

IDENTIFICATION MARKING OF PARTS

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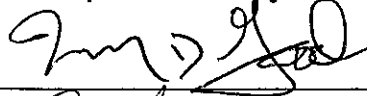
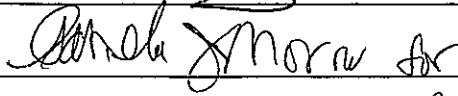
Release Date: 21 May 2021

Note: Changes to this document are controlled per QP-134, section 6.16

Note: Printed copies of this document are considered uncontrolled unless stamped "Controlled Document" or equivalent. The revision level of this document must be verified prior to use by accessing the Luminator network.



Approvals

Department	Approval (signature)	Date
Mike McNair CEO		21 May 2021
Jeff Good Director Product Management		21 May 2021
Gerald White Quality Assurance		21 May 2021

Gerald White



Document History

Revision	Description	Date
B	Completely rewritten. Earlier revision history was not recorded.	17 Nov 95
C	Updated para. 2.0; 6.8; 7.3.1; 7.4.1; 7.4.3.c; Added para 6.9; 6.9.1-6.9.3; 7.1.2.c; 7.1.3.e; 7.1.4.b; 7.2 Note; 7.2.3.b; 7.3.3.b.; 7.3 Notes 1 & 2; 4.2.b; 7.4.3; 7.5.2.b.	01 Aug 97
D	Added para 7.5.2.e, 7.6.1.e	30 Jan 98
E	Added PWA marking requirements (Item 3) to Section 7.6 – Marking Of Printed Circuit Board Assemblies, Ballasts, & LCD Glass. Updated serialization methods and added FAA/PMA procedures for Aircraft products. ES-1004 Product Identification standard will be superceded by LPS-258 upon release of this Revision	17 Jul 02
F	Revised section 6.8 (General) to include instructions for the creation of Aircraft part numbers	17 Apr 03
G	Added to section 7.1.2 information about marking procedures for Qantas ECLS assemblies.	07 Nov 03
H	Added references throughout document to address marking needs specifically for the Stationary Sign SBU.	15 Jul 04
J	Revised sections dealing with part marking by Suppliers	17 Jan 07
K	Revised FAA/PMA marking requirements; updated throughout; revised address	01 Jun 07
L	Revised company name	06 Aug 07
M	Added section 7.10	05 Sep 07
N	Revised cable identification requirements 7.6.3 pg. 7	20 Jun 08
P	Revised section 8.1.1 to reflect latest CFR change	1 Apr 10
R	Rewritten and reformatted	12 Jul 12
T	Added Definition 3.9 and Section 6.16	01 Oct 12
U	Revised by adding labeling of materials with expiration date requirements and to clarify requirement of bar code on PWAs. Removed Tooling and Assembly Aids from 3.0 Definitions, remove Identification of Assembly and Tooling Aids at 6.15.2, 3.1 revised LMT Cage Code, added 3.9 WIP, 5.1 changed QA to co-owner, 5.4 defined engineering as process owner, added 5.6, 6.6 removed label material type, 6.8.1 removed label size to adequate label size, 6.8.1.e added Top Level Assemblies, 6.9 revised C and F and added Note. Revised 6.12.2, revised 6.13.1 a, c & d and added e. Removed 6.13.2 and 7.0	31 Jan 19
V	Revised 6.5 to allow for edge sealing when required, and added requirement for label sealing use for all curved surfaces.	5/28/2020
W	Updated logo, removed 6.8 Mass Transit part identification, renumbered accordingly.	30 Nov 2020
X	Revised 6.5 to change from “is required” to “may be required”	21 May 2021



1.0 Purpose

This procedure defines requirements and provides guidelines for the identification of all Luminator parts.

2.0 Scope

This procedure applies to all parts within the Luminator Quality System. Any marking or identification requirements on a drawing or contract that are different from the requirements of this procedure take precedence.

3.0 Definitions

- 3.1 CAGE Code - An acronym for Commercial and Government Entity. The CAGE Code for Mass Transit Products is 80LT1. The CAGE Code for Aircraft is 0VDA9.
- 3.2 Date Code - A four (4) digit code (YYWW or YY/WW); the first two digits are the calendar year and the second two digits are the week of the calendar year in which the product was manufactured.
- 3.3 End Item - Any part which will not generally be shipped as part of a higher assembly. This term is synonymous with the term Top Level Assembly.
- 3.4 FAA – Federal Aviation Administration
- 3.5 Parts – Includes piece parts, subcomponents, subassemblies, assemblies, and kits
- 3.6 ICD - Interface Control Drawing
- 3.7 PMA – Parts Manufacturer Approval
- 3.8 Top Level Assembly - see End Item
- 3.9 WIP – work in process which can consist of subassemblies and subcomponents of incomplete top level assemblies, until material is transferred into finished goods.

4.0 References

- 4.1 Product Identification and Traceability, procedure QP-118
- 4.2 Control of FAA-PMA Parts, QP-134
- 4.3 WIP Tag, form 902602
- 4.4 Title 14 Code of Federal Regulations (CFR) Part 45.15

5.0 Responsibility

- 5.1 Quality Assurance (co-owner)
- 5.2 Production
- 5.3 Design Engineering (process owner)
- 5.4 Purchasing
- 5.5 Luminator Suppliers

6.0 Procedure

- 6.1 The Luminator standard identification method is labeling. Where practical, identification labels shall be applied directly to the surface of the part. The label shall be located so as not to be visible during normal operational use, and parallel to an edge whenever possible. The label shall conform to an item in a manner as not to wrinkle or bubble excessively after application to the part.
- 6.2 Text height should be based on the size of the part and readability. The identification method should provide sufficient contrast to allow for easy readability of the information.



- 6.3 If the label cannot be applied directly to the part, the container (bag, box, etc.) shall be labeled or the part shall be tagged. If a container is used, the label shall be placed on the container parallel to an edge, in the approximate center, and on a surface that is easily seen.
- 6.4 Identification of parts shall not adversely affect the part's form, fit, or function.
- 6.5 Labels will be of sufficient durability and contain sufficiently strong adhesive so as to not require edge sealing. Edge sealing of labels will be performed when required, using clear acrylic covering #PT1010-001, applied over the label such that the label cannot be removed. Edge sealing of labels on curved components may be required to ensure proper adherence.
- 6.6 The preferred material for labels will be a white polyester material with a permanent acrylic adhesive.
- 6.7 A drawing note for specific identification will be performed as follows:
- 6.7.1 A note with no arrow pointing to the item: the item may be identified anywhere except on a show surface, or on the container, paperwork, or the part wrapping.
 - 6.7.2 A note with an arrow pointing to the item with no location specified: the item may be identified anywhere except on a show surface.
 - 6.7.3 A note with an arrow pointing to the item with the location specified by a dotted box: the item shall be identified in that approximate location.
- 6.8 Identification of Top-Level Assemblies, Aircraft
- a) Name ("Luminator").
 - b) Part Number
 - c) Top Level Drawing revision (not ICD)
 - ~~d) Date Code~~
 - e) CAGE Code
 - f) Serial Number/Date Code
 - g) Bar Code (if required)
- Note. Ref. Section 2.0
- 6.9 Identification Marking of PMA Parts:
- 6.9.1 Identification of FAA-PMA parts must be per 14 CFR §45.15 (a), (1), (2), (c), (d) and QP-134, Control of FAA-PMA Parts.
 - 6.9.2 Luminator must be authorized by the FAA to declare parts FAA-PMA, which is provided by the PMA supplement for specific parts.
 - 6.9.3 Luminator will comply with 14 CFR §45.15 by the following method:
All parts produced under the Luminator FAA-PMA issued under 14 CFR Part 21.303 shall be permanently and legibly identified with a tamper resistant label. The label shall, at a minimum, contain the following information:
 - a) The letters FAA-PMA
 - b) The name "Luminator"
 - c) The part number
 - 6.9.4 The permanent marking of the part is to be accomplished using the following components:



- a) Use label LB 006 – XXX (dash numbers, i.e. -001, -002, indicate different label sizes).
 - b) Clear acrylic covering # PT1010-001, applied over the label such that the label cannot be removed.
- 6.9.5 FAA-PMA part markings required by 14 CFR Part 45.15 are applied to the top-level assembly for which the original PMA was granted, not subassemblies or individual detail parts.
- Note: If a PMA is granted for an assembly, individual detail parts of the assembly sold separately must be labeled as in 6.10.4 and accompanied by a shipping document containing the information required by 14 CFR Part 45.15 (a). This includes the following on the shipping documents, “This is a subcomponent of a PMA assembly”.
- 6.10 Identification of Work In Process (WIP)
- 6.10.1 The requirement for the identification of WIP parts is to allow all parts within Luminator to be readily identifiable. WIP parts are identified in one of three ways:
- a) Labeled or stamped per this procedure
 - b) The accompanying router (i.e. work instructions or job pack)
 - c) The WIP tag Form 902602
- Note: WIP addresses anything not identified in paragraph 6.8 through 6.10, 6.12 to 6.17
- 6.10.2 The marking of WIP parts should not be visible upon final assembly of the product.
- Note: For parts requiring further outside processing (e.g. anodize, powder coating, finishing, plating, machining, etc.), the router stays with the parts until they are placed in a higher assembly or moved to stock.
- 6.11 Identification of Cables
- 6.11.1 Cable identification shall include, but is not be limited to, a label or indelible ink stamping. Items will have, at a minimum, the following information:
- a) Part number
 - b) Part revision
 - c) Date Code
 - d) Luminator Identification - The part must be marked, at a minimum, “Luminator”, or contain Luminator’s CAGE Code.
- 6.11.2 Cable identification should be located within the first 12” from the connector or end.
- 6.12 Identification of Printed Circuit Boards (PWB) and Assemblies (PWA), Ballasts, & LCD Glass
- 6.12.1 Identification methods shall include, but are not limited to, a label (single or multiple), silk-screening, or indelible ink stamping. Parts will have, at a minimum, the following information:
- a) Part number and BOM revision. Example: 123456 A/B (A is the drawing revision and B is the BOM revision)
 - b) The name “Luminator”



- c) Supplier Identification - The part must be marked with the supplier’s name and the supplier ID number assigned by Luminator.
 - d) Date code and serial number.
 - e) If space allows bar coded serial number should be included on the label
- 6.13 Identification of Programmable or Application Specific Integrated Circuits
- 6.13.1 The requirement for the marking of Integrated Circuits (IC) is to allow all ICs to be readily identifiable upon inspection.
 - 6.13.2 Preferred marking is by label but may be by indelible ink stamping. Minimum item marking will contain the Luminator Part Number.
- 6.14 Identification of Listed Electronic Assemblies
- Applies to assemblies listed by various industry organizations, such as Underwriter’s Laboratories (UL), Edison Testing Laboratories (ETL), etc.
- 6.14.1 Mark in accordance with the industry organization requirements.
 - 6.14.2 In addition to the above, labels shall include the following information
 - a) Input voltage and frequency.
 - b) Full load amperes.
 - c) The words “Suitable For Wet Locations”.
- 6.15 Identification of Shelf Life Materials
- 6.15.1 All items that have a shelf life must be identified with the expiration date on the container (bag, box, etc.)
 - 6.15.2 Shelf life items shipped to the customer as piece parts or as part of a kit must include expiration date label.
- 6.16 Trademarked Items – Luminator products that are registered trademarked must be indicated as such using the ®, see Appendix A for the list of trademarks.

Appendix A

Serial Number	Registration #	Word Mark	Live/Dead	Country
73823594	1603514	MATRIX:MAX	Live	United States
73817100	1604429	GTI	Live	United States
85063469	3992330	LCD:MAX	Live	United States
85194397	4432837	LUMINATOR TECHNOLOGY GROUP	Live	United States
86083995	4, 756,718	INFOTRANSIT	Live	United States
85194390	4361755	LUMINATOR	Live	United States