

**TO: HOLDERS OF MASS SYSTEMS CARTRIDGES**
**REVISION 4, DATED MAR 23/10**
**HIGHLIGHTS**

THIS PUBLICATION HAS BEEN REPRINTED IN ITS ENTIRETY. REPLACE ALL PREVIOUSLY ISSUED COPIES OF THE SERVICE INFORMATION LETTER.

The highlights of the revision are outlined below. All pages have been revised and maintain the format of ATA 100 and the AECMA Simplified English guidelines.

Chapter/Section and Page No.	Description of Change	Effectivity
Information, Page 2	Clarification of electrostatic protective devices.	3-23-10
Table Page 3	- Added "Operating" to Temperature Properties call-out - Removed "Temperature" from Storage Data call-out	3-23-10
Handling, Page 4	Added list of electrostatic protective devices.	3-23-10
Storage, Page 4	Added note for requirement for electrostatic protective devices.	3-23-10

**REVISION HISTORY**

<u>Initial Release:</u>	Rev. N/C, Dated 2-15-08
<u>Revision 1:</u>	Rev. 1, Dated 2-26-08
<u>Revision 2:</u>	Rev. 2, Dated 3-11-09
<u>Revision 3:</u>	Rev. 3, Dated 3-18-10
<u>Revision 4:</u>	Rev. 4, Dated 3-23-10

*PLEASE NOTE THAT THE INFORMATION CONTAINED HEREIN WAS ORIGINATED BY AND IS THE PROPERTY OF MASS SYSTEM / AMETEK AMERON, LLC. AND SHALL NOT BE USED, TRANSFERRED, REPRODUCED OR DISTRIBUTED WITHOUT WRITTEN CONSENT FROM MASS SYSTEMS. ALL RIGHTS, ARE RESERVED BY MASS SYSTEMS.*

## **SERVICE INFORMATION LETTER 26-22**

### **CARTRIDGE STORAGE & HANDLING, FAA-PMA**

1. **SCOPE**

Service Information Letter covers proper Storage & Handling of MASS Systems / AMETEK Ameron, LLC FAA-PMA Cartridges.

2. **INFORMATION**

The main function of a Cartridge is to provide a force to fracture the rupture disc or generate a shock wave that starts the release of fire extinguishing agent when the Cartridge is threaded into the fire extinguisher discharge outlet.

**WARNING!!**

**CARTRIDGES ARE EXPLOSIVE DEVICES. USE ALL APPROPRIATE SAFETY MEASURES AND SAFETY EQUIPMENT. ALWAYS FOLLOW SAFETY RULES AND PROCEDURES WHEN HANDLING EXPLOSIVES. YOU MUST USE APPROVED SAFETY EQUIPMENT AND TOOLS. PERSONNEL, TOOLING AND FIXTURES MUST BE GROUNDED AT ALL TIMES.**

**FOR SAFE HANDLING, PERSONNEL MUST BE GROUNDED. CARTRIDGES WITH ELECTRICAL CONNECTORS MUST HAVE AN ELECTROSTATIC PROTECTIVE DEVICE INSTALLED OVER THE CONNECTOR (EXCEPT WHEN SPECIFIED IN THE PROCEDURE). ELECTRICALLY SHUNT POSITIVE AND NEGATIVE TERMINALS USING SAFETYWIRE FOR THREADED STUD TYPE CARTRIDGES.**

**IMPROPER HANDLING OF EXPLOSIVES CAN LEAD TO INADVERTENT DETONATION AND CAUSE SEVERE PERSONAL INJURY.**



**STATIC SENSITIVE DEVICE!!**



**3. MASS SYSTEMS CARTRIDGES**

The information below is believed to be correct, but does not purport to be all-inclusive and shall be used only as a guide in conjunction with approved safety procedures and all applicable regulatory requirements.

PROPERTY	SPECIFICATION
<b>All MASS Systems Cartridges including but not limited to:</b>	
<b>Description</b>	<b>Part Numbers</b>
Cartridge, Power Device, (Initiator) Explosive UN 0323	M13083-5, M13083-45, M30903820, M30903849, M13083-10, M30900400, M30903823, M30903850, M13083-25, M30903819, M30903824, M30903920, M30903824-1
Life Limit	10-years service maximum from date of manufacture
Cartridge, Power Device, (Detonator) Explosive UN 0323	M262299-2, M30903891, M30903939, M446518-1, M30900000M, M30903894, M30903940, M446616, M30903801, M30903895, M30903941, M446617, M30903822, M30903896, M30903942, M472001-01, M30903827, M30903898, M30903943, M841155-1, M30903828, M30903899, M30903944, M861345, M30903836, M30903912, M30903945, M861355, M30903852, M30903913, M30903949, M861375, M30903856, M30903927, M30903959, M861385, M30903857, M30903928, M30903964, M873364-1, M30903859, M30903929, M446090, M873571-02, M30903870, M30903930, M446090-2, M876299-3, M30903871, M30903931, M446090-3, M877744-03, M30903872, M30903932, M446158, M895408-01, M30903874, M30903933, M446189-1, M895409-1, M30903875, M30903934, M446201, M897776-01, M30903876, M30903935, M446203, MA805300-12, M30903886, M30903936, M446290, MA805300-41, M30903889, M30903937, M446307, MA805300-43, M30903890, M30903938, M446384-1, MA805300-44, M876296-3, M30903872-1, M30903962-1, M30903963-1
Life Limit	12-years service maximum and 15-years total (any combination storage / service).
Cutter, Cable, Explosive, UN 0070	M53000399-1
Life Limit	10-years service maximum and 12-years total (any combination storage / service).
<b>Identification</b>	
Hazard Class	1.4S
Type	1A/1W No-Fire, 3.5 All-Fire
<b>Temperature Properties</b>	
Operating Range	-65°F to +250°F (-54°C to +121°C)
<b>Storage Data*</b>	
Container	Plastic bag, electrostatic / static shield
Note(s):	
*See Paragraph 5	



#### 4. HANDLING

Authorize handling only by trained, qualified personnel. When handling Cartridges impervious rubber gloves and safety glasses (ANSI-Z87 STD) with side shields must be worn at all times. Keep Cartridge connector/terminal ends electrostatically protected when not connected to aircraft circuitry. Never attempt to disassemble, machine, or otherwise modify unit or physical injury hazard may result.

The following are acceptable forms of electrostatic protection for Cartridge electrical connections during handling operations or until connected to aircraft circuitry:

- a) Conductive metal or plastic caps – keeps electrical connectors completely covered and shields electrical pins from electrostatic discharges.
- b) Conductive metal caps with conductive rubber – some metal caps have a secondary protective function by having conductive rubber components that shunt the connector pins together by making physical contact with connector pins. This shunting function is not provided nor required of conductive plastic caps.
- c) Conductive rubber plugs – are specially formed for various electrical connector types. These plugs electrically shunt connector pins together by making physical contact.
- d) Safety wire – acts as electrical shunt for threaded terminal type Cartridges by physically binding together the “positive” and “negative” terminals.
- e) Electrostatic bags – are made of conductive plastic that provide electrostatic discharge protection when the entire cartridge is enclosed within the bag. However, these bags are a supplementary line of electrostatic protection whereas (a) thru (d) listed above are the primary and mandatory methods.

#### 5. STORAGE

The Cartridge must always have a primary method of electrostatic protection per Section 4 above. Insert the Cartridge in an electrostatic plastic bag, then into a cardboard carton. Seal and identify the cardboard carton. Mark the part number, service date, expiration date and the pyrotechnic classification on the cardboard carton. Store per State / local fire marshal or in an approved explosive magazines in accordance with BATF, OSHA, DoD, and as applicable.

The storage temperature is +40°F to +100°F (+4°C to +38°C).

>>> END OF SERVICE INFORMATION LETTER <<<