In-House Quality Information Handling Standard

[Core]

1 General Provisions

1.1 Purpose

The purpose of this standard is to improve and maintain product quality by facilitating promotion of handling, investigation, analysis, countermeasures and horizontal development of information relating to quality nonconformance (hereinafter referred to as "nonconformity") found in-house and of actual units (includes all doubtful nonconforming lots; hereinafter referred to as "nonconforming product").

1.2 Scope

This standard applies to quality-related information and nonconformity found in-house during manufacturing at the production stage, found in supplied parts or products in other facilities and of the actual products.

1.3 Definition of Terms

Definitions of terms used in this standard are as follows:

| No. | Term | Definition |
|-----|---------------------------|---|
| 1 | In-house | The entire process from receiving raw materials, parts, etc., to delivering finished products to customers. |
| 2 | Supplied parts | Parts supplied to other facilities (includes component parts). |
| 3 | Nonconformity | A condition in which the raw materials, parts, products, etc. do not meet the required specifications. |
| 4 | Concession | To use a specific amount of raw materials, parts, products, etc., which do not conform to required specifications, or refers to the usage of those for a limited time. |
| 5 | Horizontal development | The act of preventing recurrence of similar nonconformity by sharing nonconformity information (root causes, corrective actions and recurrence prevention measures) found in-house with other Honda facilities and by verifying operations of similar processes |
| 6 | Unsold products | Products shipped from manufacturing facilities and are managed under its own facility. |

2 System

2.1 Management System

- 2.1.1 The process from detection and investigation of nonconformity to implementation of countermeasures are outlined in Attachment-1 "In-House Quality Information Process Flow (Importance Rank A)" and Attachment-2 "In-House Quality Information Process Flow (Importance Rank B and C)"
- 2.1.2 The flow for implementing horizontal development is shown in Attachment-3 "Horizontal Development of In-House Quality Information (Manufacturing Nonconformity)"

2.2 Roles and Responsibilities

- 2.2.1 The responsible person for implementing countermeasures to nonconformity or nonconforming products is the quality representative.
- 2.2.2 The quality representative is responsible for providing instructions on remedial measures such as shipping suspension and on countermeasures based on engineering judgment.
 For matters involving such as shipping suspension, the top management of the facility is responsible for accordingly coordinating personnel, corresponding in production and arranging with other concerned sections such as logistics and sales (includes other facilities).
- 2.2.3 The responsible person for each operation described in "In-House Quality Information Processing System" is the head of the section implementing it.

3 Management of Quality Information

3.1 Communication Upon Detection

Ranking of Nonconformity".

- 3.1.1 Sections that find nonconformity determine its importance ranking based on the definitions given in Attachment-4 "Importance Ranking of Nonconformity" and notify the related sections the occurrence after identifying the responsible sections.
 - For nonconformity attributable to transport after completion inspection, refer to G-HQS "Handling, Transporting and Storage Standard".
 - (1) Establish a criteria to determine importance ranks and judge its rank taking into account of the potential impact on safety, pollution and compliance to laws and regulations.
 For judgments of importance criteria, refer to Attachment-5 "Case Examples of Importance

- (2) For nonconformity (oil leak or ooze, abnormal noise or order, etc.) that could possibly result in importance rank A problem are to be deemed as an importance rank A problem until its actual importance rank is determined in accordance with section 3.2.1.
- (3) The following table shows the sections responsible for the occurrence, classified by the primary judgment of importance rank.

| | | Contact | | | | | | | |
|------------|---------------------------------------|-----------------------------|---------------------------|----------------------------|--|--|--|--|--|
| Importance | Section responsible for | Responsible | Quality section | | | | | | |
| Ranking | occurrence | section within the facility | Receiving quality section | Completion quality section | | | | | |
| | Each section in facility (see note 1) | 0 | _ | 0 | | | | | |
| A | Other facilities | _ | O (Note 2) | | | | | | |
| | Supplier | _ | 0 | 0 | | | | | |
| B and C | Each section in facility (see note 1) | 0 | _ | _ | | | | | |
| D and C | Other facilities | _ | O (Note2) | | | | | | |
| | Supplier | _ | 0 | _ | | | | | |

- Note 1: The subject section is included in "Each section in facility".
- Note 2: For nonconformity attributable to other facilities, the receiving quality section or the completion quality section informs the subject facilities.
- Note 3: Importance rank B and C also needs to be informed to the completion quality section taking into account factors such as problem details, frequency, trend, and outflow to subsequent processes of the nonconformity.

The head of the completion quality section provides information of the nonconformity to the quality representative of its own facility.

- 3.1.2 Sections that discover an importance rank A nonconformity, report to the quality representative the details within 24 hours.
- 3.1.3 Inform the completion quality section of the applicable facility if nonconformity is found at physical distribution after the completion inspection and of which is attributed prior to physical distribution or natural disasters.
- 3.1.4 If nonconforming products may have been supplied from one facility to another, the quality section (hereinafter referred to as the receiving quality section or completion quality section) notifies the receiving facilities.
- 3.1.5 The quality section determines and promotes necessary prevention measures for concerns reported from sections of its facility or other facilities, etc.

- 3.2 Investigation of Nonconformity and Promotion of Countermeasures
 - 3.2.1 Judgement on the importance rank of nonconformity and its respective countermeasures are as follows:
 - (1) Rank A nonconformity and those which could result in Rank A nonconformity.
 - (a) The quality section investigates and analyzes the nonconformity reported from the detection section and determines the importance rank.
 - (b) The quality section or the detection section reports the investigation and analysis results to its own immediate plant manager or the head of the quality control section, receives instructions from the quality representative for necessary actions and requests the responsible section or the quality control section (if the cause is thought to be due to the specification) to take corrective action using the form such as "Countermeasure Request Form."
 - (2) Rank B and C Nonconformity
 - (a) The quality section or the detection section performs investigation and analysis of the nonconformity occurrence situation and determines the importance rank.
 - (b) The quality section or the detection section requests the responsible section or the quality control section to take corrective action using the form such as "Failure and Corrective Action Request" taking into account of factors such as problem details, frequency, trend, and affects to manufacturers.
 - For nonconformity described in Note 3 of paragraph 3.1.1, report the investigation results to the direct plant manager or the head of the quality control section and the quality representative, and receive corrective actions and/or other necessary instructions.
 - (3) If nonconformity of importance rank A or those applicable to Note 3 of section 3.1.1 have a possibility of occurring in other facilities, the quality representative inform those facilities' quality representative.

3.2.2 The requesting section and the receiving section of the nonconformity countermeasure per factor are as follows:

| | | Importanc | e Rank A | Importance Rank B and C | | | | |
|---|---------------------------------|--------------------------------------|--|--|--|--|--|--|
| Factor | | Countermeasure requesting section | Contact person of the receiving section | Countermeasure requesting section | Contact person of the receiving section | | | |
| Nonconformity attributabl specificati | e to | Quality section or detection section | Head of the quality control section | Quality section or detection section | Head of the Quality control section | | | |
| | Subject facility In-house | Quality section or detection section | Immediate plant manager of the responsible section | The quality section or detection section | Head of the responsible section | | | |
| Nonconformity deemed attributable to | Other facilities | Quality section | Quality representative of the responsible facility | Quality section | Head of the quality section of the responsible facility | | | |
| manufacturing | Supplier | Quality section | Supplier's quality assurance manager through the head of the receiving quality section | Quality section | Head of the supplier's quality section through the head of the receiving quality section | | | |

- 3.2.3 Promotion of countermeasures toward nonconformity is implemented in the following manner:
 - (1) For nonconformity thought to be resulted from specification, the quality control section analyzes and if identified as so, makes a request to Honda R&D Co. Ltd to take countermeasure.
 - Countermeasure request for nonconformity due to specification is made in accordance with G-HQS "Specification Change Control Standard"
 - (2) The quality control section reviews the countermeasure plan prepared by Honda R&D Co., Ltd. and notifies the requesting section of the decision.

(3) For nonconformity based on facilities' manufacturing, take countermeasures based on the flowing importance ranking.

| | | | Importance rank B, C | | | | | |
|-----|--|---|---|-----------------------------------|--|--|--|--|
| No. | Procedure | Importance rank A | Those falling into "Note 3" of section 3.1.1. | Others | | | | |
| 1 | The responsible section identifies the causes, extent of nonconformity, investigates and analyzes quality verifications of similar processes, or the like, of its section. | 0 | 0 | 0 | | | | |
| 2 | The responsible section makes a primary report of the investigation and analysis results to the quality representative. | 0 | 0 | _ | | | | |
| 3 | The responsible section prepares a countermeasure plan based on the investigation and analysis results, and takes countermeasure after obtaining approval from the appropriate authority specified in the right. | Countermeasure requesting section Immediate Plant Manager, Quality Representative | Countermeasure requesting section | Countermeasure requesting section | | | | |
| 4 | The responsible section or countermeasure requesting section reports the countermeasure description of nonconformity described in Note 3 of paragraph 3.1.1. | | Immediate Plant Manager, Quality Representative | | | | | |
| 5 | Based on the primary report result, if it is determined that a similar nonconformity may occur through similar processes of its own facility, the quality representative provides instructions to verify the quality of products produced by such processes. | 0 | 0 | _ | | | | |
| 6 | The section that received instructions from the quality representative verifies similar processes based on the informationand causes of nonconformity, and notifies the quality representative of the result of the confirmation and process. | 0 | 0 | _ | | | | |

- (4) For nonconformity attributed to other facilities or suppliers, the quality section assesses the appropriateness of the countermeasure and promotes it in accordance with paragraph (3). For countermeasure contents of Importance Rank A, obtain approval from the quality representative.
- (5) The countermeasure implementing section manages and applies the improved parts based on "IPP control standard" or "lot control standard" of its own facility.
- 3.2.4 The countermeasure requesting section confirms the effectiveness by verifying the contents of countermeasure records, occasional audits of related processes and the actual problem parts.

3.3 Horizontal Development

- 3.3.1 If nonconformity of importance rank A or those that apply to note 3 in section 3.1.1 is judged necessary for horizontal development in other facilities, the quality representative sends the causes, countermeasures, recurrence prevention measures and key points of verification to Quality Planning Center of <u>Production Planning Division</u> and submits it to the Chief Inspecting Engineer meeting in Japan.
- 3.3.2 The quality representative instructs verification of the horizontal development to the concerned sections of its facility, based on the nonconformity information in other facilities sent from Quality Planning Center of <u>Production Planning Division</u>.
 For suppliers, the receiving quality section reports to the subject supplier's quality representative.
- 3.3.3 The section subject to verification reviews and compiles the verification results and reports to the quality representative.
 For supplier verification, the receiving section confirms the verification results and reports to the quality representative.
- 3.3.4 The quality representative provides information on the results of horizontal development verification to the Chief Engineering Inspector meeting in Japan for sharing information.
- 3.3.5 The facility's quality representative maintains verification results of horizontal development.

4 Management of Nonconforming Products

4.1 Action Upon Detection

If any nonconforming product is discovered, the section that discovered it identifies the nonconforming product by attaching tags, keeping it in designated containers or storing it in designated area that suit the shape of nonconforming product and isolate it from other conforming products until nonconformity is properly corrected.

4.2 Post-Discovery Action

- 4.2.1 The responsible section investigates parts based on the notification from the detection section or instructions from the quality section. For identified nonconformities, isolate the products based on section 4.1.
- 4.2.2 The responsible section investigates the need for replacement products, and takes appropriate actions in cooperation with other sections concerned.
- 4.2.3 For parts receiving from suppliers, the receiving section promotes operations described in section 4.2.1 and 4.2.2.

4.3 Suspension of Shipment and Dissemination of Information

- 4.3.1 The quality representative instructs suspension of shipment if nonconformity of importance rank A or explanations described in "Note 3" of section 3.1.1 is found.
- 4.3.2 The quality representative requests the service section, logistics section, etc., to perform checks and temporary holdings of unsold products, indicating the symptoms of occurrence, model, destination, manufacture date, product identification number, quantity, etc. provided.
- 4.3.3 The logistics section or the service section that received instructions from the quality representative takes measures by temporarily holding of unsold products.
- 4.3.4 The quality representative, if nonconformity may have outflowed into the market, discusses its handlings with the market quality section and the service section or the facility that shipped it.

4.4 Measures for Nonconforming Products

There are three types of measures to take toward nonconforming products: correction, disposition and concession.

4.5 Correction

- 4.5.1 Follow the procedures below when returning corrected products back to the process:
 - (1) The responsible section examines the results of correction and after the responsible personnel's decides, the section lot manages and returns the corrected product back to the process.
 - (2) For nonconformities found during completion inspection process, record the correction details in the inspection result sheet, for example, and if necessary, implement another completion inspection on the corrected product.
- 4.5.2 For correcting nonconformity of unsold products, follow the below:
 - (1) The completion quality section informs the logistics section of corrections to perform, along with notifying dealers, distributors, etc. of the implementation through the service section (including facilities in a destination country) via the market quality section.
 - (2) The quality representative determines the section for implementing corrections after consultation with the service section (includes facilities in a destination country).
 - (3) The section for implementing corrections record the corrections made based on application forms, etc. of implementation of corrections.
 - (4) The completion quality section verifies the corrected results, manages the records of date, place, implemented section and identification number of corrected products.

4.6 Disposition

When disposing nonconforming products, the responsible section identifies the products need to be disposed by marking or tagging, etc. If the responsible section turns out to be other facilities or suppliers, the section discovered identifies the products to be disposed by marking or tagging. After identifying the quantity and reason, the section consults with the responsible section whether or not the parts are to be returned or disposed.

4.7 Concession

4.7.1 A request for concession is made to the quality section by the responsible section using the request form.

The request forms of parts from suppliers are prepared by the receiving quality section.

Those affecting safety, pollution and legality are not the subject of concession.

- 4.7.2 The head of the quality section determines the application of the concession after consultation with the quality section and other concerned sections (including concerned facilities) regarding consequences, such as impacts on product function or marketability and past application of concessions.
 - If application of concession involves multiple facilities, agreement needs to be reached with the quality representatives of the facilities.
- 4.7.3 The products to which a concession is granted, the responsible section identifies the products by attaching identification, such as tags, for each release lot.
 - For parts being received from suppliers, the receiving quality section instructs the suppliers to implement the identification tasks.
- 4.7.4 The products to which a concession has been granted, the assembly section keeps track of product number and the responsible section maintain records.
 - For those received from other facilities and suppliers, the quality section maintains the records.

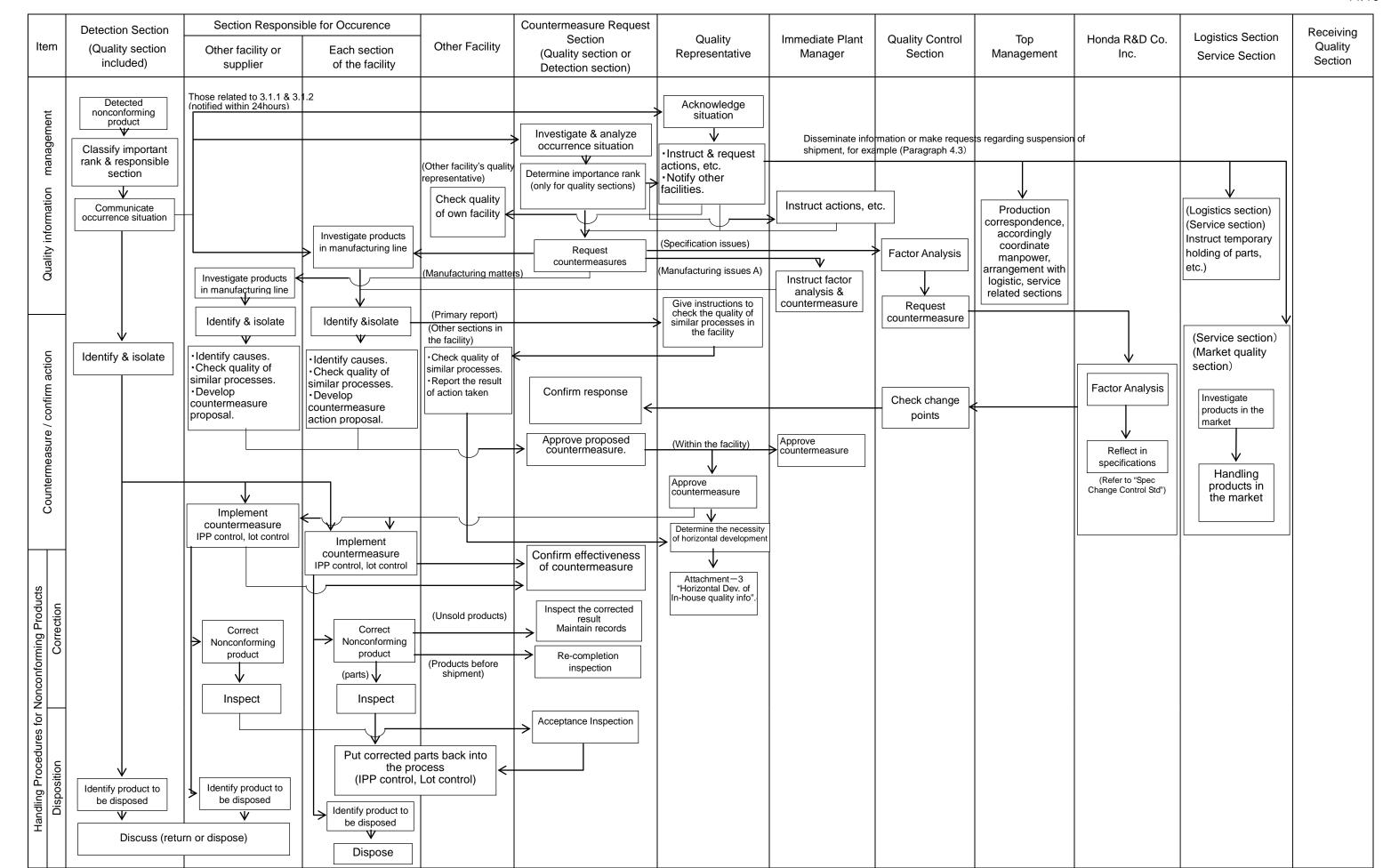
4.8 Implementation of Market Action

Procedures, regarding handling and market investigation based on nonconformity are to be applicable to the standards the facility defined regarding market quality handling.

5 Supplementary Provision

5.1 Application

Matters relating to establishment, revision and implementation of this standard are outlined in G-HQS [Quality Management Standards Control Standard].



Attachment - 2(Related to Paragraph 2.1)

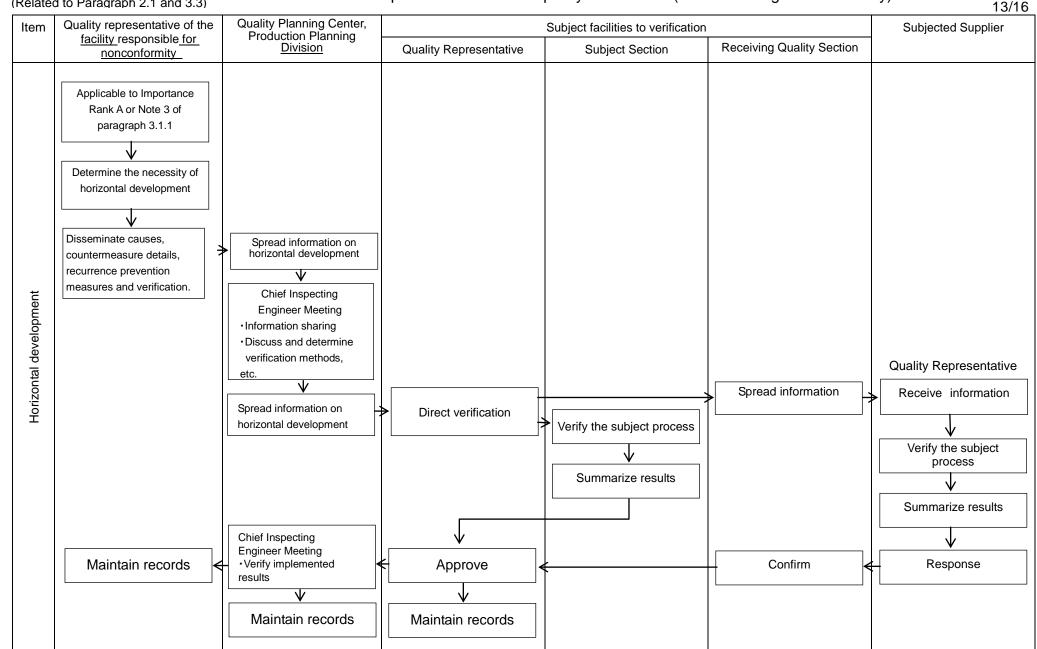
Legend: ---- applicable to Note 3 of paragraph 3.1.1. 12/16 Section Responsible for Occurence Countermeasure Request **Detection Section** Receiving Logistics Section Section Quality Immediate Plant **Quality Control** Honda R&D Top Management Item Item Quality (Quality section Other facility or Each section (Quality section or Representative Manager Section Co., Inc. Service Section Section included) supplier of the facility Detection section) Investigate & Detected Determine analyze occurrence nonconforming occurrence situation product (relating to Paragraph 3.2.1, (2) Classify important Spread information or request suspension Instruct & request rank & responsible of shipment (Paragraph 4.3 related) (Other facility's qualit nine importance actions, etc. section representative) Notify other (only for quality sections) facilities information Instructions on corrective Check Production (Logistics section) Communicate actions, etc. quality of correspondence, (Service section) occurrence situation own facility accordingly Instruct temporary coordinate Investigate products holding of parts, Factor Quality Request in manufacturing line manpower, Analysis etc.) (Manufacturing related matters) (Specification related countermeasures arrangement Investigate products with logistic, in manufacturing line Request Give instructions to countermeasure check the quality of (Primary report) Identify & isolate Identify & isolate (Service Section) similar processes in (Other sections in the facility) the facility (Market Quality Section) action Identify causes. ·Check quality Identify & isolate ·Identify causes. of similar Factor ·Check quality of Check quality of processes. similar processes. analysis Investigate similar processes. confirm a Report the products in the Develop Develop result of action Check change market countermeasure countermeasure taken Confirm response action action points Countermeasure / Reflect in Approve proposed Report countermeasure) Specification Confirm Handling countermeasure products in (Refer to "Spec Change Control Implement action/ the market Std") Determine whether or not countermeasure orizontal developr IPP control, lot control Implement action/ needed countermeasure Confirm effectiveness of IPP control, lot control Attachment - 3 "Horizontal Dev Inspect results of In-house (Unsold products) Correct Correct Maintain records quality info" Nonconforming nonconforming product product Re-completion (Products before inspection (Parts) Corr shipment) Inspect Inspect Acceptance inspection Nonconforming Put corrected parts back into the process Identify product to (IPP control, Lot control) be disposed Identify product to be disposed Identify product to be disposed ξ Discuss (return or dispose) Dispose Apply concession (Supplier) Determine whether or not to Issue concession Apply concession make concession (Quality Apply concession Handling I (Other facilities) request form Section) Put product with concession in the process & lot control Conce (Other facilities, Product number of the Product number of the product with suppliers) product with concession Maintain records concession

Attachment-3

(Related to Paragraph 2.1 and 3.3)

"Horizontal Development of In-House quality Information (Manufacturing Nonconformity)"

G-HQS F 1701-02



Attachment -4 (Section 3.1) <u>Importance Ranking of Nonconformity</u>

| Rank | Definition | | | | | | | | |
|------|---|--|--|--|--|--|--|--|--|
| A | Those which cause or could potentially cause any of the following conditions: (1) Conditions which may impair control (driving, turning, stopping) of vehicle (2) Conditions which may result in electric shock, burn or injury (3) Conditions which may cause fire (4) Conditions which may cause environmental pollution (5) Conditions which may impair the protection of passengers (6) Other conditions which do not comply with regulatory requirements | | | | | | | | |
| В | Those other than listed in A; and those significantly impairing the function or marketability of the product. | | | | | | | | |
| С | Those which do not fall into neither of the A or B categories | | | | | | | | |

Attachment-5 (Section 3.1)

Case Examples of Importance Ranking of Nonconformity

Not operative: won't drive, turn or stop, inspection accidents

| | Inspection Criteria Sheet [Completed Product] | | | | | | | | Тор Е | Event | | | eft | | |
|-----|---|-------------------|--------------------|-----------------------|----------------------------------|-------------------------------------|----------------|-----------------------------------|-------|-----------|-------------------------|---------------------|---------------------------------------|-----------------|--|
| No. | Item | Inspection | ltem | Item of Importance | Quality Judgement Criteria | Symptoms of Nonconformity | Cannot control | Injury, burn, electrical shock | Fire | Pollution | Passenger protection | Legal certification | Possibility of occurrence in the left | Importance rank | Case examples of mainly importance rank A problems |
| 1 | Major | Chassis number | Stamping | В | No mistakes in | Wrong type or | | | | | | • | | Α | Wrong stamping of chassis number. |
| | Specifications | | condition | | stamping No errors | number Unclear or missing character | | | | | | • | | A | Unclearly stamped chassis number. |
| | | | | | | Unevenly spaced out words | | | | | | • | | Α | |
| | | Engine type | Stamping condition | В | No mistakes in stamping | Wrong type or number | | | | | | • | | Α | Unclearly stamped engine type number |
| | | | | | No errors | Characters not clear or missing | | | | | | • | | Α | Unevenly spaced out engine type number. |
| | | | | | | Unevenly spaced out words | | | | | | • | | Α | |
| 2 | Engine | Startabilit | ty | Α | No abnormality | Does not restart | • | | | | | | | Α | Engine does not restart. |
| _ | | | | | | Stop | • | | | | | | | Α | Engine stalls during driving (not |
| | | | | | | Lock | • | | | | | | | Α | from out of gas) Burnt engine |
| | | | | | | Abnormal noise | | | | | | | | В | Abnormal noise when cranking. |
| | | | | | | Does not start | | | | | | | | В | Long cranking when starting |
| | | | | | | easily. | | | | | | | | | engine. |
| | - | Starter interlock | Operative | Α | No abnormality | Inoperative locks | | • | | | | | | Α | Inoperative starter interlock. |
| | | | | | | | | | | | | | | | |

Establishment and Revision

| | | shment, Revision or (MM/DD/YYYY) | Description (MM/DD/YYYY) | Approved by: |
|---|--|----------------------------------|---|--------------------------------------|
| 0 | Estab. 04/06/2010 Enact. 05/01/2010 | | First issue. This document becomes effective as of 05/01/2010. | T.Sonoda (Signed on original) |
| 1 | Rev. Enact. | 12/08/2011 01/01/2012 | Enacted upon partial revisions on clarification of handling methods for unsold products. | T. Sonoda (Signed on original) |
| 2 | Rev. Enact. | 09/13/2013 10/01/2013 | Enacted upon making partial revision due to organization change of Honda Motor Co., Ltd. as of 04/01/2013 | T. Sonoda (Signed on original) |
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