CHRYSLER CORPORATION ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Vehicle

Engineering Office

PROCESS STANDARD

Change: H

OUTSIDE DESIGNED AND DEVELOPED ITEMS (ODD BOX ITEMS) ABSTRACT

standard establishes the business This process relationship between Chrysler Corporation Suppliers design of outside (supplier) development (ODD Box) items. An ODD Box is a part,

CONTENTS

Topic	Paragrap	Page
General Organizations Identified in this Standard	1.0	2 2
Chrysler Approval of a Supplier	3.0	2
Design Drawings/CATIA Models	4.0 5.0	3 3
Supplier Specifications (Standards) Use of Approved Subsources	6.0 7.0	4 4
Safety, Regulatory, Regulated Substance, Recyclab		Export
Compliance Start of Production Tooling	8.0 9.0	5 6
Construction and Certification of Tooling Aids	10.0	6
Control of Changes Record Retention Quality Assurance Warranty Responsibilities Serviceability and Service Parts Requirements	11.0 12.0 13.0 14.0 15.0	6 7 8 9
Control	16.0	10

A single asterisk "*" after the paragraph header denotes a technical change to the paragraph. A triple asterisk before and after an item (*** text ***) identifies the specific changed text.

Date M Cancellations	dl. Yr. Eff.	Code & Disp	Code PCN N	o.	Change	Text Changes and
10/31/94			Editorial	Н	Revised FME	A man. ref.
7/27/94			Editorial	G	Appexdix A	rev.
Date Issued 10/2	5/79	Dept 2610	Contact	Engine	ering Standard	s Supervisor

IMPORTANT: Chrysler Corporation standards, specifications and drawings are subject to frequent revision. It is the users' responsibility to comply with current versions. Distribution of standards to parties other than Chrysler Corporation suppliers, whether with or without charge, is for information only. A subscription service is available at reasonable cost, which will automatically provide the subscriber with Subscription information or copies of current standards are available from the current standards. Engineering Standards & Information Services Department, Vehicle Engineering Office, Chrysler Corporation.

200-36-A (4-93)

Volume: A

Section: -

Page No:

305 (1)

CHRYSLER CORPORATION ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Vehicle

Engineering Office

PROCESS STANDARD

Change: H

APPENDICES

Α

Intellectu
a 1
Property
Rights,
Disclosure
, and NonConfidenti
ality 11

В

Glossary (Including Definitions)

12

С ____

References

15

A single asterisk "*" after the paragraph header denotes a technical change to the paragraph. A triple asterisk before and after an item (*** text ***) identifies the specific changed text.

Date M Cancellations	dl. Yr. Eff. Code	e & Disp C	ode PCN N	lo.	Change	Text Changes and
10/31/94			Editorial	Н	Revised	FMEA man. ref.
7/27/94	***************************************		Editorial	G	Appexdix	A rev.
Date Issued 10/2	25/79 Dept	2610	Contact	Engine	ering Stand	dards Supervisor

IMPORTANT: Chrysler Corporation standards, specifications and drawings are subject to frequent revision. It is the users' responsibility to comply with current versions. Distribution of standards to parties other than Chrysler Corporation suppliers, whether with or without charge, is for information only. A subscription service is available at reasonable cost, which will automatically provide the subscriber with current standards. Subscription information or copies of current standards are available from the Engineering Standards & Information Services Department. Vehicle Engineering Office, Chrysler Corporation.

2010-336BA(6(-4093)

Volloilmene: A A

Sestetatainon:---

Pargeger eNotio:

305 (2)

CHRYSLER CORPORATION ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Vehicle

Engineering Office

PROCESS STANDARD

Change: H

This standard is for use in supplying certain parts under purchase orders of Chrysler Corporation or its subsidiaries. This standard is limited in its application to those drawings/CATIA models or engineering graphic overviews/operation description sheets which call out this standard number, or which refer to this standard within some other standard or specification. Original equipment and replacement parts for some vehicles sold by Chrysler Corporation or its dealers are not covered by this standard. Special Interest Vehicle Program ("Package Program") designs and modifications, done by an outside supplier, must conform to the requirements in this standard.

1.0 GENERAL

1.1 Purpose

- To define an <u>outside designed and developed item</u> (ODD Box Item). Refer to the Glossary at the end
 of this standard.
- To define and establish Chrysler Corporation and supplier responsibilities regarding parts, assemblies, components, and sub-systems furnished to Chrysler Corporation as ODD Box items.
- To recommend quote package content. Refer to the Glossary at the end of this standard.
- To assist in identifying drawings/CATIA models as supplier designed and developed.

1.2 Changes from the Previous Edition

Changes include refining CATIA requirements, intellectual property rights, service and warranty requirements, production part approval process, regulatory requirements, etc.

2.0 ORGANIZATIONS IDENTIFIED IN THIS STANDARD

The following organizational titles refer to functional entities within Chrysler Corporation.

Assembly Plant
Corporate Patent Office
Engineering (Lead Vehicle Engr. Dept)
Fastener Engineering
Manufacturing Plant
Mopar Parts Division
Cataloging
Service Parts Analysis
Tool Engineering

Supplier Development (Quality)
Supplier Management (Purchasing)
Product Development Team
Safety Programs
Supplier Quality Lab
Vehicle Assembly Plant
Vehicle Engineering Homologation Department
Vehicle/Components PF Safety Systems

Procurement and Supply Office

3.0 CHRYSLER APPROVAL OF A SUPPLIER

The supplier must have full source approval, as described in Vehicle Engineering and Procurement and Supply Offices' procedures before purchase orders for design, development, or production are issued. Any deviations must be approved by Chrysler Corporation's Procurement and Supply Office. Design Verification of an ODD Box item is not a substitute for these procedures.

200-36-B (6-90) Volume: A Section: - Page No: 305 (3)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000

ASL Req'd: N

Engineering Office

PROCESS STANDARD

Change: H

4.0 DESIGN

Design and performance requirements are specified in the quote package, i.e. Performance Standard.

4.1 Intellectual Property Rights, Disclosure, and Non-Confidentiality

Intellectual property rights, disclosure, and non-confidentiality are described in Appendix A at the end of this standard.

4.2 Standard and Semi-Standard Parts.

The supplier shall utilize whenever feasible Chrysler standard and semi-standard parts, purchased from approved sources. Metric fasteners shall be utilized in accordance with Chrysler's program for that vehicle family. Refer to Fastener Engineering and to the Standards Parts Book for further information.

5.0 DRAWINGS/CATIA MODELS

- Detailed drawings/CATIA models are required for any component parts appearing in the Chrysler Bill of Material. Supplier must submit all drawings/CATIA models, requested in the quote package, to the Product Development Team.
- It is the responsibility of Engineering to determine the level of component detail to be carried in the Engineering Bill of Material and to subsequently manage and communicate changes to the Bill of Material by the appropriate change document.
- Detail component drawings/CATIA models intended to be released:
 - must be prepared in accordance with the Chrysler CATIA Standards Reference Manual CEP-002 and the Drawing Standards Manual. Any deviation must be approved by the responsible engineering design, releasing, and Procurement and Supply activity.
 - must detail all interfaces with associated parts and components.
 - become the property of Chrysler Corporation.
 - must show PS-7000 and the words "ODD Box" in the standards block or comment page.
 - must list all the applicable standards in the standards block or comment page in accordance with the standards entry guidelines in Engineering Operations Bulletin 93-2. The following standards shall be listed as applicable:

Safety or Regulatory

PF-Safety

PF-Emissions

PF-Noise

PF-Theft Prevention

PS-9336, "Homologation Requirements"

Part Identification

PS-4480, "Identification of Parts"

Quality Assurance

PS-7300, "Quality Assurance Diamonds"

PS-8335, "Pentagon - Critical Verification Symbol"

PS-9500, "Hydrogen Embrittlement Relief"

Chrysler Performance Standard(s) related to the part

Section: Page No: 305 (4) Volume: A 200-36-В (6-90)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000

ASL Req'd: N

Engineering Office

PROCESS STANDARD

Change: H

Other Standards if not already referenced within the Performance Standard

- Engineering shall confirm that the list of standards in the standards block or comment page is complete and accurate and approve (sign-off) the drawing/CATIA model before its release.
- Engineering will identify critical:
 - safety/regulatory characteristics and direct the supplier to apply the shield symbol to the drawings/CATIA Models where appropriate.
 - non-safety/non-regulatory characteristics in conjunction with Procurement and Supply and direct the supplier to apply the diamond or pentagon symbols as appropriate.

Refer to the Drawing Standards, Shields-Critical Characteristics, Diamonds-Critical Characteristics, and the Pentagon-Critical Verification Symbol manuals.

NOTE

Supplier Development shall approve each application of "diamonds" and "pentagons" and sign-off for PS-7300 and/or PS-8335 respectively in the standards block on the drawing or comment page on the CATIA model.

- Supplemental detail information not shown on released drawings/CATIA models shall be shown on drawings/CATIA models done on supplier forms and submitted to Engineering.
- If a supplier drawing is overlaid on a Chrysler form and is no longer to scale, the drawing must be clearly marked "Do not Scale." The Chrysler Corporation title block must always be in the lower right hand corner of the drawing.
- CAD/CAM Data exchange must conform to Chrysler's Data Exchange Policy covered in PS-9227 and in Corporate Engineering Publication CEP-001.

6.0 SUPPLIER SPECIFICATIONS (STANDARDS)

If specified in the quote package, the supplier will submit internal specifications (standards) for the ODD Box to Engineering.

7.0 USE OF APPROVED SUBSOURCES

When a referenced Engineering Standard includes an Engineering Approved Source List (EASL) as an addendum, materials, processes, and components must be purchased from suppliers listed. Engineering and Procurement and Supply Offices must review any proposed deviation. The supplier is completely responsible for the quality of the end-item regardless of whether the components are purchased from an approved source or not.

Volume: A Section: -200-36-B (6-90) Page No: 305 (5)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000

ASL Req'd: N

Engineering Office

PROCESS STANDARD

Change: H

8.0 SAFETY, REGULATORY, REGULATED SUBSTANCE, RECYCLABILITY, AND EXPORT COMPLIANCE

Engineering shall make known the safety and regulatory requirements to the supplier and the supplier shall assure such requirements are incorporated into their products.

- Engineering responsibilities include:
 - reviewing the following documents:

Corporate Procedure 189, "Compliance with Motor Vehicle Safety Shields - Critical Characteristics Manual Applicable compliance procedures Applicable regulatory standards Applicable Chrysler safety and regulatory standards and MASSEs.

- clearly identifying to the supplier safety/regulatory requirements, including
 - any labelling or customer information needs.
 - certification requirements.
 - responsibility for compliance reports, documentation, etc.
- assuring that the Performance Standard identifies specific safety and regulatory requirements.
- consulting with Safety Programs to verify that safety and regulatory requirements are being conveyed via the applicable source documents.
- consulting with the Vehicle Engineering Homologation Department to determine requirements for items and vehicles that require certification before export. Refer to PS-9336 and to Engineering Operations Bulletin 93-1.

The supplier must:

- consult with Engineering to assure the item meets safety and regulatory guidelines.
- submit reports and retain records as described in the SQA Manual, Guide to Quality Systems Requirements.
- In conjunction with Engineering, identify critical safety and regulatory characteristics on the drawing/CATIA model.
- identify parts with safety, regulatory, or homologation concerns by including the appropriate Chrysler standard in the drawing standards block or CATIA model comment page.
- meet Chrysler's requirements relative to regulated substances and recyclability. Products furnished to Chrysler Corporation or its subsidiaries and products and processes used by suppliers to manufacture those products must conform to the requirements in CS-9003.
- date code shielded parts, refer to PS-4480.
- mark plastic parts with the plastic Standard Marking Symbol as described in PS-4480.

Volume: A Section: -Page No: 305 (6) 200-36-В (6-90)

CHRYSLER
CORPORATION
Vehicle
Engineering Office

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

PROCESS STANDARD

Change: H

All changes must meet the requirements in paragraph 11.0.

9.0 START OF PRODUCTION TOOLING

Upon concurrence of the Product Development Team that tooling may begin, Supplier Management will notify the supplier. The supplier is not to begin actual tooling until authorized by the Supplier Management representative either by:

- a Tooling Purchase Order
- direct communication, such as an "OK TO TOOL AUTHORIZATION NOTICE."

Refer to the "OK to Tool" Authorization Notice Operating Process booklet.

10.0 CONSTRUCTION AND CERTIFICATION OF TOOLING AIDS

Tooling aid(s) requirements should be specified in the quote package. Suppliers or their agents are to certify the accuracy of the specified tooling aid(s).

11.0 CONTROL OF CHANGES

11.1 Authorization

Changes affecting parts, designs, standards, materials, processes, subsources, or program requirements including performance, assembly, quality, timing, durability, warranty, service, compliance with governmental regulations, or customer satisfaction must be authorized by Chrysler.

- A. No change shall be made by the supplier without prior approval by Chrysler.
- B. Supplier may request a change to a part by submitting either a completed:
 - "Supplier Request for Product Change" (SRPC). Refer to the Glossary.
 - "Chrysler Change to Supplier 'Odd Box' Item" (formerly known as the "Black Box Form")
- C. Any change to the end item made after award of business:
 - must be authorized and documented on the appropriate Chrysler change document. Refer to the Glossary.
 - requires Engineering to forward a copy of the change document along with appropriate supporting documentation to Procurement and Supply.
- D. Suppliers will be required to respond promptly to a change document with cost, timing, and weight impact as requested. Chrysler Corporation will not be responsible for additional cost of supplier-initiated changes unless approved by Chrysler Engineering and Supplier Management, prior to the supplier making the change. The Product Development Team shall review the cost impact of the proposed changes. Disagreements regarding costs are to be resolved by the Supplier Management representative.

200-36-B (6-90) Volume: A Section: - Page No: 305 (7)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000 ASL Reg'd: N

Engineering Office

PROCESS STANDARD

Change: H

11.2 Drawings/CATIA Models

As each change occurs, the supplier must:

- submit updated drawings/CATIA models to Engineering.
- show the authorizing change document in the change block or CATIA model comment page.

If the change is 35 weeks prior to launch or later, the supplier must also notify Service Parts Analysis. Changes to released drawings must follow Chrysler drawing practices.

NOTE

Changes to supplier drawings/CATIA models or supplier specifications (standards) must follow either Chrysler or ANSI practices.

11.3 Supplier Specifications (Standards)

If an authorized change affects the supplier's internal specifications (standards), the supplier must submit copies of the revised document to Engineering; and if the change is 35 weeks prior to launch or later, the supplier must also notify Service Parts Analysis.

11.4 Changes of Second Tier Sources

The primary supplier, using the form "Chrysler Change to Supplier 'Odd Box' Item", shall notify Engineering, Procurement and Supply, and Service Parts Analysis when a change of subsources is being contemplated, whether or not the source is included on an Engineering Approved Source List.

11.5 Safety, Regulatory, Regulated Substances, Recyclability, and Export Compliance

Any running change to the design after compliance validation, must be evaluated for compliance implications. If compliance with a government regulation is affected, re-certification will be required:

- for safety and/or regulatory concerns, Engineering must notify Safety Programs. In addition, a supplemental compliance report may be required.
- for export approval, Engineering must notify the Vehicle Engineering Homologation Department to arrange for export re-certification; refer to PS-9336.
- for approval of restricted or regulated substances, the supplier must submit a revised "Supplier Regulated Substance and Recyclability Certification Report;" refer to CS-9003.
- to report changes in recyclability; the supplier must submit a revised "Supplier Regulated Substance and Recyclability Certification Report;" refer to CS-9003.

11.6 Production Part Approval

Refer to paragraph 13.3.

12.0 RECORD RETENTION

Engineering shall maintain drawings/CATIA models and supplier specifications including all changes per the requirements in Engineering Operations Bulletins 92-1, "Record Retention Requirements."

200-36-B (6-90) Volume: A Section: - Page No: 305 (8)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Change: H

ASL Re

Engineering Office

PROCESS STANDARD

13.0 QUALITY ASSURANCE

13.1 Design Verification

As depicted in the Chrysler Performance Standard or quote package, suppliers shall furnish sample pre-production parts along with a completed "Pre-production Sample Report" to Engineering.

13.2 Production Validation

The supplier shall conduct Production Validation as specified in the applicable Performance Standard.

NOTES

Design Verification and Production Validation must be completed prior to the Process Signoff and the Production Part Approval Process Warrant submission. Successful completion of Design Verification and Production Validation does not fulfill **production** quality control requirements.

Any Changes (including changes to subsources, materials, processes, etc.) may require repeating Design Verification and/or Production Validation at the discretion of Engineering or Supplier Development.

13.3 Production Part Approval Process (PPAP)

Production Part Approval Process describes production part review and approval prior to the first quantity shipment to a Chrysler plant. The Production Part Approval Process determines if all the engineering requirements are properly understood and if the process has the potential to produce parts meeting requirements. PPAP must be successfully completed before a supplier ships the first quantity shipment to a Chrysler facility. Refer to the Glossary for further information.

Supplier submission requirements to the respective Chrysler facilities for PPAP are shown below:

Vehicle Assembly Plants

Self-certified suppliers of end-items to Chrysler vehicle assembly plants must submit a Warrant to Chrysler's Supplier Quality LAB. Suppliers who are not classified as self-certified must submit their parts to an independent laboratory approved by Chrysler for tests and dimensional inspections, prior to submitting their Warrant to the Supplier Quality Lab.

Chrysler Manufacturing Plants (Powertrain, Acustar, etc)

Self-certified suppliers of end-items to Chrysler plants other than assembly plants must submit a Warrant to the respective Chrysler manufacturing plant. Suppliers who are not classified as self-certified must submit along with the Warrant, sample parts and test and dimension inspection results to the Chrysler manufacturing plant.

When materials, subsources, processes, specifications, etc. for parts are changed, the supplier must repeat the production part approval process unless Engineering has waived this requirement for this specific change. Refer to AIAG's Production Part Approval Process manual and to paragraph 11.0.

For further instructions contact the responsible Supplier Management representative.

13.4 Continuing Conformance Requirements

Upon satisfactory completion of the requirements in paragraphs 13.1 through 13.3, the supplier must conduct Continuing Conformance Inspection/Tests as defined in the applicable Performance Standard.

200-36-B (6-90) Volume: A Section: - Page No: 305 (9)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Engineering Office

PROCESS STANDARD

Change: H

Shipments of parts for production and for Mopar Parts Division must conform to all specified requirements.

13.5 Supplier's Quality System Requirements

Suppliers must have a quality system plan to assure that only defect free parts are shipped to Chrysler. Suppliers must adhere to the current Chrysler quality system requirements.

14.0 WARRANTY RESPONSIBILITIES

14.1 Production Items and Systems

Warranty cost reduction/elimination is the joint responsibility of Chrysler Corporation and the supplier. Chrysler Corporation has overall system responsibility to ensure that the system operation does not cause a supplier component failure. The supplier has total responsibility for the quality and reliability of the components supplied and will be held accountable for any system failures attributable to failure of the supplier's components. Such responsibility will include:

- reimbursement of Chrysler's total actual costs in extending a warranty on the supplied component, including but not limited to Chrysler's total reimbursement to its dealers for parts and labor.
- defending and indemnifying Chrysler Corporation against all claims, liabilities, losses, consequential and other damages, and settlement expenses for injury or death of any person and damage or loss of any property allegedly or actually resulting from failure of the supplier's components.

14.2 Service Items

Supplier has responsibility for Service Part Warranty. This warranty will cover failures of supplied components sold by Chrysler dealers to customers outside of the new vehicle warranty.

15.0 SERVICEABILITY AND SERVICE PARTS REQUIREMENTS

Service information is the joint responsibility of Chrysler Corporation and the supplier. Decisions regarding how to provide service parts are the responsibility of the Supplier, Engineering, and Service Parts Analysis.

The supplier in conjunction with Engineering must design production parts, kits, and service assemblies that:

- incorporate serviceability design objectives.
- meet MOPAR parts supply needs and design objectives.
- require the minimum of special tools.
- consider low volume service production requirements.

Suppliers must provide:

- serviceability information.
- Mopar Parts, including Cataloging, Service Parts Analysis, and Tool Engineering with drawings/CATIA models, material and process specifications, graphic illustrations, or actual sample part assemblies.
- Service Parts (MOPAR) Purchasing and Service Parts Analysis approximately 35 weeks before volume production with a priced bill of material, in a structured format indicating recommended serviceable parts. The bill of material should also identify second and third tier sources.
- assurance (guarantee) that service assemblies and components are available for the entire service retention period.

Changes affecting service parts shall be handled according to the instructions in paragraph 11.0, as appropriate.

200-36-B (6-90) Volume: A Section: - Page No: 305 (10)

CHRYSLER CORPORATION Vehicle ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Vehicle Engineering Office

PROCESS STANDARD

Change: H

16.0 CONTROL

This standard was issued by Chrysler's Engineering Standards and Information Services Department. All proposed changes should be directed to them for approval, prior to implementation.

This standard was revised through the efforts of a task force, consisting of representatives from Supplier Development, Supplier Management, Engineering Standards and Information Services, Small Car Engineering, Large Car Engineering, and MOPAR Parts Division.

#####

200-36-B (6-90) Volume: A Section: - Page No: 305 (11)

CHRYSLER CORPORATION Vehicle Engineering Office

ENGINEERING STANDARD

No: PS-7000

ASL Req'd: N

PROCESS STANDARD

Change: H

APPENDIX A: INTELLECTUAL PROPERTY RIGHTS, DISCLOSURE, AND NON-CONFIDENTIALITY*

INTELLECTUAL PROPERTY RIGHTS

Ownership of intellectual property, such as trade secrets, patents, trade marks, and copyrights, is addressed in the purchase order through rider clauses 98, 98A, and/or 99. Copies of these clauses are available from Supplier Management.

DISCLOSURE

Supplier at the time of preliminary discussions shall provide Engineering and Supplier Management total disclosure of supplier's patents and patent applications relating to the item to be provided by the supplier.

NON-CONFIDENTIALITY

It is Chrysler's policy not to enter into formal confidentiality agreements with its suppliers or potential suppliers.

Information, such as material, literature, specifications, blue-prints, CATIA models, samples, or data relating to a particular ODD Box item provided by a supplier shall not bear written "Restricted," "Confidential," or "Proprietary" notations or markings pertaining to confidential requirements or other restrictions limiting usage of the data itself or parts or processes to which it relates. Suppliers shall be asked to delete and initial any such notations, markings, or restrictions. In any event, any such notations, markings, or restrictions shall not prevent Chrysler personnel from using such information or from disclosing such information to others who have a need to know such information.

To foster the exchange of proprietary information or confidential information, Chrysler and the supplier shall rely on each other's ethics to handle each other's proprietary or confidential information in the same manner as each handles its own proprietary or confidential information. Further, the exchange of such information is with the understanding that disclosure of such information from one party to the other neither constitutes a public divulgence nor creates a bar to filing patent applications anywhere in the world.

200-36-B (6-90) Volume: A Section: - Page No: 305 (12)

CHRYSLER
CORPORATION
Vehicle
Engineering Office

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

PROCESS STANDARD

Change: H

APPENDIX B: GLOSSARY

<u>AIAG.</u> AIAG (Automotive Industry Action Group) is a trade association formed to increase productivity and competitiveness through a cooperative effort between manufacturers and suppliers.

<u>CATIA</u>. CATIA is the acronym for <u>C</u>omputer <u>Aided Three-Dimensional Interactive Application software which is used to create computer aided design models.</u>

<u>Change Document</u>. Within this document, the term "change document" refers to the appropriate change instrument: Product Change Notice (PCN), Advance Product Change Notice (APCN), Change Notice (CN), Material Change Notice (MCN), Chrysler Change to an ODD Box form, SRPC, etc.

AMCN. AMCN stands for an Advance (pre-release) Material Change Notice.

<u>APCN</u>. An APCN (Advance Product Change Notice) communicates and coordinates part design and change information prior to release of the production drawing.

<u>CN</u>. A CN (Change Notice) is a streamlined version of a Product Change Notice (PCN); it automatically includes an MCN.

MCN. After release, an MCN (Material Change Notice) is the supplier's official authorization from Chrysler to implement a change in response to a product change notice (PCN). It associates costs with a PCN. (A CN encompasses an MCN and is not a separate process.)

(ODD Box form) Chrysler Change to a Supplier 'Odd Box' Item. Formerly known as a "Black Box Form" is used to request and approve changes to a drawing/CATIA model, Engineering Standard, process, material, or subsource. This form (NPM # 84-806-1609), included in the General Terms and Conditions, can be obtained from the responsible Supplier Management representative. If the change affects appearance, performance, quality, or costs, a change document may be required.

PCN. A PCN (Product Change Notice) documents, describes, and communicates a product change.

(SRPC) Supplier Request for Product Change. An SRPC (NPM # 84-806-1849) is a Chrysler form used by the supplier to obtain approval for no-cost changes which do not affect performance, assembly, quality, durability, warranty, or customer satisfaction. SRPCs are used for changes that will be visible on a drawing/CATIA Model. Refer to Engineering Operations Bulletin 85-5.

<u>Design Aids</u>. Design aids are used in developing and proving out fit, finish, and clearance among mating parts and in determining conformance to assembly, serviceability, installation, and appearance specifications.

<u>Engineering</u>. Within the context of this standard, the term "Engineering" denotes the <u>lead</u> Chrysler Vehicle Engineering design department.

Engineering Approved Source List (EASL). An Engineering Approved Source List is a list of suppliers approved by Engineering and the Procurement and Supply Office. An EASL is included as an addendum to an Engineering Standard. Refer to the Engineering Standards Writers' Guide.

ISIR/ISLR (Initial Sample Inspection Report/Initial Sample Laboratory Report). This term has been superseded by the "production part approval process." Refer to paragraph 13.3.

200-36-B (6-90) Volume: A Section: - Page No: 305 (13)

CHRYSLER
CORPORATION
Vehicle
Engineering Office

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

72

PROCE

PROCESS STANDARD

Change: H

<u>Outside Design and Development Item ("ODD Box")</u>. A part, assembly, component, or vehicle sub-system designed, developed, tooled, and produced by a supplier or jointly by a supplier and Chrysler. An ODD Box may fit any of the following categories:

- 1. A proprietary item to which the supplier retains ownership of the intellectual property rights.
- An adaption of the paragraph above. Modification may be made to meet Chrysler Corporation performance, identification, or packaging requirements, but the supplier retains all the intellectual property rights to the item.
- An item designed and developed from Chrysler Corporation concepts to meet a specific need. Supplier designs and develops the item, but Chrysler Corporation owns all the intellectual property rights to the item.
- A combination of the above items.

<u>Pre-Production Sample Report.</u> Part suppliers are required to submit a Pre-production Sample Report on pre-production parts during the program/pilot phases, prior to Production Part Approval Process Warrant submission. Refer to the SQA Manual, <u>Guide to Quality Systems Requirements</u>.

<u>Production Parts and Production Samples.</u> Production Parts are manufactured at the production site using production tooling, gaging, processes, materials, operators, environment, and process settings, e.g. production feeds/speeds/cycle times/pressures/temperatures. Production Samples are production parts taken from a significant production run. Refer to AIAG's Production Part Approval Process manual.

<u>Production Part Approval Process (PPAP)</u>. Production Part Approval Process is a process adopted by Chrysler, Ford, and General Motors to simplify and standardize customer (Chrysler) approval of initial samples; at Chrysler it replaces ISIR/ISLR sample submission requirements. Refer to AIAG's <u>Production Part Approval Process Manual</u>.

<u>Quote Package</u>.* A collection of information which defines and explains Chrysler Corporation and supplier responsibilities and requirements. It includes information to enable the suppliers to fulfill their responsibilities and requirements. The following list depicts typical topics for a quote package and is not intended to be all inclusive:

certification requirements

- production part approval process
- Supplier Regulated Substance and Recyclability Certification Report
- tooling aids

CATIA design and transmission capabilities, in-house

documentation requirements

- drawings or CATIA models meeting Chrysler Corporation Engineering Standards
- pictorials or graphics
- supplier prints
- supplier specifications (standards)
- interface drawings/CATIA models

Design Verification Plan and Report (DVP & R)

FMEAs-design and process (SAE J1739, "Potential Failure Mode and Effects Analysis"
management approval, i.e., executive engineer's letter

200-36-B (6-90) Volume: A Section: - Page No: 305 (14)

CHRYSLER CORPORATION Vehicle

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

Engineering Office

PROCESS STANDARD

Change: H

milestone chart (time line)

advanced quality plan

applicable master timing schedule dates

 process sign-off date (process sheets, inspection instructions, gages, initial samples, and packaging)

priority parts quality review (PPQR) dates

part name, number, and description - Chrysler (end-item)

Process Standard, PS-7000

Performance Standard for the item (including expected quality/reliability)

prototype requirements

purchase order rider clauses 98, 98A, and 99 as appropriate

recyclability requirements

sales code(s)

sample requirements (design verification, production validation, production part approval

standards, other applicable (Material, Process, Characteristic, etc.)

subsources (subsuppliers) if deemed necessary

serviceability and service parts requirements, refer to paragraph 15.0

target investment

target piece price

target weight

tooling aids

tooling capacity

volumes planned for each production year

Questions concerning the content of the quote package should be directed to the Supplier Management representative.

Released Drawings/CATIA models. Drawings approved by Chrysler design, Engineering, engineering management, and engineering release activities for production or special interest vehicle programs.

Special Interest Vehicle Program ("Package Program"). A program to provide special limited-volume sales models or options by modifying production vehicles prior to shipment to dealers.

Standard Parts. Parts for which specifications are published in the Standard Parts book.

<u>Semi-Standard Parts.</u> Parts which differ enough from Standard Parts to require their own separate drawing/CATIA model.

Supplier. The term supplier refers to both Corporate and outside sources.

200-36-B (6-90) Volume: A Section: - Page No: 305 (15)

CHRYSLER CORPORATION Vehicle Engineering Office

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

PROCESS STANDARD

Change: H

APPENDIX C. REFERENCES

The documents, standards, and forms referenced within this standard are listed below and are available from the organizations depicted below:

Automotive Industry Action Group (AIAG)*

Quality System Requirements **Production Part Approval Process**

Customer Satisfaction & Vehicle Quality, Chrysler Quality Institute

Diamonds-Critical Characteristics and the Pentagon-Critical Verification Symbol manuals Shields Critical Characteristics manual SQA Manual, Guide to Quality Systems Requirements, 84-231-1200

Engineering Standards and Information Services Department

Compliance Procedures

Drawing Standards Manual

Engineering Operations Bulletins:

"Supplier Request for Product Change (SRPC) Procedure" 85-5 "Record Retention Requirements" 92-1

"Homologation Requirements" 93-1

"Entering Engineering Standard Numbers on Drawings and EBOM" 93-2

Engineering Standards, Standards Parts book

Engineering Standards Writers' Guide

Engineering Standards (MS, PS, PF, CS, and AS)

PS-4480 "Identification of Parts"

PS-7300 Quality Assurance Diamonds

PS-8335 Pentagon-Critical Verification Symbol

"Environmental, Health, and Occupational Safety CS-9003

PS-9227 "CAD/CAM Data Exchange Policy"

PS-9336 "Homologation Requirements"

PS-9500 "Hydrogen Embrittlement Relief"

CEP-001 CAD/CAM Data Exchange Policy

CEP-002 Catia Standards Reference Manual

Chrysler safety and regulatory standards, e.g. PF-SAFETY

Motor Vehicle Safety Standards

Product Strategy and Regulatory Affairs Office, Vehicle Compliance and Safety Affairs Dept. Vehicle Components PF Safety Systems

Applicable MASSEs (Manufacturing Assurance Standard Safety/Emissions) Corporate Procedure 189, Compliance with Motor Vehicle Safety, Emissions, Noise, ...

Safety Programs

Compliance Procedures, Reports, & Supplemental Compliance Reports Motor Vehicle Safety Standards and regulations

305 (16) Page No: Section: -Volume: A 200-36-В (6-90)

CHRYSLER
CORPORATION
Vehicle
Engineering Office

ENGINEERING STANDARD

No: PS-7000 ASL Req'd: N

PROCESS STANDARD

Change: H

Society of Automotive Engineers (SAE)

J1739, "Potential Failure Mode and Effects Analysis...."

Supplier Management Organization of Procurement and Supply

Chrysler Change to Supplier "Odd Box" Item (NPM # 84-806-1609)
Procurement and Supply Procedures
Purchase Order Rider Clauses 98, 98A, and 99
Supplier Request for Product Change - SRPC (NPM # 84-806-1849)

Vehicle Engineering Platforms Program Management Team

"OK to Tool" Authorization Notice Operating Process

200-36-B (6-90) Volume: A Section: - Page No: 305 (17)