

**NHK Seating of America, Inc.  
SUPPLIER MANUAL**

**Issued by NHK Purchasing Department**

Revision 3 – July 2022

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# **I. INTRODUCTION**

This NHK Seating of America, Inc. (hereby referred to as “NHK”) supplier manual (hereby referred to as “Supplier Manual”) is intended to be used by NHK’s suppliers. It addresses all aspects of conducting business with NHK. This Supplier Manual also outlines NHK’s policies, procedures, and standard forms.

All NHK suppliers should arrange a meeting between the NHK Purchasing department and each NHK department that will be involved in doing business with NHK prior to conducting business with NHK. The supplier should have contact information for all appropriate NHK departments and should fully understand NHK’s information systems prior to supplying parts to NHK.

If there are any questions regarding this document, please contact the NHK Purchasing department for guidance.

## **A. COMPANY OVERVIEW**

NHK is the dedicated seating supplier for Subaru of Indiana Automotive, Inc. NHK is also a supplier of seat frames for Nissan North America and mechanical components for certain Toyota Group seat suppliers.

Address: 8425 West State Road 28  
Frankfort, Indiana 46041

Phone #: (765) 659-7800

Fax #: (765) 659-5591

Website: [www.nhkseating.com](http://www.nhkseating.com)

Established: 1987

Shareholder: NHK Spring Co., Ltd. (100%)

Executives: 5 persons from NHK Spring Co., Ltd.

## **B. COMPANY HISTORY**

1987: Founded as General Seating of America, Inc. in Michigan as a joint venture between NHK Spring Co., Ltd. and Lear Co.

1988: Production facility established in Frankfort, Indiana.

1989: First seat delivery to Suzuki America.  
First seat delivery to Subaru-Isuzu Automotive.

1996: ISO 9002 Registered.

1997: ISO 14001 Registered.

- 2004: ISO/TS 16949 Registered.
- 2005: First Subaru Tribeca seats produced.
- 2006: NHK Spring Co., Ltd. acquires 100% ownership of General Seating of America, Inc. Name changed to "NHK Seating of America, Inc."
- 2007: First Toyota Camry seats produced.
- 2008: First Toyota Active Headrest units produced.
- 2009: Subaru Legacy & Outback 2010 model year expansion.
- 2010: NHK annual production volume hits 257,000 vehicles.
- 2011: New NHK production facility completed in Murfreesboro, TN.
- 2016: First Subaru Impreza seats produced; registered for IATF 16949 quality standard.
- 2018: First Subaru Ascent seats produced.  
NHK annual production volume hits 370,000 vehicles.
- 2019: 4 millionth Subaru seat produced.
- 2020: ISO 27001 Registered.
- 2021: Grand opening of new facility in Frankfort, Indiana

### **C. NHK CONTACT INFORMATION**

**Plant 1:**  
8425 W SR 28  
Frankfort, IN 46041  
P: (765) 659-7800  
F: (765) 659-5591

**Plant 2:**  
2298 W SR 28  
Frankfort, IN 46041  
P: (765) 659-6601

**Plant 3:**  
2195 W Barner St  
Frankfort, IN 46041  
P: (765) 659-2507

<b><u>Department</u></b>	<b><u>Associate</u></b>	<b><u>Phone #</u></b>
Engineering	Manager	(765) 659-7842
Engineering	Asst. Manager	(765) 659-7841
Purchasing	Sr. Manager	(765) 659-7846
Projects	Manager	(765) 650-2517
Quality	Sr. Manager	(765) 659-7849

Supplier Quality	Manager	(765) 654-3325
PC/MRP	Manager	(765) 659-7837
Materials	Sr. Manager	(765) 659-7836
Finance	Director	(765) 654-2368
Finance	Manager	(765) 654-2368
Service Parts	Coordinator	(765) 654-3331
Information Systems	Compliance Manager	(765) 654-2365
Information Systems	Manager	(765) 659-7821
設計（日本語）	ディレクター	(765) 659-7847
購買（日本語）	シニアマネージャー	(765) 654-3332

#### **D. ACRONYMS AND DEFINITIONS**

The following is a list of acronyms that are frequently used by NHK, Subaru, and Nissan, along with their definitions. These acronyms are used in this Supplier Manual and in other related documentation and correspondence with suppliers.

##### **NHK ACRONYMS:**

AAS	Advanced Authorization Sheet	ERFQ	Engineering Request for Quotation
APQP	Advanced Product Quality Planning	FOB	Free On Board Shipping Terms
ASN	Advanced Shipping Notice	GER	General Engineering Request
BNF	Bad News First	IMDS	International Material Data System
BOM	Bill of Materials	ISO	International Standardization Organization
BPO	Blanket Purchase Order	ISR	Initial Sample Report
SBPO	Spot-Buy Purchase Order	JIT	Just In Time
CO	Carryover	KD	Knockdown
DIP	Delivery Improvement Program	LOI	Letter of Intent
DMT	Discrepant Material Tag	LTA	Long Term Agreement
DWG	Drawing	LTL	Less than Load
ECN	Engineering Change Notice	MOQ	Minimum Order Quantity
ECR	Engineering Change Request	MP	Mass Production
ECS	Engineering Change Summary	MPC	Material Price Change
EDI	Electronic Data Interchange		

MRP	Material Requirements Planning	RNPO	Renault-Nissan Purchasing Organization
NDA	Confidentiality and Nondisclosure Agreement	SAP	Service Assembly Parts - Components provided by the OEM
NDO	Non-conforming Delivery Order	SCAR	Supplier Corrective Action Report
NHK-J	NHK Spring Co. Ltd. (Japan)	SDN	Sedan
NNA	Nissan North America	SIA	Subaru of Indiana Automotive, Inc.
NHK	NHK Seating of America	SNP	Standard Number Pack
OBK	Subaru Outback	SOP	Start of Production
OEM	Original Equipment Manufacturer	SPANF	Supplier Problem Advanced Notification Form
OP	Off-Process	SPE	Supplier Performance Evaluation
OT	Off-Tool	SPR	Service Part Request
PC	Production Control	SQA	Supplier Quality Assurance
PCR	Process Change Request	TAR	Nissan Tool Acceptance Report
PP	Piece Price	VA	Value Analysis
PPAP	Pre-Production Approval Process	VE	Value Engineering
PPR	Preliminary Production Requirement	WGN	Station Wagon
QA	Quality Assurance		
QIP	Quality Improvement Program		

RFQ Request For Quotation  
RMA Return Material Authorization

## **II. PURCHASING**

### **A. CONFIDENTIALITY AND NONDISCLOSURE AGREEMENT**

All suppliers are required to carefully read and sign the NHK Confidentiality and Nondisclosure Agreement (NDA) (provided by NHK Purchasing) before conducting business with NHK.

### **B. PURCHASE ORDER / CONTRACT**

A purchase order is a commercial document issued by NHK outlining a quantity, description, and agreed-upon price for a supplier to provide goods or services to NHK.

There are two types of purchase orders issued by NHK:

**BPO/Contract**- A BPO (blanket purchase order), also referred to as a contract, is issued for production parts, service parts, or materials which are purchased on a continuing basis. The BPO defines the part number, description, purchase price, and effective date for all parts to be ordered on a continuing basis. The BPO number is static and will be used continually for all requirements ordered under the contract.

**SBPO** - An SBPO (spot buy purchase order) is a one-time request for parts outside of a blanket purchase order. It sets forth the agreed-upon prices, quantity, delivery dates, and delivery locations. An SBPO is given a unique purchase order number and is used only once.

NHK Purchasing is responsible for ensuring the accuracy of quantities, part numbers, and part descriptions on all purchase orders. The supplier is responsible for confirming the accuracy of pricing on all purchase orders. If the supplier finds any discrepancy in a purchase order, the supplier must immediately inform the NHK Purchasing department and provide detail of the discrepancy. NHK Purchasing will investigate the discrepancy claim and, if necessary, amend the purchase order.

*All purchase orders are subject to the NHK Purchase Order Terms and Conditions.* The NHK Purchase Order Terms and Conditions can be found on the supplier information page of the NHK Seating of America Website at [www.nhkseating.com](http://www.nhkseating.com).

### **C. TOOLING INFORMATION**

If a part requires special tooling, the NHK Purchasing department will issue a separate SBPO for that tooling (unless specifically negotiated otherwise). That SBPO will be subject to the NHK Purchase Order terms and conditions.

The tooling purchase order will include the total amount (in U.S. dollars) agreed-upon between the supplier and NHK Purchasing.

NHK requires all trial parts to be inspected and approved by the NHK Quality department and the submission of an Initial Sample Report (ISR).

**Specification Data** – Specification data must be provided to NHK for every tool. The specification data includes, but is not limited to: dimensional specification (length, width, and height); shut height; mass; tool location; tool

manufacture location. NHK Purchasing will provide the appropriate forms for asset specification data to be completed by the supplier and/or tool shop.

**Data Files** – All data files for each tool are property of NHK and must be supplied upon request. This includes, but is not limited to: all Computer-Aided Design (CAD) data, strip layouts, and trim cut files.

**Asset Tags** – An Asset Tag with an asset number will be issued by NHK Purchasing for all tools purchased by NHK. All asset tags must be fixed to the tool and a digital photograph must be provided to NHK Purchasing for each asset tag location.

**UCC filings** – NHK may, at its discretion, file UCC notices documenting NHK’s ownership of the tools.

***NOTE: Additional Nissan-Only Tooling Requirements:***

Renault-Nissan Purchasing Organization (RNPO) has the following requirements for all Nissan-owned tools:

All asset tags must be engraved “PROPERTY OF NISSAN NORTH AMERICA U.S.A.”.

A Nissan Tool Acceptance Report (TAR) must be filled out with dimensional specification data and tool shop information for each tool. (A blank TAR and detailed instructions will be provided to the supplier by NHK Purchasing).

A copy of all tool shop invoices must be provided to Nissan by all suppliers and must match the purchase order amount exactly, or reimbursement will not be issued. (Note: Nissan reserves the right to physically audit any PO regardless of PO amount).

Other forms of audit verification may be required if the tool is located outside of the United States (or at the discretion of Nissan).

*RNPO tooling requirements are non-negotiable.* Failure to agree to the RNPO tooling requirements will disqualify a supplier from conducting business with NHK for all Nissan North America programs.

**D. REQUEST FOR QUOTATION**

The Request for Quotation (RFQ) is the first formal communication between NHK Purchasing and a potential supplier. An RFQ will be issued with the release of a new part and with every design change of an existing part.

An RFQ from NHK Purchasing will include a copy of the ECN, all related drawings, estimated production volume, quotation due date and any other applicable data required to complete a quotation.

All RFQs issued by NHK Purchasing are subject to the RFQ terms and conditions. A copy of the terms and conditions will be provided with all RFQs, and can be provided to suppliers by NHK Purchasing upon request.

**E. LETTER OF INTENT**

When NHK has made a preliminary supplier selection for a new production part, a Letter of Intent (LOI) will be issued to the chosen supplier.

A Letter of Intent is:

- Confirmation by NHK that the supplier may begin tool manufacturing.
- Confirmation that NHK agrees to pay for agreed-upon tooling costs (subject to the RFQ terms and conditions).
- Confirmation that, as of the date of the LOI, NHK intends (but has not committed) to award business to the chosen supplier.

A Letter of Intent is NOT:

- An award letter.
- A binding agreement from NHK purchasing that the chosen supplier will be awarded mass production business.
- A binding agreement that NHK will purchase any specific volume of components from the chosen supplier. NHK is not bound to purchase any parts until an award letter is issued by NHK and countersigned by the supplier.

## **F. AWARD LETTER**

Suppliers chosen by NHK to supply parts will receive an official Award Letter from NHK Purchasing outlining the terms of the specific awarded part(s). The Award Letter will include the following information:

- Part(s) awarded to supplier
- Mass Production Piece Price
- Event Pricing
- Tooling Cost
- Life of Program
- Long Term Agreement
- Service Part Agreement

Upon receipt of an Award Letter, the supplier must carefully read, sign, and return to NHK in a timely manner.

If a current production component will have continued use in a new program, award letters for the carryover component will be issued before the current program is scheduled to end. Carryover award letters will outline the same information as award letters for new parts.

## **G. DESIGN CHANGES**

Final design authority for all components rests solely with the Engineering department at NHK's parent company (NHK Spring Co., Ltd.) in Japan. NHK encourages suppliers to suggest improvements upon current design. NHK's targets for improvement are in the areas of cost, quality, fit & function, and overall processes enhancement.

If changes are required by the Engineering department, or as the result of a supplier recommendation, the following procedures must be followed:

**For NHK-Initiated Changes** - An ERFQ and applicable drawings will be sent to the supplier for the supplier's review. The supplier must then submit the following:

- An updated piece price and (if applicable) tooling quotation (on the official NHK Seating of America Quotation form) with all required documents attached
- An updated ISR submission
- A detailed tooling and/or implementation schedule or a detailed tooling modification schedule (if applicable)

**For Supplier-Initiated Changes** - The requested changes should be submitted to NHK Engineering via an Engineering Change Request form (ECR), as explained in the engineering section of this manual. The supplier must submit the following:

- Complete ECR – including detailed information as to why the change is necessary
- An updated piece price quotation and (if applicable) tooling quotation with all required documents attached
- A detailed tooling and/or implementation schedule or a detailed tooling modification schedule (if applicable)
- A detailed tooling and/or implementation schedule or a detailed tooling modification schedule (if applicable)

## **H. MATERIAL PRICE CHANGE AGREEMENT**

The Material Price Change Agreement (MPC Agreement) must carefully be reviewed and signed by Supplier before award of new business with intent to protect both NHK and the Supplier when goods and/or services purchased by NHK are impacted by the fluctuation of costs of raw material. NHK Purchasing Department provides the Agreement documentation upon request.

The “Material” in this Agreement indicates raw material procured by Supplier used to produce product (i.e. slit steel coil, welded steel tube and/or pipe, drawn wire, resin pallets, nurdles, or granules, chemicals for production of Polyurethane product, goods directed by NHK to be procured by Supplier from a specified source at a specified price (“Directed Goods”), etc.)

Material Cost for Directed Goods pricing will be updated by NHK and provided to the Supplier upon receipt of MPC data from the specified source.

For Non-Directed Goods, the Supplier must use commercially reasonable efforts to procure Material at the best available cost and provide necessary information to NHK. An example of Material Price Change adjustment: Both parties review the average 3-Month % Change in Indices provided by the United States Department of Labor, Bureau of Labor Statistics (“BLS”) Monthly Publications within the agreed “Review Period” and adjust piece price if the Material Cost fluctuation is more than +/-5% (or exactly 5%) of the baseline Material Price.

## **I. SERVICE (AFTERMARKET) PARTS**

All suppliers must continue to provide service (aftermarket) parts for a minimum period of fifteen (15) years after the obsolescence of a model.

### **Service Part Request:**

For all current, past, and future models produced by NHK, service (aftermarket) parts will be ordered directly by NHK. NHK will issue a Service Part Request (SPR) with every service part order.

Any Service Part Request a supplier receives from outside NHK should be communicated to NHK immediately. NHK service part coordinators will provide guidance on such external requests.

For tracking purposes, the supplier must include a copy of the SPR with the each service part shipment.

**Service Part Timing:**

- Service parts for current models must be supplied within thirty (30) days of the SPR issue date.
- Service parts for past models must be supplied within seventy-five (75) days of the SPR issue date.

**Service Part Pricing:**

The terms for service part pricing will vary based on program and component. A detailed service part pricing schedule will be outlined in the award letter.

**J. SUPPLIER SURVEYS**

NHK conducts Supplier Surveys (using SurveyMonkey) to collect information from suppliers for Supplier Performance Evaluation and many other purposes. Each supplier must have a person in charge and provide one email address for the Surveys to NHK Purchasing Department. All NHK suppliers are required to participate in the Surveys.

Example question of the Surveys:



**Imported Part Delays**

Imported Finished Goods

1. Are any of the parts or assemblies (finished goods) purchased from you by NHK Seating imported to the United States from another country?

Yes

No

**K. SUPPLIER PERFORMANCE EVALUATION**

**Purpose:** To apply rating system to NHK suppliers regarding safety, commercial, development and other business activities. Addressing these areas of the NHK supplier base will provide detail on the suppliers' ability to meet the demands set forth by NHK. The results will be compiled on a monthly basis and provided to each supplier.

**Scope:** The Supplier Performance Evaluation (SPE) will focus heavily on commercial items, new model supplier part development and design change. Results will gain NHK an understanding of how each supplier is adhering to requests made by NHK and completing the requests in a timely manner. The evaluation emphasizes the areas

that NHK has deemed important / critical business aspects for each supplier to maintain at the highest level. The results of the Supplier Performance Evaluation will be a tool used in determining current / future business with NHK.

**Evaluation items:** NHK has selected 17 Key Performance Indicators (KPI) items to assess supplier performance. Some KPI will not apply to all providers. Suppliers will only be scored on items pertaining to their company. Items not receiving a score do not calculate in overall score. Suppliers must reach out to NHK Purchasing should you feel you are not being scored on items that affect your company.

**Scoring:** Suppliers evaluated on all KPI can receive a score of 100/100. Suppliers that are not evaluated on certain KPI will receive an adjustment to the max point possible / points earned ratio. The data collection and scoring key can be found on page 2 of the Supplier Performance Evaluation. Data collection will be completed using surveys, supplier self-report and / or NHK data tracking completed by NHK Purchasing Department. Suppliers that do not agree with their score should contact NHK Purchasing.

**Performance Criteria:** Supplier ratings will be categorized by commodity. On a semi-annual basis, the highest performing supplier in each category will be recognized for their performance. Conversely, suppliers that receive a monthly score of 80% or less will be required to submit to NHK their plan to improve overall performance. NHK will review scores for a year (April-March) and award suppliers in each commodity with a Supplier Excellence Award.

**Distribution:** Suppliers will receive an email with your Supplier Performance Evaluation by the 15<sup>th</sup> of the month. This information will be provided to the main contact provided to NHK Purchasing. It will be the responsibility of the supplier to circulate the results within your organization.

## **L. ENVIRONMENTAL SURVEY REPORT**

Suppliers will be requested to complete the Environmental Report on an annual basis. In accordance with Subaru of Indiana Automotive, NHK and its Suppliers should strive to become a Zero Landfill company. Completion of this annual report demonstrates the supplier's commitment to using innovative ways to become better managers of our environment.

Results from the survey will be used to complete the monthly Supplier Performance Evaluation. Suppliers that complete the annual survey and meet their annual goals receive the highest possible score for the Environment KPI.

## **M. SUPPLIER SAFETY REQUIREMENTS**

Suppliers will be required to submit a Safety Checklist to NHK. This will be presented to suppliers via survey. The purpose is to understand the safety culture at your organization. The survey results will transfer to the score on the Supplier Performance Evaluation.

The request will include what Personal Protection Equipment (PPE) is required in your facility. This will be valuable information to NHK for supplier visits and also to ascertain the level of safety you promote in your production process.

NHK will also request your current incident rate for recordable accidents. NHK will want to see a rate that is equal or lower to the national average. Should your rate be higher, NHK will request how this will be addressed within your company to achieve a lower incident rate.



### **III. NHK ACCOUNTS PAYABLE / RECEIVABLE**

#### **A. NHK PAYMENT TERMS**

NHK processes payment based on a Net 45 prox 10<sup>th</sup> and 25<sup>th</sup> basis.

Provided the results of all quality and part inspections are satisfactory, this means:

- Shipments received on or before the 15<sup>th</sup> day of a calendar month will be paid on the 25<sup>th</sup> day of the next month; and
- Shipments received after the 15<sup>th</sup> day of the month will be paid on the 10<sup>th</sup> day of the subsequent 2<sup>nd</sup> month.

#### **B. INVOICE VERIFICATION**

NHK matches supplier invoices to both the packing slips accompanying the shipments and NHK purchase orders. If there is a discrepancy in regard to the piece price, only the approved NHK purchase order price will be honored.

The supplier must report any discrepancy found on Accounts Payable/Receivable reports to NHK within sixty (60) days of supplier's receipt of such reports. If supplier fails to report such discrepancies within that sixty (60) day period, NHK reserves the right to deem supplier to have waived its right to claim that any additional payment is owed.

#### **C. NON-CONFORMING DELIVERY ORDER**

Quantity differences between the amounts set forth on the applicable NHK purchase order and the corresponding packing slip will be noted on a Non-conforming Delivery Order form (NDO) and will be forwarded to the supplier by NHK. Any deduction for quantity discrepancies will be processed by NHK's Accounts Payable at the time of payment. If the supplier wishes to dispute an NDO, the supplier must submit a dispute in writing to NHK within sixty (60) days of receipt of the NDO. If supplier fails to report such disputes within that sixty (60) day period, NHK reserves the right to deem supplier to have waived its right to do so. To dispute the NDO, the supplier must submit shipping records, receiving documents with a signature of NHK, or any other proof of delivery to NHK's Purchasing department. If required, NHK will make a manual adjustment to the next payment processed for the supplier.

#### **D. CLAIMS AGAINST THE SUPPLIER**

If NHK incurs costs or expenses due to the supplier's breach of policies outlined within this Supplier Manual, the NHK Quality Manual, NHK's PO Terms and Conditions, the RFQ Terms and Conditions, the Award Letter, the applicable purchase order, or any associated contracts, orders, or documents, NHK will submit a claim to the supplier in the form of a debit memo detailing NHK's costs and expenses (i.e., the total number of hours involved and total dollar amount, etc.). The supplier has twenty-one (21) days from the date the debit memo is

issued to submit a dispute to the charges. The dispute must be submitted in writing to NHK's Purchasing department by the due date or the balance will be automatically deducted from the supplier's next payment.

The dollar amount of such a claim will depend upon a number of factors, including, but not limited to, the following:

- Amount of time involved in production delay or rework
- Number of man-hours involved in the production delay or rework (NHK's labor rates are confidential and should not be shared with third parties)

## **E. REIMBURSEMENT CLAIMS FROM SUPPLIER**

A supplier can request reimbursement from NHK for a specific reason using the Reimbursement Claim Form. The reason for the reimbursement claim must be clearly defined on the form. If the form is not fully and accurately completed by the supplier, it may be rejected by NHK.

If the reimbursement claim is due to obsolete material or obsolete finished goods, the Reimbursement Claim Form must be delivered to NHK within thirty (30) days of the final shipment of parts.

If the reimbursement claim is due to an Engineering Change Notice (ECN), the Reimbursement Claim Form must be submitted to NHK no later than thirty (30) days after the final shipment of old revision-level parts or first shipment of new revision-level parts, whichever occurs later. A copy of the ECN must be attached to all requests. Digital photographs must be attached to show work in progress of the parts for which the claim is being submitted.

If the reimbursement claim is due to tooling modifications, the completed Reimbursement Claim Form must be accompanied by a copy of the ECN, tooling modification specification data, and a detailed tooling modification cost breakdown in order to be considered for reimbursement.

## **F. SUPPLIER FINANCIAL ASSESSMENT**

All new NHK suppliers (and in certain circumstances, current NHK suppliers) may be required, upon request, to submit financial and operating information to the NHK Finance department on an annual basis. NHK shall treat all supplier financial information as confidential, and all such confidential supplier financial information received shall be used for financial assessment purposes only.

The requested financial information may include a copy of the income statements and/or balance sheets spanning the two fiscal years prior to the supplier financial assessment. NHK's assessment of the supplier's financial strength may also include a review of the supplier's bank information, business references, and on-site financial records.

In addition to supplier-submitted financial and operating information, NHK may conduct regular investigations into financial information via industry risk management data including, but not limited to data provided by Dun & Bradstreet.

## **IV. MATERIALS / LOGISTICS**

### **A. PACKAGING SELECTION PROCEDURE (PRODUCTION PARTS)**

Suppliers must complete and submit a copy of the NHK Packaging Proposal Form (PPF) to NHK's Materials department. NHK will then determine whether the packaging style conforms to all NHK packing specifications. The NHK PPF can be provided to the supplier by contacting NHK's Materials department. If any packaging deficiencies are assessed, the NHK Materials department will submit a letter to the supplier. The supplier is expected to respond in writing with countermeasures for each problem identified. The response should also include an estimate of the impact of any packaging cost. After a tentative agreement on a PPF is reached between NHK Materials and the supplier, NHK will request that a test pack be assembled and shipped to NHK and that a representative from the supplier be available for receiving and analysis. The test pack will be analyzed for shipping damage as well as space limitations and any ergonomic issues encountered. Upon successful completion of packing inspection and analysis, a PPF will be emailed to the supplier to confirm NHK's approval and acceptance. If the pack is not approved, NHK will email a copy of the PPF with a list of reasons why the packing failed to the Supplier, who may begin working on responsive countermeasures.

### **B. PACKAGING APPROVAL (PRODUCTION PARTS)**

Packaging plays a key role in NHK's material supply program. All new suppliers, depending on the shipping destination, who will be shipping via NHK Less-Than-Load shipments (LTL) must launch with returnable containers. In most situations, a supplier currently shipping via LTL will implement the use of returnable containers. It is important to use the packaging guidelines set forth on the NHK PPF and comply with Automotive Industry Action Group (AIAG) standards. NHK will standardize case types, sizes, and parts identifications to improve material handling efficiency based on the following standards:

- Product will be shipped in approved packaging
- Product will be shipped in set standard packs as defined by the NHK Materials department
- Product will comply with AIAG label specifications
- Product will ship in installments as determined by the NHK Materials department
- Returnable containers will be provided by the NHK Materials department (some exceptions may apply)
- If a supplier wishes to utilize returnable packaging, short term use of disposable packaging is allowed only during the transition from disposable packaging to returnable packaging. Formal approval must be obtained from the NHK Materials department and the NHK Purchasing department prior to implementation.
- Packaging size must align with NHK's production requirements and applicable material handling methods
- NHK plans no secondary warehousing of the parts

- Specific advice on packaging may be provided by the NHK Materials department

### **C. PACKAGING REQUIREMENTS (PRODUCTION PARTS)**

NHK's ordering system will issue purchase orders in quantities based on multiples of approved packaging (lot sizes) and approximating daily production requirements. NHK's goal is to minimize in-plant inventory and improve the production and operational conditions while utilizing environmentally sound materials for packaging.

Listed below are requirements for developing acceptable package types:

- Collapsible or nestable returnable containers are preferred
- Internal dunnage, if required, shall be returnable or recyclable
- Parts should be packaged in hand held returnable containers with a maximum weight limit of forty (40) pounds. Parts restricted by size, weight or unique requirements will be reviewed by NHK on an exception basis.
- Hand-held containers must be palletized to permit mechanical handling
- Hand held containers should be uncovered in even layers with a common cover or lid. Mixed pallet loads are acceptable upon prior approval by the NHK Materials department.
- NHK requires stretch/shrink wrap or banding for securing freight to the pallet for palletized loads.
- When it is impracticable to use a hand-held container, AIAG standard returnable containers with a footprint of 45" x48" x 34" (double drop door) are preferred.
- All mechanically handled loads must permit four-way entry.
- All packaging, expendable and returnable, must be stackable for transportation and storage.
- Label identification shall be in accordance with AIAG standards. All old labels must be removed by the supplier prior to relabeling a new shipment.
- NHK approval of submitted packaging does not relieve the supplier of responsibility as a shipper to meet carrier regulations and to provide adequate protections for the contents of the packaging.
- Required cleaning maintenance of NHK-owned containers, under normal use and handling, is the responsibility of the supplier.
- A copy of the NHK PPF, including an illustration of proposed packaging, must be included with a supplier's response to RFQs or a specification tender. The original form should be returned to the NHK Materials department.
- A packaging trial may be required up to two months prior to a part functional trial, upon NHK's request.
- Deviations from approved packaging methods must have prior written consent by the NHK Materials department. If a packaging change is proposed, a new NHK PPF form must be submitted for approval.

#### **D. SHIPPING RESPONSIBILITIES (PRODUCTION PARTS)**

It is the responsibility of the supplier to provide NHK with an Advance Shipment Notice (ASN) through the Electronic Data Interchange (EDI) system. If the supplier is unable to utilize EDI, a physical packing list must be provided to NHK upon delivery. The packing list is required to be carried by the driver of the delivery truck and handed to NHK Materials at the time of delivery or unloading.

The packing list must contain the following information:

- NHK-assigned supplier code
- Discrete purchase order number or blanket purchase order number for each part number shipped
- Quantity for each shipment
- Shipment date
- NHK part number for each shipment
- All containers must have the required labels as described in the logistics section of this manual.

It is also the supplier's responsibility to notify NHK Materials of any potential shipping problems, production problems, and/or any reason an expected delivery date cannot be kept by the supplier. This is of the utmost importance to NHK. The supplier must contact NHK immediately if the supplier is experiencing or foresees any problem that may prevent the supplier from meeting the delivery schedule.

#### **E. SUPPLIER PROBLEM ADVANCED NOTIFICATION FORM (SPANF)**

The Supplier Problem Advanced Notification Form (SPANF) should be submitted when a supplier has any disruption in production and / or shipping to NHK. Suppliers must complete and email this form as soon as the problem is detected to the routing indicated at the bottom of the form. In conjunction with NHK and SIA, suppliers should follow the Bad News First (BNF) principle when reporting problems to NHK. Suppliers should NOT wait until the problem is resolved to provide this report. The purpose is to provide advanced notice to NHK of any problems within your facility. A separate form must be submitted for each problem that occurs. Do not include multiple issues on the same submission. If necessary, suppliers may submit a revision to include additional information. Make sure the revision is clearly marked as such or it will be labeled as a new problem by NHK.

This form will be used by NHK to determine if downtime and / or shipping issues by the supplier will have an impact on NHK production. Suppliers should fill this form out in its entirety and provide as much detail as possible. It is recommended that the supplier follow-up with the appropriate department(s) that the form was received and the information provided is clear and NHK understands the issue at hand.

Suppliers should work closely with appropriate department(s) at NHK to ensure the temporary and permanent countermeasures put in place have no effect on production, quality, delivery, etc. that could pose future problems at the supplier or NHK.

## **F. ROUTING COMPLIANCE (PRODUCTION PARTS)**

Routing compliances will be submitted to all NHK suppliers. Routing compliances must be signed and returned to NHK showing compliance with the set logistics plan. The NHK Materials department will determine the routing for each supplier.

- If a supplier misses a scheduled pick-up, the supplier is responsible for delivering the parts to NHK immediately at the supplier's expense. NHK may require the supplier to use a specific expedited carrier or require air freight at the sole cost of the supplier. In the interest of time, NHK may assist in making arrangements to expedite shipments. Suppliers are not permitted to use NHK-provided transportation for shipment of past due orders without the prior consent of an NHK Materials associate. Failure to follow these procedures may result in NHK deducting freight costs from the supplier's next payment.
- When NHK requests emergency delivery (other than as a result of a supplier failure or supplier missed deadline), NHK is responsible for the additional transportation cost. NHK will also arrange the transportation vehicle and conduct the transportation (at NHK's expense).

## **G. LABELING (PRODUCTION PARTS)**

Suppliers will be required to print two (2) different types of labels for each shipment to NHK.

### **Case Label (4"x6")**

The first label is the case label. This label must contain the necessary information for a smooth handling of parts and materials within NHK's facility following unloading of the shipment. This label is required to be in a standard AIAG format using Code 39 symbols, and must be attached to the minimum packing unit. If all parts on the pallet are the same part number a 2" skid label will be used. If the pallet contains more than one part number, then a 2nd mixed skid label will be used.

Suppliers must include the following information on a 4"x6" label in accordance with AIAG standard format:

### **Barcode Fields:**

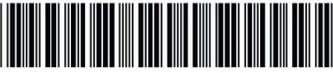
- Prefix (P) - NHK assigned part number (15 A/N)
- Prefix (Q) - Quantity
- Prefix (V) - Assigned Vendor Number
- Prefix (S) - Unique serial number per container/pallet (7 numeric)
- Prefix (L) - Lot Number

QR barcode Spec: P123456789012345,Q150,S0000001

Fields:

Part Description, Manufacturing Date, Engineering Change Level

Examples of the labels and the formats are as follows:

<b>PART NO.(P)</b> <b>123456789012345</b> 		
<b>QUANTITY (Q)</b> <b>150</b> 	<b>PART DESCRIPTION</b> <b>Test Part Number</b>	
<b>SUPPLIER (V)</b> <b>00650</b> 	<b>MFG. DATE</b> <b>08/16/10</b>	
<b>Serial # (S)</b> <b>0000001</b>  <b>Company Name</b>	<b>LOT # (L)</b>  <b>1234567890</b> <b>ENG. CHANGE LEVEL</b> <b>12345</b>	

Master Label (4"x6")

The second label is the Master Label. This label will be placed on the last pallet/container on the shipment. NHK will scan this label in order to identify the associated ASN sent via EDI.

# MASTER LABEL

ASN/Packing Slip #  
(P) **123456789012345**



**00650**  
SUPPLIER  
(V)



Company Name

## Barcode Fields:

Prefix(P) - Packing Slip Number (ASN EDI 856/ Segment BSN/BSN02)

Prefix(V) - Assigned Vendor Number

## Mixed Load Label (4"x6")

# MIXED LOAD

Company Name

The Mixed Load Label is to be utilized if a container/pallet has more than one part number. This will help with identifying multiple parts on a pallet or container.

## **V. SYSTEM APPLICATIONS**

### **A. ELECTRONIC DATA INTERCHANGE (EDI)**

NHK considers the use of Electronic Data Interchange (EDI) a requirement of its suppliers.

NHK requires suppliers to electronically receive EDI 830 Material Releases and electronically submit Advanced Shipment Notifications (ASN) EDI 856 through the process of EDI.

NHK supports the EDI-X-12 standards endorsed by AIAG. NHK also supports the material forecast transaction for estimated orders and raw material advance authorization.

#### **ADVANTAGES OF EDI:**

- Increased Data Accuracy

Using EDI helps to ensure that the data the supplier receives from NHK will exactly match NHK's current requirements. Though an email can be issued with the same data, manual methods require data entry on the part of the supplier, potentially allowing for mistakes. Conversely, data

received from the supplier is a reflection of the supplier's actual system record and will forestall any data entry mistakes by NHK personnel.

- Cost Reduction

Though there are associated costs in implementing and utilizing EDI the benefits far outweigh such expenses. If the supplier can reduce or eliminate the labor involved in data entry and clerical functions, the savings are apparent. More importantly, larger potential savings can be attained from fast and accurate communication assisting both the supplier and NHK in discovering shortages or missed receipts. Such situations can ultimately result in a line stoppage at NHK or untimely payment to the supplier.

- Improve Payment Processing

EDI insures data from the supplier and data from NHK match exactly which expedites the verification process and supports timely payment. Such accuracy is critical to a supplier in matters requiring later reconciliation of payment or shipping quantity questions.

*Any NHK supplier that is not yet utilizing EDI should contact the NHK Information Systems department and ask to speak with the EDI representative for guidance.*

## **VI. PRODUCTION CONTROL**

### **A. RELEASE AUTHORIZATIONS**

The objective of the NHK Materials Release EDI 830 is to enable the supplier to plan their purchase of raw materials or component parts according to NHK's production plan and to make a parts production schedule that will coincide with NHK's Master Schedule.

Each Release shall contain the following, where N is the date of EDI release:

- (1 Week) Firm Order (N to N+1)
- (2 Weeks) Production Authorization (N+2 to N+3)
- (4 Weeks) Material Procurement Authorization (N+4 to N+7)
- (6 Weeks) Estimates for Planning (N+8 to N+13)

NHK issues a new Material Release by supplier code the first business day of each week for all suppliers and additional EDI 862 orders on Tuesday for JIT Suppliers via EDI (unless specifically otherwise agreed

upon in writing by NHK). NHK's Materials department is responsible for delivering the Material Release to the supplier.

## **B. ADVANCE SHIPPING NOTICE**

*All suppliers must submit an Advance Shipping Notice (ASN) to NHK before shipping parts.*

The objective of an ASN is to alert NHK of what the supplier expects to ship the following day. NHK will receive the ASN *before* the actual shipment is received. NHK's Materials will then check the ASN against the actual packing list accompanying the shipment. If there are any discrepancies, the NHK Materials expeditor will inform the supplier of such matters.

A separate ASN must be sent for each trailer that is delivered.

ASNs must be transmitted through EDI (or in certain circumstances NHK's web service when directed by NHK).

The following information should appear on each ASN sent by the supplier:

- Issue date and time — The date and time that the supplier issues the ASN
- ASN Number — This is a number (12 digits or fewer) that is assigned by the supplier to each shipment. The number is used to track when the shipment is received at NHK
- Supplier Code Number — a unique code assigned to the supplier by NHK
- Ship date — Scheduled shipping date from supplier (mm/dd/yy)
- Expected receiving date & time — Date to be received at NHK (mm/dd/yy) and expected time (12-Hour AM/PM, e.g. 01:00 PM)
- Trailer No. — Number of the trailer used for the delivery
- Carrier Code — 5 digit code assigned to the carrier by NHK
- Shipped from — Supplier's name, address, telephone and fax number
- NHK Part Numbers — Identification numbers for items delivered.
- ECN Revision Level — Actual NHK ECN revision level at which parts are being shipped.
- Quantity Shipped — The number of actual parts shipped in total and in relation to the delivery order requirement.
- Purchase Order Number — Purchase order number (BPO number or SBPO PO number)
- Weight — The weight of each item on shipment (must be specified in units of pounds).
- Remarks — Any special comments.

### C. IMPOSED PARTS

In some cases, NHK will provide suppliers with parts from another source. NHK calls these parts "Imposed Parts". The supplier may be directed to purchase these parts at a set price from a specific vendor, or the parts may be supplied to the supplier directly by NHK or via a third party. Suppliers are expected to work very closely with the NHK Materials department in order to maintain a satisfactory, workable inventory. It is the supplier's responsibility to confirm the quantity and notify NHK Materials of any discrepancies within 48 hours of the receipt of these parts. During a model change, it is the supplier's responsibility to provide an accurate inventory count to NHK Materials upon NHK request.

### D. MISCELLANEOUS SHIPMENTS (SPR, PPR, GER)

At times, a special shipment request may be made by the NHK Materials department, Projects department, Engineering department, or Purchasing department. These may be in the form of a Service Parts Request (SPR), Preliminary Production Requirement (PPR) and/or General Engineering Request (GER). If a supplier is responding to a special shipping request, the supplier must include the appropriate ECN-ECS form for with every container shipped in response to the request. An ASN must precede all special shipments and the transportation must be coordinated with the NHK's Materials department.

### E. NDO — SHORTAGES / MISLABELED PRODUCT

Upon receipt of a shipment by NHK, in the event of a non-conforming shipment, the supplier must comply with the following guidelines:

- **Shortages:**

Items missing when being checked against the Delivery Order or ASN will be considered undelivered. NHK will request that the supplier have the undelivered items delivered.

- Large quantity missing with potential to impact production:
  - NHK may require that the supplier make a special delivery for the missing quantity.
- Small quantity missing:
  - NHK will issue a request to include the missing items in the next delivery.

Missing items found after receipt will follow the same procedure as above with the consent of the supplier.

- **Mislabeled Product:**

Any items that are not correctly labeled will be processed as discrepant and a debit charge will be applied to the supplier.

NHK Supplier Quality Assurance will contact the supplier and request a corrective action.

NHK Materials will note this non-compliance on the monthly supplier rating.



## **VII. ENGINEERING**

### **A. ENGINEERING CHANGE NOTICES**

Engineering Change Notices (ECN) will include the following:

- ECN Cover Page — a summary of Engineering change with information including part numbers of parts modified, part change description, reason for ECN, ECN Timing and cost responsibility.
- ECN Receipt —ECN receipt (ECN\_RECT) will document drawings included with ECN. Supplier is required to sign ECN receipt and return to NHK Engineering to verify that drawings were received by supplier.
- ECN File Attachment form — ECN File Attachment form will list all 2D and 3D files included with ECN.
- 2D Drawings — NHK uses CATIA V5. Drawings associated with an ECN will be provided in .pdf and/or .dxf formats. CATIA 2D drawings may be provided as well upon request.

*NOTE: Drawing revision level will advance with each ECN. The part revision level will only advance if there is a change to the part. If there is no change to the actual part, the part revision level will not advance. For example, if the usage changes or a note changes on the drawing that does not change the part, so the drawing revision level will change, but the part revision level will not.*

- 3D Data — NHK uses CATIA V5. Any 3D data associated with an ECN will be provided in .igs and/or .stp formats. CATIA 3D data may be provided as well upon request. 3D data will only be included with an ECN if the part revision level advances.

*NOTE: If 3D data is provided with the ECN, a copy of the 3D Revision History Page will be included documenting changes to 3D model.*

### **B. ENGINEERING CHANGE REQUEST**

Suppliers can submit a request for a change to a design or drawing using the Engineering Change Request (ECR) form. An ECR form must be submitted for all Engineering Change Requests including VA (Value Added) cost reductions. The ECR form must be submitted to the NHK Engineering department. Information required on the ECR will include current design, proposed design, reason for request, any cost impact including tooling costs, cost responsibility, change timing, and ECR response date requested. NHK Engineering will provide a quick response when an ECR is submitted. This response may include a request for additional information before a decision can be made. If an ECR is approved, an ECN will be issued to implement the approved change.

### **C. NHK FILE TRANSFER PROTOCOL SITE**

The NHK File Transfer Protocol (FTP) Site is used to share files between suppliers and NHK. This can include ECN files, quotation files, and any other files that may need to be shared. Suppliers should contact the NHK Engineering manager to receive login information for the NHK FTP Site. The Engineering manager will create a folder on the FTP Site for each supplier. The Engineering manager will assign a username and password for each supplier to allow access to that specific supplier's folder on the FTP Site. The supplier will also be provided a copy of the NHK FTP Site Supplier User's Guide.

#### **D. INTERNATIONAL MATERIAL DATA SYSTEM (IMDS) REQUIREMENTS**

All suppliers are required to participate in the International Material Data System (IMDS) online data entry system. IMDS is the material data system used by almost all automobile manufacturers and is becoming the international standard to collect component information from suppliers.

*NOTE: NHK uses the IMDS system for suppliers to comply with the Directive on End-of Life Vehicle 2000/53/EC aimed at reducing waste caused by vehicles which have reached the end of their useful lives.*

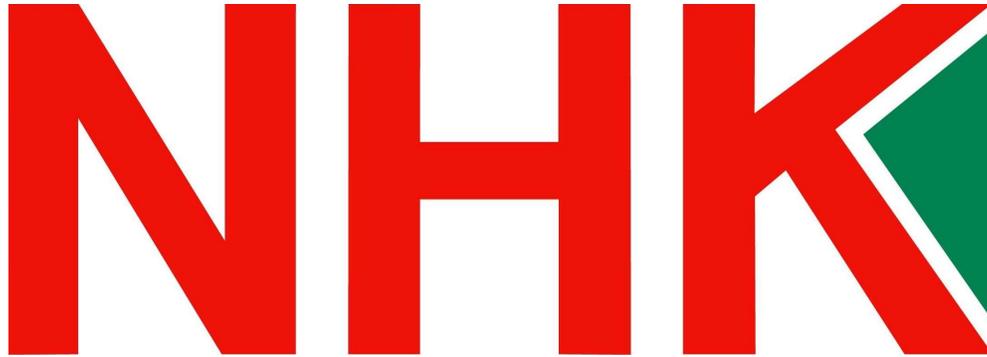
Utilizing IMDS, data for all materials used for automobile manufacturing is collected, maintained, analyzed, and archived. Using IMDS, it is possible to meet the national and international standards, laws, regulations, and obligations placed on automobile manufacturers (and by extension their suppliers).

If the supplier is not currently utilizing IMDS, the supplier *must* contact NHK Engineering, and the IMDS representative will facilitate a smooth transition into IMDS. *IMDS is a requirement of all NHK suppliers, and no exceptions will be made.*

All suppliers must assign one or more client managers to be responsible for IMDS compliance. IMDS part submissions will be entered by the supplier then accepted or rejected by the automobile manufacturer.

IMDS is mandatory for PPAP submission and must be complete and approved by the NHK Engineering department prior to ISR.

*INTENTIONALLY BLANK PAGE. – END SUPPLIER MANUAL – BEGIN QUALITY MANUAL.*



**NHK Seating of America, Inc.  
SUPPLIER QUALITY MANUAL**

**Issued by NHK Quality Department**

Revision 2 – May 2020

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**Section 1: INTRODUCTION**

The NHK of America, Inc. supplier quality manual is intended to be used by NHK suppliers and will fully explain all quality expectations for conducting business with NHK. The supplier quality manual will outline NHK quality policies, procedures, and standard forms.

All suppliers to NHK should request that the NHK Supplier Quality department arrange a meeting with the supplier prior to conducting business. The supplier should have contact information for all appropriate NHK departments and should fully understand quality expectations prior to supplying parts to NHK.

If there are any questions regarding this document, please contact the NHK Supplier Quality department for guidance.

**Part 1: NHK SUPPLIER QUALITY CONTACT INFORMATION****Plant 1:**

8425 W SR 28  
Frankfort, IN 46041  
P: (765) 659-7800  
F: (765) 659-5591

**Plant 2:**

2298 W SR 28  
Frankfort, IN 46041  
P: (765) 659-6601

**Plant 3:**

2195 W Barner St  
Frankfort, IN 46041  
P: (765) 659-2507

**Department**

Quality

Supplier Quality

**Associate**

Manager

Manager

**Phone #**

(765) 659-7849

(765) 654-3325

**Part 2: Intent of NHK Supplier Quality Manual (SQM)**

NHK Seating of America, Inc. strives to be the number one seat manufacturer in North America. NHK provides this Supplier Quality Manual (SQM) to its suppliers in order to develop a consistent and strong supplier base. This SQM is provided to suppliers as a reference to aid in achieving the production expectations of NHK. NHK will periodically provide updates to this SQM as needed. It is the supplier's responsibility to implement the policies and procedures described in the SQM.

All information provided by NHK to the supplier with regards to part design, specifications, pricing and volumes is to be kept strictly confidential and may not be disclosed to any third party or used by the supplier for any propose other than making parts for NHK without the prior written consent of NHK.

This manual is divided into four sections:

1. Introduction
2. Prototype Components
3. Production Preparation
4. Activities in Production

Should the supplier and NHK determine it to be beneficial to deviate from the requirements of a specified process, a record must be agreed upon, signed and placed on file at NHK using the provided waiver form.

## **Section 2: Pre-Production Expectation**

### **Part 1: New Program Review and Preparation**

Upon sourcing, NHK will provide the supplier with CAD data, blueprints, tolerance documentation and other information to describe the program requirements. The supplier must within five (5) days review the requirements, complete and return requirements review documentation.

The Supplier is expected to provide a “Tooling Progress Report” with the requirements review documentation. This document will detail the expected timeline for the project. The “Tooling Progress Report” is required to be resubmitted weekly to indicate the program progress.

NHK welcomes supplier questions and issues during the review period and will make every effort to provide the requested information in a timely manner. NHK will respond to questions within one week.

NHK will review new program features with the supplier when kicking off a new program, which could be a complete model change or minor model changes to a current program.

## **IATF 16949:**

All suppliers must comply with International Automotive Task Force (IATF) 16949 section 8.4.2.3 quoted below; NHK is the "organization".

### **8.4.2.3 Supplier quality management system development**

The organization shall require their suppliers of automotive products and services to develop, implement, and improve a quality management system (QMS) with the ultimate objective of eligible organizations becoming certified to this Automotive QMS Standard. Using a risk-based model, the organization shall define a minimum acceptable level of QMS development and a target QMS development level for each supplier. Unless otherwise authorized by the customer, a QMS certified to ISO 9001 is the initial minimum acceptable level of development. Based on current performance and the potential risk to the customer, the objective is to move suppliers through the following QMS development progression:

- a) certification to ISO 9001 through third-party audits; unless otherwise specified by the customer, suppliers to the organization shall demonstrate conformity to ISO 9001 by maintaining a third-party certification issued by a certification body bearing the accreditation mark of a recognized International Accreditation Forum Multilateral Recognition Arrangement (IAF MLA) member and where accreditation body's main scope includes management system certification to ISO/IEC 17021;
- b) certification to ISO 9001 with compliance to other customer-defined QMS requirements (such as Minimum Automotive Quality Management System Requirements for Sub-Tier Suppliers [MAQMSR] or equivalent) through second-party audits;
- c) certification to ISO 9001 with compliance to IATF 16949 through second-party audits;
- d) certification to 16949 through third-party audits (valid third-party certification of the supplier to IATF 16949 by an IATF-recognized certification body).

## **Part 2: Prototype Component Requirements**

All products must be produced from the specified materials and in accordance with the dimensional and functional tolerances specified. All shipments will include the following:

1. Inspection data showing the dimensional and functional status of the product;
2. Material property certifications for all materials used;
3. Product serialization tag; and
4. Prototype warrant.

The supplier shall provide component inspection data and/or material certs for assembled deliverables upon request. Material samples may be requested as needed for testing purposes.

## **Part 3: Deviation Request**

If at any time a supplier's product is unable to meet the quality or engineering requirements of the design record, the supplier must receive NHK's approval prior to shipment. All deviation requests must be documented using the NHK Deviation Request form and submitted to the Supplier Quality Department for approval at least one week prior to delivery. Failure to receive "Deviation Authorization" will result in

rejection of the product. Pending deviation requests do not alter the delivery date. A copy of the approved deviation must be sent with the shipment.

#### **Part 4: Feasibility Commitment**

For each new program, supplier shall provide a feasibility acknowledgement to NHK indicating it is capable of meeting the program expectations. The acknowledgement must include, but is not limited to, the following:

1. Ability to meet the component specifications;
2. Ability to meet the volume requirements; and
3. Ability to manage the process/components to ensure good quality.

#### **Part 5: Production readiness plan and progress report**

An NHK representative may hold a periodic engineering review to ensure the project stays on track. During such review, the supplier will be responsible for providing information as it relates to the schedule, open issues, concerns for the program and prototype progress.

The supplier is expected to provide a Sales and Operation (SOP) plan/schedule for production preparation including but not limited to:

1. Production Tooling;
2. Production Process;
3. PPAP Submission;
4. Quality document development (IE: Process Flow diagram, PFMEA, Control Plans, Line layout, Work Instructions and etc.);
5. Testing Plan;
6. Gage development;
7. Trial events leading to SOP.

#### **Part 6: Supplier assessment activities**

Based on the supplier's activities, NHK reserves the right to assess the supplier's quality control system at the supplier facility. Such reviews may include but, not limited to a quality system audit, process audits, material evaluation and any activities related to the integrity of the product delivered to NHK.

It is the expectation of NHK that all suppliers are at least ISO-9001/2008 certified or compliant. If not certified then conformity to ISO-9001/2008 must be demonstrated which may require a quality systems audit by NHK.

#### **Part 7: Inspection Standards and Data**

The supplier shall develop an inspection standard for each product that is to be delivered to NHK. This standard shall document and define the inspection process used to determine the conformity of the part to the engineering specifications.

Dimensional or tolerance information may be developed from the drawing, CAD data or other engineering communications. Inspection standards shall address all characteristics required to determine the product's conformance with NHK's specifications. This includes, at a minimum:

1. Geometric dimensioning and tolerancing (GD&T) callouts;

2. All dimensions;
3. Key Product Characteristics (SC's, CC's, Delta R, Delta S and etc.);
4. Evidence of all functional requirements determined on the print or by contract.
5. All testing, validation, and inspection frequencies

Inspections must be conducted by qualified personnel using appropriate equipment and in a manner that is consistent with the tolerance or requirements of the characteristic being inspected.

Inspection data for all items specified must be provided and available for each product and each job setup that will be used to produce the products delivered to NHK.

For each delivered product to NHK, a minimum of three pieces will be required to provide inspection data. NHK reserves the right to require the supplier to provide additional inspection data (L e., due to data inconsistency, corrective actions, rejects or to prove process control).

Inspected components shall be identified and/or segregated from the bulk of the product during shipment. Inspection results must be included in the shipment, for multiple shipments the first shipment will include the inspection results.

Non-conforming products shall not be shipped without "Deviation Authorization" obtained from NHK. NHK shall be alerted immediately upon the discovery of non-conforming products that may have been delivered to NHK and of products that are still at the supplier's facilities.

The use of checking jigs or fixtures for the product is acceptable to inspect multiple parts. Jigs, fixtures or other devices used must be approved under the following:

1. The check fixture is certified and the Coordinate Measurement Machine (CMM) data made available
2. The device checks all of the required characteristics
3. NHK will approve the device prior to use.

## **Part 8: Evaluation and Testing Plan**

For all variations of product shipped to NHK there must be an evaluation and testing plan to confirm that the product meets specifications. The plan must cover functional, electrical and appearance requirements as called out in the specifications. The plan must include the different stages of the product as follows:

1. Prototype level product;
2. Pre-production level product; and
3. Mass production level product.

## **Part 9: Inspection Gage Development**

Products that need to be inspected through the use of an inspection gage must have a development plan for the gage. The development plan must ensure that all the required characteristics are properly checked against the specifications. The gage must be proven through Coordinate Measurement Machine (CMM) data and capability studies and as needed Reproducibility and Repeatability (R&R) evaluation based on the application of the gage.

## **Part 10: Inspection Data**

All data collected to prove the gage capability must be available to NHK upon request. This data must be supplied using NHK's required format and shall clearly illustrate the capability of the gage. All data collected to prove the product meets specification must also be made available to NHK upon request.

### **Part 11: Material Certification and Safety Concerns**

All products must be made from the designated materials. The supplier is required to obtain a "Deviation Authorization" from NHK for any materials that do not meet the requirements in type, thickness, color, finish and etc. Material certification will be provided with the initial shipment to NHK. All material certs must be less than 1 year old. MSDS will be delivered with the initial shipment to ensure that NHK has it on file. If there are any safety concerns with any material, NHK must be notified prior to the initial shipment.

### **Part 12: Appearance Approval**

Appearance approvals will be based on the specifications for that product. Appearance requirements can be color, texture, fit or shape based on the application. Initial appearance conditions must be approved by NHK personnel.

### **Part 13: Layout / Process Flowcharts**

The supplier's process will be illustrated by a flow chart and layout drawing that represents the complete process for the product being delivered to NHK. Key characteristic locations must be identified on the flow chart. Symbol formats can be determined by the supplier to match their quality systems. The development steps and timing should be included in the Production Readiness Plan. Flow chart steps must align with control plan and FMEA.

### **Part 14: Process Failure Mode and Effects Analysis**

The supplier's process will utilize a Process Failure Mode and Effects Analysis (PFMEA) approach to ensure a low risk production setup. The PFMEA will reference the Design Failure Mode and Effects Analysis (DFMEA) or FTA to identify key characteristics that need to be protected. Periodic Assessment of the FMEA should be in place to ensure the quality of the product delivered to NHK.

- Suppliers must utilize AIAG FMEA Format and Guidelines
- Evidence of cross functional team participation
- Proper methodology used to assign correct values to RPN
- Critical Characteristics must be identified and have a recommended action as a contingency
- Use 4M (Material, Man, Method, Machine) When assessing risk
- Process identifiers link with Process Flow and Control Plan

### **Part 15: Process Control Plan**

The supplier's process control plan will be developed from the PFMEA. The Process Control Plan (PCP) must ensure the key characteristics are protected with appropriate controls, tools and reaction plans. Appropriate check levels or sampling must be in place to safeguard any defective products being shipped to NHK. The PCP is a living document and must be maintained to reflect the actual conditions of the production set up. Periodic assessment of the PCP should be in place to ensure the quality of the product

delivered to NHK. The development steps and timing should be included in the Production Readiness Plan (PRP).

### **Part 16: Control of Special Characteristics**

Special characteristics must be called out in the PFMEA and Control Plan to ensure that the process is robust enough to provide defect free products to NHK. Special Characteristics include but are not limited to Delta "S", Delta "R", welding, color, texture or trim fit. The specific key characteristics will be identified by NHK through the drawings or special specification sheets. Methods for ensuring Special Characteristics compliance may include:

1. Initial process capability study
2. Ongoing statistical process control
3. 100% inspection and confirmation of the characteristic
4. Validation testing
5. Other methods agreed upon with NHK

### **Part 17: Training**

All personnel associated with the manufacturing of products delivered to NHK must be adequately trained on the process they are performing. Records of their training must be maintained and available upon request from NHK. Training is an essential tool to ensure standardized work among supplier's associates.

### **Part 18: Production Packaging Requirements**

Delivered product shall be packaged in a manner that prevents damage and deterioration to the product during shipment. Packaging must be approved by NHK prior to making any shipments. Labeling must clearly identify the product, quantity and part number for that product. Labeling must also identify the product if it is special (i.e., first part, engineering change level, process change or other)

### **Part 19: Product Serialization**

Each part delivered must have an attached identification tag identifying the part number, Engineering Change Notice (ECN) revision level and serial number. Serial number identification is the responsibility of the supplier to establish. Traceability data must link back to the supplier's process that built the product. Identification number must include date/shift and be located on the product when delivered to NHK.

On small parts or bulk materials where it is not feasible or practical to have serial number **ID** this requirement will be waived. Materials of this nature must have lot tracking ability to be determined and managed by the supplier. This trace ability data must be available upon request from NHK.

### **Part 20: Production Part Approval Process**

All suppliers will receive NHK's PPAP Guidelines through the Supplier Quality Assurance Department. The guide will highlight all PPAP expectations and NHK specific requirements. PPAP requirements and expectations can change at any time due to process improvements or changes in OEM requirements. Suppliers will be notified and provided with updated guides anytime a change occurs.

### **Part 21: Production Containment**

During all stages of production the supplier must have the ability to contain any non-conforming product so such products are not delivered to NHK. The supplier will dispatch inspection personnel and tools, as

needed, to NHK's facilities to sort and/or rework product so only conforming product is used by NHK. If at any time the supplier refuses to provide containment resources, NHK reserves the right to implement containment and apply the cost to the offending supplier.

At SOP the supplier will, as notified, implement additional containment activities to ensure defect free delivery to NHK. Containment will remain for the first 3 calendar months after SOP. The exit plan for this containment will be agreed upon by the supplier and NHK and will be based on product quality performance.

## **Part 22: Suspect and Nonconforming Material**

The supplier shall have a written procedure for the segregation and disposition of nonconforming material. No non-conforming or suspect non-conforming material will be submitted to NHK without prior written authorization. NHK must be notified immediately in the event that non-conforming material has been delivered to NHK or that the material will jeopardize delivery or timing.

Rework and repair may be acceptable for eliminating the product nonconformance. A rework plan and procedure must be in place and approved by NHK.

## **Part 23: Investigation and Corrective Actions**

In any of the following events the supplier must provide corrective action responses:

1. Non-conforming material being delivered to NHK;
2. Parts of supplier design that fail validation testing;
3. Late delivery or short delivery
4. Receipt of Supplier Corrective Action Request

Suppliers are responsible for conducting an investigation of the issue and providing a corrective action report. Investigations must be conducted to identify the true "root cause." Once the root cause has been identified then the supplier must implement corrective actions to prevent the same defect from happening again. Suppliers must "Yokoten" countermeasures across similar processes.

From the time the supplier is alerted to a problem the following must take place:

1. Containment action must be implemented within twenty-four (24) hours.
2. Temporary corrective action to be in place within seventy-two (72) hours.
3. Permanent corrective actions to be in place with ten (10) days (NHK must be notified if the timing is beyond the 10 day limit).

Containment or temporary corrective actions must be maintained until the permanent corrective actions are in place and verified for effectiveness. Verification is typically three clean shipments after the Corrective Action Break Point is provided.

## **Part 24: Mass Production Readiness Evaluation**

NHK will audit the supplier as needed to ensure they are ready for mass production conditions. This includes, but is not limited to, run at rate ability, process evaluation, packaging availability and quality verifications. In the event that NHK cannot audit the supplier directly, the supplier must have the documents and data available to support their readiness for mass production.

### **Section 3. Mass Production Expectations**

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## **Part 1: Process Changes**

Changes to the process (including minor changes) may not be made without the prior written approval of NHK.

Notification for process or tooling changes is required except in the following conditions:

1. Replacement of perishable manufacturing materials
2. Preventative maintenance activities
3. Repairs to tooling or capital equipment (unless it is a major overhaul)

Implementation of a process change requires a PCR (Process Change Request) to be submitted and approved by NHK. Examples of a PCR submission include:

1. Change of subcontractor or material manufacturer
2. Change of plant layout or manpower change
3. Change of equipment, jigs, machines or tools
4. Change of inspection procedure
5. Change of process condition

If the supplier has any questions about Process Change Requests or what constitutes a Process Change, they must contact NHK's Supplier Quality Assurance team.

## **Part 2: Product Changes**

Changes to the product may not be made without the prior approval of NHK.

Before a change can occur an approval in writing from NHK must be documented and received. Implementation of a product change requires a Product Change Request (PCR) to be submitted and approved by NHK.

Product changes may come to the supplier in the form of an Engineering Change Notice (ECN) from NHK, which will include the change requirements and the implementation timing.

## **Part 3: Abnormal Production Control Contingency Plan**

Suppliers are responsible for managing temporary abnormal conditions within their production environment. This control is very important as it typically attributes to a large number of defects.

The supplier shall provide their procedure for controlling and recording the following events:

1. Abnormal Manpower — Such as temporary labor, new team members, turnover, training and the use of additional team members to meet volume
2. Abnormal Machinery — Such as new tools, broken jigs, production line changes, additional equipment or the loss of equipment
3. Abnormal Process — Such as temporary labor changes, process changes, parameter changes, addition or removal of inspection steps or temporary inspection equipment
4. Abnormal Material — Such as new raw material or deviated raw material

The status of an abnormal condition must be made clear to the line/team members and management staff. Records of the abnormal change must be made available upon the request of NHK.

Output from the abnormal procedure must include the following:

1. Date/Time the change was in effect
2. Description of the abnormal condition
3. Description of the countermeasure used to control the abnormal condition
4. Any inspection data that may be created
5. A clear visual indicator of the abnormality while the line is running

#### **Part 4: Change Point Control**

The supplier is responsible for identifying and controlling changes in the product or manufacturing process with the goal of preventing defects.

A change point control system must address at a minimum:

1. The schedule for the change
2. A plan for special inspection or defect control method
3. A plan for informing and training all related personnel
4. A plan for documenting change point history

The supplier's change control procedure must be made available upon NHK's request.

#### **Part 5: Rework Control**

The majority of quality defects passed on to the end user are a result of reworks. The supplier must have a process to control the rework and verification of the reworked products.

The rework process must include, at a minimum:

1. A method to record the reworked product received
2. A system for determining whether or not the rework will occur online or offline
3. Criteria for selecting rework operators
4. A written procedure for high volume reworks
5. A process for re-verification of the product after it has been reworked
6. An approval procedure for the completeness of the rework
7. A method for identifying reworked product after it has been shipped

#### **Part 6: Production Traceability**

In the event of a manufacturing defect, product suspected of containing the defect must be contained. Suppliers are required to have a method for tracing the manufacturing date of materials sufficiently to ensure that the suspect parts are controlled. Suppliers are encouraged to provide production trace ability in the smallest increment that is economically feasible. Products with special characteristics must be traced and recorded.

Every part, unless physically impossible due to size or material, must be manufactured with the part identification number inscribed, stamped, molded or labeled. Part identification method should be determined at the start of the program between the supplier and NHK.

## **Part 7: Suspect Product Shipment**

In the event that potentially non-conforming product or "suspect" product has been shipped to NHK, the supplier is responsible for immediately alerting NHK.

The supplier is expected to take the following actions upon suspicion of a suspect product:

1. Identify the quantity and location of the suspect products:
  - a. At the supplier
  - b. In transit
  - c. At NHK
  
2. The severity of the problem:
  - a. Is it a safety issue?
  - b. Will the inventory be depleted?
  - c. Will this issue affect NHK's customer?
  
3. The containment of the problem:
  - a. Is conforming material available?
  - b. Determine method to contain the issue at the supplier and NHK
  - c. Timing to get the process back in control

Open communication between the supplier and NHK is essential and must take place in order to manage the situation and prevent it in the future.

## **Part 8: Continual Improvement**

Suppliers are responsible for conducting continual improvement activities. The goal of these activities should be to:

1. Reduce defects, scrap or rework;
2. Improve safety;
3. Reduce cost;
4. Improve operating efficiency; and
5. Improve production capacity.

Suppliers are encouraged to utilize one or more of the following methods as applicable:

1. Kaizen teams;
2. Six Sigma projects;
3. QC circle; and/or
4. RPN reduction groups.

The supplier is responsible for maintaining all records related to their improvement activities. The records are expected to include implementation dates, before and after conditions, project target, achievement to the target and lessons learned. Upon request, the supplier shall provide such records to NHK as evidence of the supplier's improvement activities.

## **Part 9: Design Investigation Request**

The supplier may request NHK for a design investigation or revision if one of the following conditions applies:

1. The supplier reasonably believes that the part cannot be reliably made to tolerance;
2. A design change would improve workability leading to cost or time savings;
3. A design change would improve the supplier's ability to safely make the product; and/or
4. Customer requirements have changed making the current process unusable and resulting in issues related to items 1, 2 or 3 above.

The supplier must submit a written request for a design investigation to NHK's Engineering department before an investigation can be initiated. Conditions to prove or disprove the requested change must be agreed upon by NHK before any trial event take place. Support data required from any trial events must be identified by NHK prior to the event.

#### **Part 10: Supplier Score Card**

NHK will track key supplier performance criteria on a Supplier Score Card. Performance indicators will be monitored based on WI-064 SUPPLIER RATING SYSTEM, as amended from time to time by NHK.

#### **Part 11: Dimensional Data Collection**

It is the responsibility of the supplier to perform routine layouts on all assemblies provided to NHK. Dimensional layout data shall be provided upon request but will be required at a minimum of twice annually. If the supplier does not have CMM capabilities, the supplier will be cost responsible for outsourcing.

#### **Part 12: Nissan Quality Initiatives**

The Supplier must comply with the rules of the Nissan ANPQP system. Please regularly contact your NHK Quality department contact to acquire the latest version of form WI-QA-117 ANPQP "Customer submission" for guidance.

The Supplier must comply with the rules of the Nissan 4M system. Please regularly contact your NHK Quality department contact to acquire the latest version of form PWWI-002 "4M Board" for guidance.

### **Section 4. Quality Management and Control Standard Requirements for NHK**

All NHK suppliers should follow the requirements as defined by this NHK SUPPLIER QUALITY MANUAL (hereinafter referred to as the "Quality Manual") and Terms and Conditions of Purchase of NHK (which includes a product warranty for supplier's product) which is published on NHK's website at: [www.nhkseating.com](http://www.nhkseating.com)

Quality Management and Control activities based on this manual throughout the development, start of production, and manufacturing process are required for all parts delivered to NHK.

Suppliers are to maintain quality management and control systems based on this manual

\*This manual is made based on the requirements of ISO9001 / IATF16949.

Scope of suppliers to whom this Quality Manual applies:

1. Suppliers as defined in General Rules, 2.2. Scope of Application (page No. I-1).
2. Third-Party Registration. Third party registration for certification to ISO 9001/IATF16949 is not a requirement, but is recommended for suppliers in order to assure compliance to the requirements of this Quality Manual.
3. Scope of the requirement
  - (1) Specific requirements are defined in this Quality Manual.
  - (2) Suppliers to NHK must abide by NHK's special requirements as noted by the Tasks contained in section "II, Specifics Methodology" of this Quality Manual.
4. Quality Management and Control Systems for Sub Suppliers (NHK Tier 2, 3 and after)  
Tier 1 suppliers to NHK are responsible to assure tier 2, 3 and after sub suppliers have Quality Management and control systems that meet the requirements of this Quality Manual.
5. References and Contact Information  
ISO9001, IATF 16949 2016 or other non NHK standards or manuals are to be obtained through self-procurement by the supplier. Listed below are sources for self-procurement:

ISO9001, IATF16949 2016 or related standards:

Automotive Industry

Action Group (AIAG)

26200 Lahser Road, Suite 200

Southfield, MI 48034

Phone: 248-358-3570 FAX: 248-358-3253

<http://www.aiag.org/> (English)

ISO/TS16949 or ISO9001:2008

Japanese Standards Association

Phone: +81-3-3583-8002 (Japan)

<http://www.jsa.or.jp/> (English/Japanese)

If you have any additional question, please contact:

Supplier Quality Manager

Phone: +765-654-3325

Other Items:

NHK Purchasing department

Phone: 765-659-7846