

## RL-SQC-306 Rev 5.0

## Harness Manufacturing, Testing, and Inspection Requirements

#### **DOCUMENT PROPERTIES**

Document Type	Supplier Quality Clause (Doc Type)
Security Level	Approved for Limited External Use

#### **DOCUMENT APPROVAL**

Author	Reviewer	Approver	Date Released	Status
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# Harness Manufacturing, Testing, and Inspection Requirements



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## Harness Manufacturing, Testing, and Inspection Requirements



Manufacture, test, and inspect per IPC/WHMA-A-620 Class 3 and Rocket Lab specification RL-PS-023 - Harness Manufacturing Process Specification.

All supplier assembly and inspection personnel shall be trained and certified to IPC/WHMA-A-620 for Requirements and Acceptance for Cable and Wire Harness Assemblies or at least trained by a certified J-STD-O01 and IPC/WHMA-A-620 Trainer and certified to a Supplier training program.

#### Cable/Harness Data Package

- 1. Certificate of Compliance per RL-SR-OO1 Supplier Quality Manual
- 2. The Data Package shall comprise the following document:
  - a. As Built List (ABL)
    - i. Serial Number, Lot or Date code Information for all components and materials, as applicable.
    - As built documentation shall clearly indicate Rocket Lab furnished material.
  - b. Cure records
  - c. Material certificates
    - i. Material used shall be traceable to the manufacturer's lot number through date code and/or serial number.
    - ii. For components and materials furnished by Rocket Lab, the Rocket Lab packing slip is an acceptable alternative to the manufacturers or distributors material certificates.
  - d. List of Assembly Materials (solder, flux, potting material, fiberglass tape, lacing, heatshrink, overbraid, etc.)
    - Lot and expiration date records shall be kept and provided upon request of Rocket Lab
  - e. Assembly Documents
  - f. Deviations from Drawing and parts lists and objective evidence for the approval
  - g. Copies of all redlined drawings and parts lists
  - h. Copies of all Non-Conformance reports if the resulting disposition was Rework, Repair, or Use As Is
  - i. Rework documentation
  - j. High resolution photo\* documentation of all solder cup joints and connectors before potting, and end item.
  - k. Test data results as specified in the drawing or additional test requirements as required by Rocket Lab.
    - i. Included but not limited to continuity, Milliohm Bonding and Hi-Pot test data results

#### In-Process Inspection - If required by Rocket Lab

- 1. Supplier shall provide high resolution photos\*. Each high resolution photo\* shall be labeled with part number, serial number, reference designator.
- Supplier shall provide photo(s) from these sides whenever possible: Front, Back, Left Side, Right Side.
  - a. Supplier shall indicate the position of the photo(s) taken.
    - i. For example: Part Number, Serial Number, Reference Designator, Right Side.

#### Clause



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- b. Supplier shall provide high resolution photos\* via FileCloud and approval must be granted by RL quality/engineering team in writing in order to proceed to the next operation.
- 3. Supplier shall provide high resolution photos\* for cables that have shield terminations to show evidence of no damaged strands.
- 4. Lay wire terminations on a flat surface and provide high resolution photos\* showing the top, bottom, left, right sides.
  - a. For contacts, supplier shall certify in writing that strands are visible through the inspection window.
  - b. For splices, supplier shall certify in writing that strands are visible through the inspection window, as applicable

<b>(i)</b>	*High Resolution Photos are generally considered to be anything that has a
	DPI/PPI of 300 or higher.

### 1 Glossary

**Glossary Term** 

No content found.

## 2 Revision History

Rev	Author	Date	Change Log / ECN
1	@Hannah Bruttig		First Release - Baseline
2.0	@Merelin Antoni Ruiz		Minor update - correct section 2.a.i to not include "reference designators" as this does not apply to harnesses.
3.0	@Hannah Bruttig	i 10 Jun 2024	Minor update - added "/or" for serial number in 2.c.i. Added milliohm bonding to test data result in 2.k.
4.0	@Yulisa Jimenez Ramon @Scott Castillo	i 10 Jul 2024	Minor update - updated item 2. a. ii. and added item 2. c. ii.
5.0	@Merelin Antoni Ruiz  @Jose Enriquez  @Yulisa Jimenez Ramon		Major Update - added in-process inspection requirements.



## Harness Manufacturing, Testing, and Inspection Requirements



## **3 Document Properties**

Document Type	Supplier Quality Clause (Doc Type)
Summary	<ul> <li>EQC detailing the requirement to:</li> <li>follow RL-PS-023 - Harness Manufacturing Process         Specification for the manufacture of electrical harness     </li> <li>provide a data package with each harness supplied.</li> </ul>
References	N/A
Notes	N/A
Parent Manual	RL-PM-005 - Procurement Process Manual
Security Level	Approved for Limited External Use
Export Classification	Not Subject to Regulation - No Technical Data

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