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| **Serialization** |
| **Document Number:** | SRF-09-PR-002 | **Effective Date:** | XX Dec 2024 |
| **Revision Number:** | 4 | **Periodic Review Date:** | XX Dec 2026 |
| **Document Owner:** | Phil Denny | **Department Owner:** | SRF Operations |

# Purpose

This procedure describes the recommended standard formats for serialization of components and sub-assemblies where traceability is required.

This procedure supports the Quality Management System as described in SRF-01-ML-001 Quality Manual.

# Scope

This procedure applies to parts used by SRF Operations for production items.

This procedure does not apply to parts used for research & development, training, commodity items such as fasteners, or any item that does not require traceability during production activities.

# Terms and Definitions

The following terms have specific meanings within this procedure.

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| **Term** | **Definition** |
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# Roles and Responsibilities

The following roles have responsibilities described in this document.

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| **Role** | **Responsibility** |
| Technical Representative (TR) | identify the critical parts where traceability is required in the SOW and/or Purchase Order |
| Inventory Representative | Verify an external unique identifier format is acceptable to PRIMeS database. |

# Procedure

Specific serialization formats may be required by a project. Details about inventory can be found in SRF-09-PR-001 Inventory Control.

## Non-Critical Parts where traceability is not required

Fabricated parts shall be marked with the Drawing Number and Revision when possible, with no serial numbers.

Assemblies (examples Space frame, Tuner) may have serial numbers, however associated vendor hardware KITS (examples nuts, bolts & gaskets) are not serialized. KITS have limited or no traceability at time of issue from SRF Inventory.

## Vendor and Partner Lab Components

Vendor Item Identification: Manufacturer identification (i.e. Brand, Part No., Serial No. etc.) for "Off-the shelf" or Catalogue items may be accepted in-lieu of JLab specification with approval of JLab TR and Inventory Representative.

Partner Labs Identification: Unique identification from partner labs (i.e. Part No., Serial No. etc.) may be accepted in-lieu of JLab specification with approval of JLab TR and Inventory Representative.

## Critical Components & Sub-Assemblies

For Critical Components & Sub-Assemblies, where traceability is required, parts should be marked (stamped, etched, or engraved) by the vendor on the part in the following format.

Marking Format: ***DrawingNumber-Revision-SerialNumber***

Example Marking: ***CRM9007070-0000-B-026***

***Drawing number*** (not vendor drawing numbers) should be used, examples:

* CRM9007070-0035
* JL0038394
* F10023864

***Drawing revision*** – A space or alphabetic characters only

* CRM9007070---0035, (initial release)
* CRM9007070-B-0035, Rev B drawing

***Serial number***

* Recommend 4 digits
* Multiple vendors are to be assigned a serial Number set – examples
	+ Vendor A – 0nnn, 0001 – 0999, leading zeros are significant
	+ Vendor B – 1nnn, 1000 – 1999
	+ Vendor C – 2nnn, 2000 – 2999
* In House suppliers would similarly be assigned non-conflicting serial number ranges for the same part/drawing
* Never duplicate serial numbers for the same drawing number, even if the project identifier or the revision level changes.

## Prototype Component Serialization

## To address potential conflict with the same production parts, prototype components will be marked with alphabetic characters. A single sequential alphabetic character should be used in place of the 4-digit numeric serial number.Example Marking: *CRM9007070-0000-B-A*

## Documents and Packing Lists

Serial numbers shall be on all certifications and packing lists should include all relevant marking as those on the parts.

## Records

The following records are created as a result of this procedure.

* None

# References

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| **Document No.** | **Title** |
| SRF-01-ML-001 | SRF Quality Manual |
| SRF-09-PR-001 | Inventory Control |
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# Release and Revision History

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| --- | --- | --- |
| **Rev #** | **Major Changes** | **Approval Date:** |
| 1 | Initial version (Edited from old procedure PR-P-007 Rev A) | 15 Jul 2021 |
| 2 | Re-write 5.2 per CAPA-031, Changed SOTR’s to TR’s | 17 Feb 2023 |
| 3 | Added 5.3 reference to not duplicating serial numbers | 29 Jul 2024 |
| 4 | Added 5.4 reference to serialize prototype parts with alpha characters, and corrected typos. | XX Dec 2024 |

# Approvals

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| --- | --- | --- | --- |
| **Approved by:** | **Name:** | **Signature:** | **Date:** |
| Document Owner | Phil Denny | In DocuShare |
| Quality Representative | Ashley Mitchell | In DocuShare |
| SRF Department Head  | Tony Reilly | In DocuShare |