Handling, Transport and Storage Standard

[Core]

1 General Provisions

1.1 Purpose

The purpose of this standard is to prevent quality deterioration of parts and products by defining basic requirements for handling, transport and storage of materials, parts, equipments (hereinafter referred to as "parts"), and products.

1.2 Scope

This standard applies to products and parts, which comprise a product of a facility, delivered from suppliers, or shipped out from facilities (including service parts and knock-down parts; hereinafter referred to as "KD parts").

1.3 Terms

Definitions of terms used in this standard are as follows:

| No. | Term | Definition | | |
|-----|--------------------|--|--|--|
| 1 | Packaging | A state in which appropriate materials and containers, etc. are applied to parts and products, in order to assure quality during transport, storage, etc. | | |
| 2 | Delivery packaging | Refers to size, outer contour, appearance of the packaging in which parts are transported from suppliers (including other facilities) to facilities. | | |
| 3 | Transport | The act of sending and transferring parts and products from one set of location to another by means of vehicles, vessels, and/or aircrafts. This includes a general series of operations such as gathering, distributing, , transporting, aborting, loading, unloading, sorting and so on. | | |
| 4 | Storage | The act of protecting and managing stored parts and products. | | |
| 5 | Acceptance | The act of receiving ordered parts and/or products upon confirmation that they are the ordered parts and/or products and matches the order in quantity, etc. | | |
| 6 | Protection cover | A general term used for protection covers and exterior coating protection covers for parts and assemblies. | | |
| | | Protective covers for parts and assemblies: Plastic covers, protectors or resin covers that keep product quality, performance and function of a product. | | |
| | | ② Exterior coating protection cover: Plastic covers, wax and films that prevent contamination, scratch, stain, and corrosion of the exposed coating surface of products, rust on the body and suspension parts which may be generated during customer usages. | | |
| 7 | Contaminants | Abrasive grains, sand, burrs, cuttings, dirt, dust, etc. | | |

2 System

2.1 Management System

- 2.1.1 Management system for preventing quality deterioration of parts and products is as follows:
 - (1) For management system concerning Motorcycle and Power Products, refer to Attachment-1 "Management System for Handling, Transport and Storage (Motorcycle and Power Products)."
 - (2) For management system concerning Automobile, refer to Attachment-2 "Management System for Handling, Transport and Storage (Automobile)."
 - (3) For management system concerning KD parts, refer to Attachment-3 "Management System for Handling, Transport and Storage (KD parts)."
- 2.1.2 The person responsible for each operation based on the management systems is the head of the section in charge of operation.

3 Control of Parts

3.1 Controlling Criteria

Regarding management of handling, transport and storage, facility's responsible section is to implement quality control manuals and work standard documents as its control standard, based on criteria set forth in 3.2 to 3.5.

3.2 Packaging Style Criteria

- 3.2.1 Purchasing section determines delivery packaging style, taking into account of quality influence due to vibration, shock, compression, moisture, temperature, humidity, contaminants, contact and friction, etc. during transport and storage, as well as the ease, safety, and cost effectiveness of disposing those packaging materials after delivery.
- 3.2.2 For delivery of parts, purchasing section specifies which container, trolley, etc. to use in order to protect the parts, and at the same time, indicate part name, part number or material symbol of the part, name of sender, delivery date, quantity, and name of recipient, etc. on each container, trolley, etc. for identification.
- 3.2.3 Purchasing section periodically checks delivery packaging of parts, container, trolley, etc. at the acceptance or at line delivery (also known as "introduction").

3.3 Handling Criteria

- 3.3.1 Logistics section and manufacturing section employ first-in, first-out management for transport, storage, and receiving/releasing between manufacturing processes of parts.
 The practice of first-in, first-out basis is also applied for parts other than regular parts in production flow.
- 3.3.2 Manufacturing section takes measures in machining and assembly processes of parts to eliminate contaminants, and to prevent dent, external damage, etc. that may be caused during transfers or by tools used.
- 3.3.3 When storing a part that is still in-process, manufacturing section identifies the parts using part number, material symbols, quantity, the storage start date and any other relevant information.

3.4 Packaging Criteria

- 3.4.1 The packaging criteria apply to parts shipped as service parts or KD parts.
- 3.4.2 Rust-proof and packaging specifications are determined for each part taking into account of quality influence due to vibration, shock, compression, moisture, temperature, humidity, contaminants, contact and friction, etc. during transport and storage. The ease, safety, cost effectiveness and items listed below are to be taken into consideration when disposing packaging materials after sales or delivery.

As for complex-shaped parts, large parts and new parts, packaging tests are to be conducted.

- (1) Shape and material
- (2) Means of transport and the form of storage
- (3) Storage duration
- (4) Environment of the storage site
- (5) Identification of part number, quantity, packaged date, supplier name or supplier symbol, distinction of top and bottom, handling care for fragile items, expiration date (limited to those that have expirations), etc.

3.5 Storage Criteria

- 3.5.1 The storage criteria applies to parts stored in the facility.
- 3.5.2 Storage site is determined considering storage duration, packaging or packaging style and location (surrounding environments), etc. so that the warehouse and the location are appropriate for the condition of parts to be stored.
- 3.5.3 Storage of parts is conducted in such a way as to protect parts by preventing confusions due to mix-up of delivery lots and similar parts. Dust-proof, rust-proof handlings, etc. are implemented to protect the parts.

3.5.4 If the storage duration of a part is expected to be over a long period of time, determine inspection method and inspection frequencies for the packaging or packaging style and conduct periodical inspection.

If, as a result of the inspection, a part is judged to be inappropriate to use due to deterioration, damage or being an old-model, it is identified as a non-conforming part, and is controlled so that it will not be used by an error.

3.6 Control of Special Oils

Oils, such as brake fluids, requiring special control (of moisture prevention, boiling point, etc.) are controlled by appropriate methods and a responsible section is appointed in order to maintain quality characteristics.

4 Product Control

4.1 Controlling Criteria

In regards to handling, transport, and storage of product control, sections in charge of each operation stipulated in 4.2 to 4.4, specify and implement controlling criteria in Quality Control Manual and Operation Standards.

4.2 Rust-proof Criteria

Specifications of rust-proof or protective cover for products are established taking into considerations of the following items:

- (1) Means of transport and necessity of packaging during storage
- (2) Storage duration or the duration of a product from when shipped out to when it is sold.
- (3) Destinations, etc.

4.3 Packaging Criteria

Specifications of product packaging are set for each product taking into consideration of the following items:

- (1) Shape and mass of product
- (2) Means of transport and form of storage
- (3) Storage duration
- (4) Environment of the storage site
- (5) Identification of product name or model name, destination, etc.

4.4 Odometer Criteria

Define release criteria for odometers when shipped from factory to manage mileage.

4.5 Criteria for Cargo Handling and Transport

- 4.5.1 Regarding product handling, criteria are to be established and implemented on dress code, methods of loading and unloading, driving (starting engine, driving methods and stopping methods), etc. This may be consigned to a carrier.
- 4.5.2 Regarding product transport, criteria are to be established and implemented on fastening methods in accordance to loading manners of getting on and off and product protection methods in accordance to road conditions. This may be consigned to a carrier.
- 4.5.3 Regarding batteries being transported to dealers, management criteria are to be established and maintain conditions.

4.6 Storage Criteria

- 4.6.1 The storage criteria apply to products stored in the facility.
- 4.6.2 Storage site is set at a warehouse and location with appropriate condition for the stored product, by considering the storage duration, geographical conditions (environment of the surrounding areas), cost effectiveness, etc.
- 4.6.3 Storage of products is established by determining for each location, the form of product storage equipments (road condition, lighting system, car-wash equipment, etc.), layout (in terms of securing passageways and providing adequate spaces between products etc.), security system, storage condition of the product, etc.
- 4.6.4 If storage period of a product is expected over a long period of time, inspection method, frequent inspection of product condition and storage location are implemented respectively, along with periodical inspection.
 - If, as a result of product inspection, an article is judged inappropriate due to deterioration, damage, corrosion, etc., it is to be marked as a non-conforming article, and controlled so that it may not be shipped out by an error.

5 Control of Contaminants

5.1 Scope

The provisions in this chapter apply to parts that control contaminants.

5.2 Control of Contaminants

Specify parts and processes for which contamination control is provided, determine control criteria based on Honda Engineering Standard (HES A 3054), and put it into operation to assure functions of products.

Sections perform contamination control appoint a person in charge and perform the control.

For the contamination control, ensure the following operations:

- (1) Set-up of contaminant control plan concerning review of equipments, machines, etc. necessary for contaminant control and preparation or upgrade of standards
- (2) Standardization of contaminants control operations
- (3) Measures to prevent contaminants during processes
- (4) Implementation of contaminant inspection

6 Supplementary Provisions

6.1 Application of the Standard

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

Attachment-1 (Related to 2.1.1 (1))

problem part

occurrence

*Enter the section applicable in the facility concerned.

Management System for Handling, Transport and Storage (for Motorcycles and Power Products) Legend → :Info. route → :Parts, products route ----> : Feedback route Facility R&D Section in Distributor or Supplier Carrier Other Facility *Parts Receiving Manufacturing Completion charge Product Logistics Sec. Dealer Section Inspection Section Section Product Determine SPEC SPEC of parts and products Prepare Std. based on Prepare Std. based on Prepare Std. based or Prepare Std. based on Controlling Controlling Criteria Controlling Criteria Manufacture parts Controlling Criteria Controlling Criteria Criteria Packaging Set up delivery packaging Agreement on loading and transport style Packaging Acceptance Acceptance Transport Storage Process and Assembly Completion Determine SPEC of Prepare Std. based or Controlling Storage inspection rust-proof and Controlling Criteria Criteria protective materials Rust-proof Apply rust-proof sealers and package packaging Shipping Acceptance Acceptance / Transport Shipping Transport Prepare Standard Controlling based on Criteria Controlling Criteria Storage Storage Acceptance Shipping and Storage Acceptance and Transport Storage Collect problem Delivery to Delivery information. Dealer Request improvement. Feedbacks on Improvement

measures

Attachment-2 (Related to 2.1.1(2))

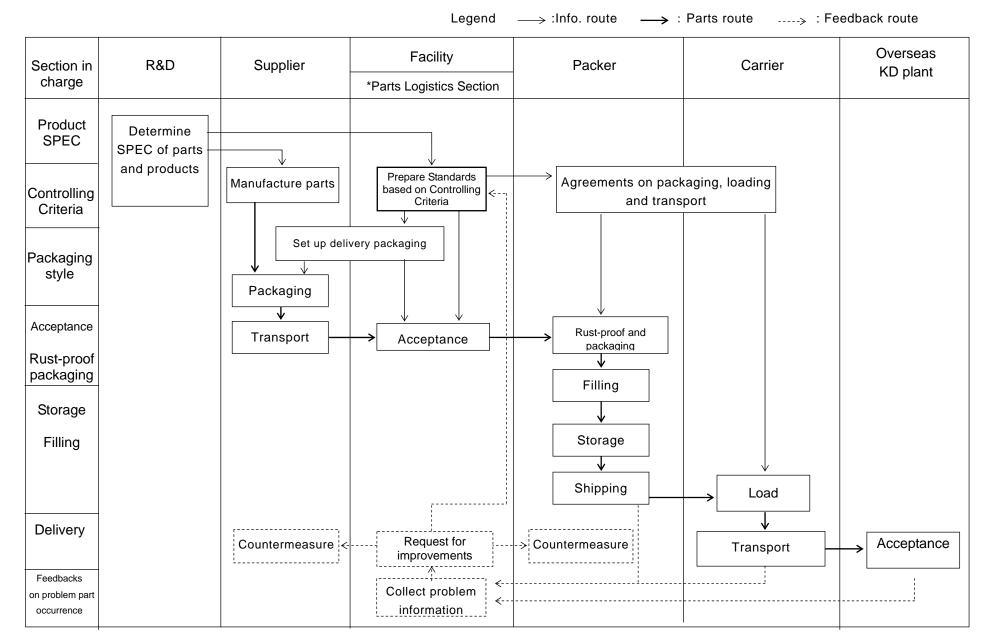
Management System of Handling, Transport and Storage (for Automobile)

*Enter the sections applicable in the facility concerned.

Legend \longrightarrow : Info. route \longrightarrow : Parts, products route ---->:Feedback_route) Distributor or Section in Facility R&D Supplier charge Carrier Other Facility Dealer *Parts Receiving Section | Manufacturing Section | Completion Inspection Sec. *Quality Section *Product Logistics Sec. Determine SPEC of Determine SPEC of Product parts and products protective cover SPEC Controlling Prepare Std. based Prepare Std. based Manufacture parts, Prepare Std. based on Prepare Std. based on Prepare Std. based on Criteria on Controlling Criteria on Controlling Criteria Controlling Criteria Install protective cover Controlling Criteria Controlling Criteria Packaging Set up delivery packaging style Agreement on loading and transport Packaging Acceptance Acceptance Transport Machining and Assembly Storage Storage Install protective cover Completion Storage inspection Controlling Determine SPEC of Prepare Std. based Criteria on Controlling Criteria protective cover (undercoats) etc. Rust-proof, etc. Shipping Install and apply Limited to protective cover Acceptance Acceptance waxes / Transport intended to prevent Shipping corrosion on the body, Transport suspension Prepare Std. based Control parts, and on Controlling Criteria tubular portion Criteria of the body during Acceptance Storage Storage customer and Storage usage. Shipping Acceptance# Transport <Sales Section, and Storage Service Section> Delivery to Delivery to Collect problem dealer dealer Delivery information. Request for improvements Feedbacks on problem Improvement measures part occurrence

Management System for Handling, Transport and Storage (for KD parts)

*Enter the section applicable in the facility concerned.



[Headquarter Function]

1 General Provisions

1.1 Purpose

The purpose of this standard is to prevent quality deterioration of service parts by establishing basic requirements for handling, transportation and storage concerning service parts.

1.2 Scope

This standard applies to service parts that are controlled by the parts supply section of Honda Motor Co. Ltd.

2 System

2.1 Management System

- 2.1.1 Matters relating to the management system preventing quality deterioration of parts and products are outlined in Attachment-4 "Management System for Handling, Transport and Storage (for Service Parts)".
- 2.1.2 The person in charge of each operation based on management system is the head of the section in charge of that operation.

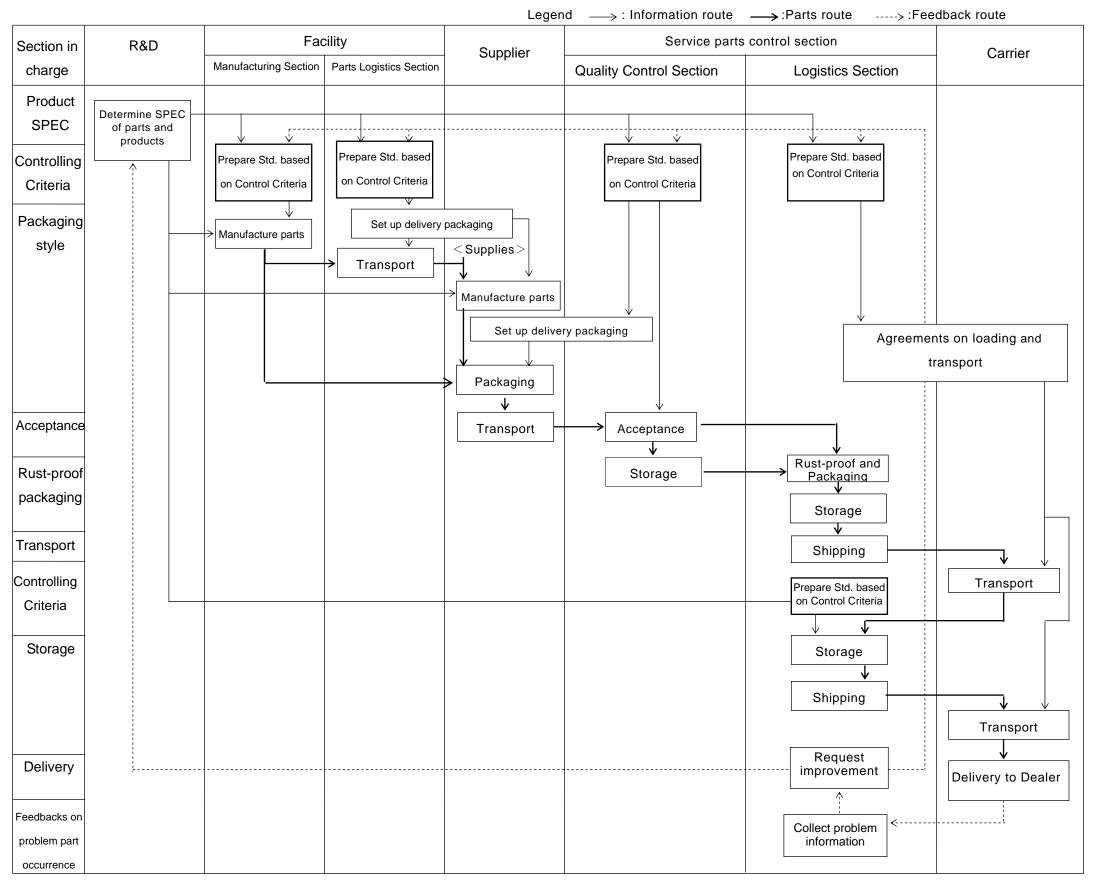
3 Control of Parts

3.1 Control of Service Parts

Operation conducts concerning service parts are based on this standard.

Attachment-4 (Related to 2.1.1(1))

Management System for Handling, Transport and Storage (for Sevice Parts)



Establishment and Revision

| Date of Establishment, Revision or Enactment (MM/DD/YYYY) | | | Description (MM/DD/YYYY) | Approved by: |
|---|------------------|--------------------------|--|---------------------------------------|
| 0 | Estab. Enact. | 04/02/2010 05/01/2010 | First issue. This document becomes effective as of 05/01/2010. | T. Sonoda (Signed on original) |
| 1 | Estab. Enact. | 12/26/2011 01/01/2012 | Revised to correct wording. | T. Sonoda (Signed on original) |
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