suppliers are encouraged to develop a more wholistic plan based on their specific commodity and processes. Additionally, other items may be requested by the H-D team at any time. These may include and are

not limited to 3rd Party Inspection, Product & Process Assessment (PPA), VDA Assessment, or Run at Rate Assessment.

SAFE LAUNCH STRATEGY (CONTINUED)

One of the main tools used for the safe launch strategy is the Escalated Control Plan (ECP). The ECP is a documented Launch Control Plan that defines additional requirements to the Production Control Plan for a set period of time or until the requirements in the Production Control Plan can be clearly demonstrated to be fully met. The ECP should take into consideration all known critical conditions of the part, as well as potential areas of concern identified during the PPAP. The ECP will consist of additional controls and inspection audits, and will factor in the production process (set-up, machinery, fixture, tooling, operation, material/components, preventative maintenance, labor, and climate). If the requested escalated dimension is controlled at a sub-tier, the Tier 1 is responsible for ensuring that the respective sub-tier completes that escalated inspection and submits the data for reporting availability to the Tier 1.

The H-D project team and the supplier will mutually agree upon and develop the ECP, including timing, required inspection frequencies, inspection methods, and exit criteria. As a recommended guideline, the ECP should encompass a minimum of 30 days volume & 3 separate runs.

Any failures found within the ECP implementation must be communicated by the supplier to H-D, and the supplier must follow the 8D process or approved equivalent to make Permanent Corrective Actions (PCA) to address the failures. If non-conforming material is generated during the ECP period, the ECP must be restarted after the PCA has been implemented and proven effective.

High Risk – Escalated Control Plan

- Must contain 100% Inspection on all special characteristics (KPC, SC, RC).
- Supplier and H-D to align on other dimensions to be checked and their escalated frequency.
- Inspection is to be done in a separate area (not in-line) and/or completed by a qualified inspector. If the operator is also qualified as an inspector, they may complete the checks. A 3rd party may also be used to complete these inspections.
- All data to be provided to the H-D SQL (Supply Quality Lead) for review at an agreed upon cadence.

Medium Risk - Escalated Control Plan

- Must contain more frequent inspection of special characteristics (KPC, SC, RC).
- Supplier and H-D to align on other dimensions to be checked and their escalated frequency.
- Inspection may be done online or in a separate area and may be completed by a qualified inspector or an online operator pending the operator has proper training on the inspection procedures requirement. A 3rd party may also be used to complete these inspections.
- All data must be retained and available upon request by H-D. In the event that there is a non-conforming part that data is to be sent and discussed to the H-D SQL.

Low Risk - Escalated Control Plan

• Supplier and H-D to align on to be checked and their escalated frequency.

- Inspection may be done online or in a separate area and may be completed by a qualified inspector or an online operator pending the operator has proper training on the inspection procedures requirement. A 3rd party may also be used to complete these inspections.
- All data must be retained and available upon request by H-D. In the event that there is a non-conforming part that data is to be sent and discussed to the H-D SQL.

Any exception needs to be reviewed and approved by the appropriate H-D Supplier Development Engineer or Supply Quality Lead.

SPECIAL CHARACTERISTICS

Special Characteristics are defined as product and/or process parameters which can significantly affect safety, regulatory compliance, and/or functions of H-D products. These characteristics are identified by H-D Engineering during the Advanced Product Quality Planning process using DFMEA and PFMEA principles. Special Characteristics are identified with various symbols requiring specific levels of special controls and process capability. At a minimum, suppliers shall implement process controls for Special Characteristics as defined by H-D. It is the responsibility of the supplier to ensure and demonstrate the required level of process capability for all Special Characteristics. Process capability shall be measured in accordance with the most recent edition of the AIAG Statistical Process Control (SPC) manual.

Suppliers are responsible for proper communication, control, and monitoring of Special Characteristics requirements (where applicable) with their sub-tier suppliers. The supplier shall conduct ongoing SPC monitoring of all identified Special Characteristics and shall collect and retain the SPC data on an ongoing basis, including their continuous Process Capability (Cpk). The Supplier must make SPC data available to H-D upon request. In addition, suppliers with regulatory components must have compliance data available to H-D upon request.

H-D recognizes the following categories for Special Characteristics:

- Key Product Characteristics ("KPC"); Supplier must exhibit >1.67 Cpk
 - Product attributes (i.e., features, dimensions, specifications) which, if exceeding the tolerance or specification, could affect safe vehicle operation. KPC's are designated on H-D drawings by a closed diamond (♠).
- Key Control Characteristics ("KCC"); Supplier must exhibit >1.67 Cpk
 - Process characteristics for which variation must be controlled to some target value during the manufacturing process to ensure that variation of Key Product Characteristics or Significant Characteristics do not exceed their defined tolerance or specification. KCC's are designated on H-D drawings by an open diamond ().
- Regulatory Characteristics ("RC"); Supplier must exhibit >1.67 Cpk
 - Product process requirements (i.e., features, dimensions, specifications) which, if exceeding the tolerance or specification, could affect compliance with government regulations or statutory requirements. All RC's are designated on H-D drawings by an inverted closed delta (▼).
 - The "RC" symbol is also designated in instances where Conformity of Production (CoP) is a requirement.
- Significant Characteristics ("SC"); Supplier must exhibit >1.33 Cpk

 Product and/or process features that do not affect safety or regulatory requirements but could create an unacceptably high warranty condition or significant customer dissatisfaction. The symbol for an SC will be in the form of an ellipse with the letters (SC) inside of it.

SUPPLIER PRODUCT OR PROCESS CHANGE NOTIFICATION

Each supplier shall establish a Product and/or Process Change Notification System. Any proposed change to a product or process, whether it is a tooling/fixture modification, equipment movement, change in gaging or processing, relocation of production to other facilities or to a different sub-tier supplier, or otherwise, require that the supplier provide written notice to the H-D Supplier Development Engineer or H-D Engineering prior to implementation. The supplier is not permitted to move forward without H-D's written approval. The notice should include, at a minimum, the part number, specifics of the change, desired implementation date and build out plan for old inventory (under the previous process). H-D will review the nature of the proposed change and provide written guidance. In the event the change is approved by H-D, a new PPAP submission is required unless H-D informs the supplier otherwise in writing. Submission requirements will be determined by an H-D representative and communicated via a PPAP Submission Checklist with applicable elements. Changes cannot be made unless and until H-D in its discretion approves the submitted PPAP.

A Supplier may not ship product under a modified process or a changed feature until an H-D-approved PPAP submission or PDN is in place. The H-D Supplier Development Engineer or the Supply Quality Lead and the supplier will mutually determine the Clean Date for product incorporating an approved modified process or feature. The "Clean Date" is defined as the shipment date and time of product that is approved for production. This requirement is outlined in the current revision of the AIAG *PPAP Manual, Section 3, Customer Notification and Submission Requirements*.

NON-CONFORMING MATERIAL (NCM) MANAGEMENT

Notification and Containment of Shipment

It is vitally important to our customers that we deliver exceptional quality every day, and immediately eliminate non-conformances. NCM is non-conforming material, defined as parts that fail to conform to all applicable H-D design record requirements, including but not limited parts that are defective in design, material, or workmanship. An NCM record will also be assigned to parts that are mislabeled on their packaging or on the part itself from the supplier. When a supplier becomes aware that they have shipped NCM, or suspects they may have shipped NCM, the supplier must notify the H-D Supplier Quality Engineer or Supply Quality Lead immediately in writing. The notification shall include, at a minimum, the following:

- Part number
- Quantity shipped
- Nature of non-conformance
- Lot number
- Production date

- Shipment date
- ASN number of suspected non-conforming material
- Containment plan at Supplier location
- Recommended containment plan required at H-D
- Clean date of conforming product

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The Supplier shall also communicate the same information to any H-D directed tiered relationships to which the non-conforming material may have been shipped and used. The supplier is expected to immediately begin the Corrective Action process as described below.

Parts Per Million (PPM) is the number of non-conforming units divided by the total number of units shipped multiplied by one million. NCM parts will count against a Supplier's PPM performance metric. An NCM transaction is defined as the activity of collecting, validating, and systematically dispositioning NCM in H-D's inventory system. A single NCM transaction can be a single part or multiple quantities of the same part number. Each NCM transaction will be recorded with a corresponding unique NCM number.

Corrective Action

Upon request from H-D, the Supplier shall investigate and report corrective actions for an NCM incident involving product shipped to H-D via the 8 Disciplines (8D) or similar process. This process defines the key steps involved in problem resolution, including containment of the problem, root cause analysis, problem correction, and problem prevention. Suppliers located in the U.S. and local Thailand Suppliers are required to complete and submit the first 3 steps (step 3 is initial containment) of the 8D process within 48 hours of being notified by H-D. For Suppliers that ship to the U.S and Thailand that are not local, the first 3 steps of the 8D process are required to be submitted within 5 calendar days of being notified by H-D. The 8D or similar documentation must be submitted by the supplier to the H-D requestor. Root Cause Analysis information shall be provided to H-D by the supplier within 5 calendar days of the initial sort via the 4th D of the 8D process or similar.

Containment

In the event of a disruption to a H-D production line where the root cause is identified to be due to a supplier's product, immediate containment and clean supplier material is required. To maintain the flow of quality parts to the production line, H-D Supply Quality will immediately initiate a clean point with H-D production support resources and a screen or sort (Quarantine Material Request, QMR) using an in-house 3rd party or using H-D staff at H-D's discretion. When an in-house 3rd party is used, that company will contact the supplier directly to determine plans for continued containment through sorting methods. This could be determined from continued support by the H-D 3rd party or one of the suppliers choosing. Suppliers in U.S and local to Thailand must send in replacement "Certified Material" due to H-D within 48 hours of being notified of the non-conformance QMR. For suppliers that ship to the US locations or Thailand that are not local to those countries, replacement "Certified Material" is due within 10 days of being notified. The next two subsequent shipments must also be shipped "Certified Material".

"Certified Material" is conforming product that has been reviewed, measured, and inspected by the supplier so that the supplier can certify that it fully meets design specifications and quality requirements. The expected containment steps are described below:

- 1. Within 24 hours, the supplier is required to communicate a containment plan to H-D.
- 2. Supplier needs to notify H-D of any inbound deliveries (IBD's) that have shipped non-conforming prior to the certification point.
- 3. Material already received by or shipped to H-D is to be sorted, at a location specified by H-D, by supplier designated 3rd party, a supplier onsite resource, or an H-D 3rd party sorting company at the supplier's expense.

- 4. Inventory at H-D will be sorted in amounts necessary to identify enough conforming material to meet H-D's production needs until Certified Material is received from the supplier; Certified Material must be provided by the supplier as described in Controlled Shipment Level 1 below.
- 5. Any additional parts in inventory at H-D will be shipped back to the supplier or a supplier designated location at the supplier's expense.

Controlled Shipment Level 1 (CS1): Certified Material per Supplier Sign Off

- The supplier shall confirm that material is Certified Material by having a leader sign a certification before any material is shipped to H-D.
 - o If the NCM was deemed to be Functional/Cosmetic, the supplier representative that signs the certification must be the supplier's Quality Manager or Quality Director
 - o If the NCM was due to a Mislabeling event, the signer must be the supplier's Shipping Manager or the leader responsible for labeling at the supplier.
- The supplier must provide Certified Material for 30 days beyond the implementation and sign-off of the corrective action without recurrence of any NCM.
- After the 30 -day period, if there has been no recurrence of NCM, the supplier will no longer need to certify conformance before shipment.
- If any instance of NCM occurs within the 30- day period, the supplier will be required to certify future shipments via an <u>independent 3rd party sort certification (level CS2)</u> as provided in the following section.

Controlled Shipment Level 2 (CS2): Certified Material per Independent 3rd Party Sort

- Three (3) sorts within one (1) month out of any supplier plant requires CS2 containment.
- A formal H-D Corrective Action Request (CAR) will be issued to the supplier.
- Material shall be inspected and certified in writing as being fully conforming and free from defects by an independent 3rd party (selected by supplier) at supplier's expense before any material is shipped to H-D.
- The 3rd party certification shall continue for a 30-day period.
- After the 30-day period, if there has been no recurrence of NCM, the 3rd party certification will not be required prior to shipment.
- If any instance of NCM occurs within the 30- day period for the same defect, the supplier will be required to certify future shipments via an **H-D directed 3rd party sort certification.**
- In addition, if any instance of NCM occurs within the 30- day period, the supplier's leadership will be required to formally present to H-D plant leadership ongoing action plans to resolve the issue and identify ongoing containment strategy.

The NCM management provisions set forth above are in addition to, and do not limit, the rights and remedies of H-D under the Master Supply Agreement or other supply contract between H-D and the supplier arising from delivery of NCM.

Product Deviation Notice

Any instance of shipment and use of product that is non-conforming requires approval from H-D. The Supplier shall not ship such product unless and until the supplier has sought and received approval from H-D via a Product Deviation Notice (PDN). In these cases, the supplier will need to notify H-D and provide supporting data as requested by H-D to enable a decision on whether H-D should issue a PDN. This data may include, but not be limited to, dimensional/test information, Control Plan, PFMEA, number of parts affected, clean date of complying product, 8D report, root cause and action plan. The data will be analyzed and reviewed by H-D for its impact to motorcycle form, fit, and function prior to approval/rejection. In the event a PDN is rejected, the affected parts will be treated as an NCM per the provisions stated above.

PDN's may be issued by H-D in its discretion for the follow instances:

- Cosmetic Non-Conforming
 - Temporary substitution of a purchased or manufactured component that falls outside the cosmetic standard, but which has been evaluated by H-D as having little to no negative effect on customer satisfaction.
- NCM
 - A temporary manufacturing condition that prevents producing components to the current design specification, which may include sort/rework action to bring back into specification.
- PPAP
 - A PDN may be issued to use a purchased part for which the PPAP is not yet complete. The PDN covers a change within the current revision PPAP until the new PPAP can be approved.
 - When PPAPs are not approved prior to current production launch or a production level build event (Product Validation, Pre-Production, Model Year launch), H-D will "authorize for shipment and use" of product via a Product Deviation Notice (PDN).
 - The duration of this PDN will include allowance to ship and will extend through the use of product.
 - The PDN will be approved prior to shipment of product.
 - The supplier will need to provide adequate data to show that the parts meet all requirements.
 - At minimum, supplier shall provide:
 - A copy of the H-D design record to which the parts were produced.
 - The Process Control Plan that will be in use until the PPAP is approved.
 - Dimensional results of sample parts, or full layout of 2 pieces, as directed by H-D.
 - Test results as required by the design record.
 - Features that are a KPC, RC, or SC must show to be statistically capable (i.e. 30-piece attribute study) or utilize 100% inspection.
- Change Pilot
 - Pilot builds of alternate designs/PPAP part verification prior to final change approval.
 - Examples of changes include but are not limited to tooling, process, sub-tier, and/or specification update.

PACKAGING AND LABELING

Labeling

Part quality, product integrity, production inventory and scheduling are highly dependent on accurate labeling of all products shipped into H-D plants and distribution centers. It is critical that all suppliers comply with each of

the specifications in the Harley-Davidson Bar Code Requirements document located on H-DSN. Mislabeled product will be considered as NCM, adversely affect a supplier's PPM performance and are subject to sorting and containment actions. Mislabeling events will require an 8D or similar process from the supplier.

Returnable Packaging

Returnable packaging is designed and owned by H-D. Suppliers are expected to take reasonable care in the use of all packaging provided. This includes ensuring containers are clean enough to ensure products being packaged maintain the quality necessary for their specific application. This also includes identifying packaging that is damaged or not suitable for use, segregating that packaging, and notifying the H-D Supply Chain representative of the condition of the damaged packaging.

When H-D implements returnable packaging, suppliers are provided documentation on the basic design and package quantity which should be used by suppliers to develop back-up packaging for use if returnable packaging is not available (see Expendable Packaging section for requirements). Any time the use of expendable back-up packaging is being considered, approval from H-D is required. It is the supplier's responsibility to have back-up expendable packaging available to ensure all shipments are made on time.

Back-up packaging must have the same CPQ (container pack quantity) and dimensions as the returnable packaging.

Shortage of returnable packaging is not an acceptable excuse to miss scheduled shipments. Suppliers are expected to submit their expendable packaging design information as a part of any new returnable packaging launch process initiated by H-D, on the forms provided by H-D.

Expendable Packaging

The supplier is responsible for the design, package validation, and procurement of expendable packaging to deliver damage free and corrosion free parts to the H-D facility with the chosen transportation method: truck, air, sea, or parcel.

The supplier is required to submit all expendable design information to H-D on the Expendable Packaging Sketch Form located on H-DSN or provided by H-D Packaging Engineering. Please see the Packaging Specifications "Packaging System Requirements – Returnable and Expendable" document on H-DSN for detailed requirements for both returnable and expendable packaging processes.

H-D Packaging Engineering will provide approval of the Sketch Form package footprint, CPQ, and the design approach chosen. If product delivery-related quality concerns arise after H-D acceptance of the Sketch Form, the supplier can work with the H-D Packaging Engineering team to improve and correct the packaging shortfall and revalidation at the supplier's expense.

SUB - TIER SUPPLIER MANAGEMENT

Suppliers to H-D shall have established processes to manage their respective sub-tier suppliers (regardless of how directed). These processes shall include:

- Selection and evaluation of sub-tier suppliers based on their capabilities to meet H-D quality, delivery, cost, and service requirements.
- Ensuring adherence to APQP disciplines and PPAP submission requirements by sub-tier suppliers.
- Ensuring Conformity of Production of all sub-tier suppliers, their processes, and their production controls.
- Providing ongoing sub-tier supplier performance and periodic auditing with subsequent corrective actions for identified gaps.

As an H-D Tier 1 supplier, you are responsible for:

- Demonstrating an effective management of sub-tier suppliers through documented corrective actions and verification activities and providing H-D with documentation of progress upon request.
- Maintaining an established system that tracks and reports the quality, delivery, cost and service performance of your sub-tier supply base.
- Having a process in place to assure the sub-tier supply chain understands all design record dimensions, specifications and requirements.
- Assuring that manufacturing processes throughout the sub-tier supply chain are capable of meeting all
 design and capacity requirements.
- Managing, reviewing, and approving PPAP submissions from your sub-tier suppliers.
- Ensuring that all requirements specified by this manual are cascaded to all affected sub-tier suppliers.
- Ensuring all sub-tier suppliers are compliant with all requirements specified by this manual.

H-D reserves the right to conduct onsite audits of a supplier's sub-tier suppliers at any time to ensure that proper controls are in place throughout the entire value stream.

SUPPLIER PERFORMANCE REPORTING

Suppliers will be required to submit quality performance data upon request. Suppliers are also responsible for assuring their sub-tier suppliers' PPAPs are approved and are under a controlled system for evaluation and review. These records must be made available to H-D when requested.

Supplier performance is monitored by H-D based on key product development, quality, delivery, cost, and other metrics defined at H-D discretion. At a minimum, performance will be monitored for OE suppliers that are Strategic, Essential, and Leverage and as well as key Parts & Accessories suppliers. Supplier reviews will be conducted for these categories of suppliers and if performance gaps are identified, the supplier will be required to provide an action plan to address the gaps. Performance data is available for Build to Order Suppliers and reviews may take place on a case by case basis. Performance gaps that persist for multiple months could result in new business hold, certified material requirement (at supplier's expense) and/or supplier exit. Questions related to H-D's overall supplier performance process can be directed to your Supplier Development Engineer or Category Manager.

CHARGE BACK

Suppliers are responsible for the quality, on-time delivery, and reliability of the products they supply. Supplied parts must be free from defects and meet all applicable specifications and H-D's design and drawing requirements.

The supplier will be held financially responsible for the costs, losses and damages incurred by H-D arising from or associated with non-conforming product or late deliveries including, but not limited to, the costs, losses and damages identified below:

- 3rd Party sorting.
- Expedited freight.
- Rework.
- Replacement of defective material.
- Unplanned overtime.
- Other out of pocket 3rd party expenses paid by H-D (related to NCM processing).

Suppliers will also be debited \$20 USD per NCM transaction at the H-D facility from where the Purchase Order or Scheduling Agreement originated. This process will be executed on a per incident basis, with cumulative costs identified to the Supplier and recovered through a debit memo. If you have questions, please contact your Supply Chain and/or Category Manager.

Suppliers will also be debited \$900 USD per QMR per part number in York. This process will be executed on a per part number per occurrence basis, with cumulative costs identify to the Supplier, communicated via QMR notification, and recovered through a debit memo. If you have questions, please contact your Supply Chain Analyst and/or Category Manager.

REVISION RECORD

Date	Nature of Change
12/2016	Initial Revision
11/2017	Added addendum. - Additions were made for Containment, CS2, and Returnable Packaging. - Clarifications were made on CS1, Returnable Packaging, and Primary Expendable Packaging. - Split out Intro paragraph into Purpose and Scope (no change to content). Removed P&A from Approver List (P&A not in scope).
05/2018	Incorporated addendum items into the manual and removed addendum attachment.
	Annual Re-qualification, removed the following:
	If you are a Supplier of any of the following Key SystemsBrake systems, Windshields, Grab Straps, and Locksetsa full AIAG level 3 PPAP submission and approval per the <i>Production Part Approval Process (PPAP)</i> section of this manual will be required on an annual basis per requirements above.
	PDNs related to PPAP, added the following and removed redundant verbiage:
	 When PPAPs are not approved prior to current production launch or a production level build event (Product Validation, Pre-Production, Model Year launch), H-D will "authorize for shipment and use" of product via a Product Deviation Notice (PDN).
	Duration of PDN will include allowance to ship and through use of product. The PDN will be a seemed a few to the standard of a set o
	 The PDN will be approved <u>prior</u> to shipment of product. The Supplier will need to provide adequate data to show that the parts meet all requirements.
	At minimum, supplier shall provide:
	 A copy of the H-D design record to which the parts were produced.
	o Process Control Plan that will be in use, until PPAP is approved.
	 Dimensional results of sample parts, or full layout of 2 pieces, as directed by H-D. Test results as required by the design record.
	Returnable Packaging, added the following:
	 It is the responsibility of the supplier to ensure all packaging is in good working order and
	appropriately clean prior to use to ensure safe transit and the quality of parts is maintained.
	Key System Suppliers, removed the following:
	Removed the word "annual" for on-site QMS and process assessment and added "based on
	performance".
	Removed reference to SPE group.
	Supplier Performance Reporting
	Updated verbiage to align with new supplier performance process.

Removed "Requirements" from Supplier Quality Manual.

Purpose

• Removed the word "Requirements" from Supplier Quality Manual.

Manual Location

 Removed reference to other information that can be found on H-DSN such as Forms, OE Scorecard, Training, ect.

Quality Systems Requirements

 Added that suppliers must have current, certified QMS in place by an accredited registrar (typically ISO9001 or IATF16949). Suppliers who are not certified must be working toward certification. An SSE may be conducted at supplier to evaluate risk.

APQP

- Replaced "M9" with "MX"
- Updated Methodology graphic to include "MX" alignment
- Removed "M9 vs APQP" webinar statement

PPAP

- Removed drawings can be access on H-DSN.
- Added supplier can contact their New Product Supply Management Analyst if they have questions on the latest authorized drawing revision.
- Updated the record retention for PPAP to align with the current H-D Records Retention Schedule.

Annual Re-Qualification

05/2020

Removed this section.

Pre-Launch Mitigation Strategy

 Regarding Escalated Control Plans, updated to reflect suppliers may be required to implement an Escalated Control Plan (instead of will be required).

Special Characteristics

- Added suppliers with regulatory components must have compliance data available to H-D upon request.
- Under RC, added the symbol is also designated in instances where CoP is a requirement.

Non-Conforming Material (NCM) Management

- Corrective Action: added 8D or similar process. Moved "Root Cause Analysis information shall be provided to H-D by Supplier within 5 days of the initial sort via the 4th D of the 8D process or similar" from Containment to Corrective Action.
- Controlled Shipment level 2 (CS2): Certified Material per Independent 3rd Party Sort: Added "for the same defect" to "If any instance of NCM occurs within the 30- day period".

Product Deviation Notice (PDN)

- Removed the word "Process" from "Product/Process Deviation Notice".
- PPAP: Added "Features that are a KPC, RC, or SC must show to be statistically capable (i.e. 30- piece attribute study) or utilize 100% inspection."

Change Pilot

- Removed the word "Running" from Change Pilot to align with updated H-D PDN Work Instruction.
- Added: "Examples of changes include but are not limited to tooling, process, sub-tier, and/or specification update".

Packaging and Labeling

• Labeling removed: "For further detail refer to H-DSN under Supplier Development Information>Webinar" because it no longer exists.

Sub-Tier Supplier Management

• Updated verbiage to reflect "H-D reserves the right to conduct onsite audits of a Supplier's Sub-Tier Suppliers..."

Key System Suppliers

• Removed this section.

Supplier Performance Reporting

• Updated verbiage to align with global supplier performance process (included India and Thailand in scope and updated segmentation categories).

Charge Back

- Updated to reflect the \$20 NCM debit per transaction is completed "at the H-D facility from where the Purchase Order or Scheduling Agreement originated".
- Changed Supply Base to Current Product Supply Management Analyst.

	General
4/20/2021	Removed references to "Harley-Davidson Bawal" or "India " manufacturing location.
	PPAP
	• Removed submission levels and added statement "H-D requires an PPAP submission for new product and any process changes. Submission requirements will be determined by an H-D representative and communicated via an PPAP Submission Checklist with applicable elements."
	Pre-Launch Mitigation Strategy
	 Added statement "Suppliers that have been identified by the H-D project team as presenting risk to New Model Year build and/or launch may be required to implement additional measures including but not limited to an Escalated Control Plan (ECP), 3rd Party Inspection, Product & Process Assessment (PPA) or similar review, or a Run at Rate Assessment. Specific expectations of the requirements will be communicated to the supplier by the H-D project team at the time that the need is identified." Non-Conforming Material (NCM) Management
	 Corrective Action: added 8D or similar process. Moved "Root Cause Analysis information shall be provided to H-D by Supplier within 5 days of the initial sort via the 4th D of the 8D process or similar" from Containment to Corrective Action. Controlled Shipment level 2 (CS2): Certified Material per Independent 3rd Party Sort: Added "for the same defect" to "If any instance of NCM occurs within the 30- day period".
	 Added statement "In the event where a disruption in the production lines have been encountered and the cause is identified to be due to a Supplier's product, immediate containment is required. To maintain flow of good materials to the line, H-D Supply Quality will initiate a sort using an in-house 3rd party. This company will reach out to the Supplier's organization to determine plans for continued containment through sorting methods. This could be determined from continued support by the H-D 3rd party or one of the Supplier's choosing. Materials will need to be certified within 48 hours after being notified of the non-conformance." Product Deviation Notice (PDN) Removed the word "Process" from "Product/Process Deviation Notice". PPAP: Added "Features that are a KPC, RC, or SC must show to be statistically capable (i.e. 30- piece attribute study) or utilize 100% inspection." Labeling Added "similar process" to "Mislabeling events will require an 8D or similar process from the Supplier". Charge Back Removed "Starting January 2017"
2/2022	Replaced Pre-Launch Mitigation Strategy with Safe Launch Strategy
2/2023	Updated all content within Safe Launch Strategy. General updates to clarify supplier responsibility for containment. Updated PDN language to clarify approval requirements prior to chipment.
	approval requirements prior to shipment.

Updates to Containment and Chargebacks section for York QMR Process Update

- Clean point initiated with screen or sort of production support resources, when needed hand-off made to 3rd party sorting company. Page 9
- Supplier clean point certification and onsite H-D sorting requirements clarified. Page 9.
- Suppliers will be debited \$900 USD per QMR per part number in York. This process will be executed on a per part number per occurrence basis. Page 13.

Clarification to Returnable Packaging requirements – clarified wording. Page 11

Clarification to Expendable Packaging requirements – clarified supplier responsibilities and Packaging Engineering support of product delivery quality issues that arise. Page 12

04/2024