



**MASS SYSTEMS  
A UNIT OF AMERON GLOBAL, INC.**

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**TO: HOLDERS OF THE COMPONENT MAINTENANCE MANUAL  
SUPPLEMENT 51900-1, DATED JUL 15/02.**

**REVISION NO. 1 DATED FEB 15/04**

**HIGHLIGHTS**

THIS PUBLICATION HAS BEEN REPRINTED IN ITS ENTIRETY. REPLACE ALL PREVIOUSLY ISSUED COPIES OF THE SUPPLEMENT 51900-1.

The highlights of the revision are outlined below. The 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
Title Page	Added revision date.	
Page T-2	Revised PMA Parts Notice paragraph.	
Page RR-1	Added revision status and date.	
Page LEP-1	Revised page dates.	
Page 1	Corrected Customer Part Number. Revised Empty Weight and Charged Weight. Revised hydrostatic test interval to five-years.	
Page 2	Deleted Weld per MIL-W-8611A.	
Page 1002	Added cartridge electrical schematic and Item 90.	
Page 1003	Revised part numbers for Item 20, 40, 80, and 85. Added Item 90.	

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A Unit of AMERON GLOBAL, INC.

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**FIRE EXTINGUISHER, DUAL OUTLET**

**60-CUBIC INCH (0,98 LITER)**

**P/N 51900-1**

**SUPPLEMENT TO**

**COMPONENT MAINTENANCE MANUAL 26-22-02**

**TECHNICAL PROPERTIES AND**

**ILLUSTRATED PARTS LIST**

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**PMA PARTS NOTICE**

MASS Systems, A Unit of Ameron Global, Inc. authorizes the use of FAA-PMA component parts approved for use on the fire extinguisher application.

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**RECORD OF TEMPORARY REVISIONS**

REV. NO.	PAGE NUMBER	ISSUE DATE	BY	DATE REMOVED	BY



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**SERVICE BULLETIN LIST**

SERVICE BULLETIN	ISSUE DATE	DATE FILED	BY



**LIST OF EFFECTIVE PAGES**

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**TECHNICAL PROPERTIES**

**Table 1**

<b>PROPERTY</b>	<b>SPECIFICATION</b>
Description Part Number Customer Part Number Nomenclature Complies With Customer Specification Number	51900-1 76306-7901-106 Fire Extinguisher, Dual Outlet MIL-C-22284 and DOT-E-10440-1000 76306-07901
Functional Properties Internal Volume Extinguishing Agent Pressuring Gas Temperature Range	60-cubic inches (0,98 liters) Bromotrifluoromethane (CBrF <sub>3</sub> ) Nitrogen (N <sub>2</sub> ) -65°F to +180°F (-54°C to +82°C)
Pressure Data At 70°F (21°C) Charge Pressure Hydrostatic Test Pressure * Burst Pressure Safety Relief Pressure	600- to 625-psig (4137 to 4309 kPag) 2000-psig (13790 kPag) 3000-psig (20685 kPag) minimum 1400- to 1800-psig (9653 to 12411 kPag)
Weight Data Empty Fire Extinguisher ** Extinguishing Agent (full charge) Nitrogen Charge Charged Fire Extinguisher **	3.92-pounds (1,78 kg) maximum 1.75- to 1.85-pounds (0,79 to 0,84 kg) 0.06-pound (0,03 kg) 5.83-pounds (2,65 kg) maximum
Weight Check Interval Allowable weight deviation – actual weight versus weight marked on identification plate	Once a year is recommended Minus 0.05-pound (0,02 kg)

\* The fire extinguisher hydrostatic test interval is every 5-years. If 5-years have not elapsed, hydrostatic test can be waived.

\*\* Weight check includes the cartridges (5) and discharge outlet valves (Item 20).  
 Weight check includes the rubber sleeve (Item 90).  
 Weight check does not include the mounting kit (Item -70).





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<b>PROPERTY</b>	<b>SPECIFICATION</b>
Cartridge Data, Dual Bridgewire Voltage Current Rating – All Fire No Fire Test Current Bridgewire Resistance Electrical Connector Mates With Maximum Life – Service and Storage Classification Torque Lockwire Size	16- to 30-VDC 3.5-amperes minimum 1.0-ampere, 1.0-Watt for five-minutes maximum 0.02-ampere maximum continuous 0.9- to 1.1-Ohm MS3476L8-33S 10-years 1.4s, UN0323 90 to 100 inch-pounds (10,2 to 11,3 N·m) 0.032-inch (0,81 mm)
Outlet Disc Data ID Length Flange Thickness	0.255- to 0.265-inch (6,48 to 6,73 mm) 0.095- to 0.105-inch (2,41 to 2,67 mm)
Filler with Burst Disc Data Flange Thickness Thread Size	0.045- to 0.055-inch (1,14 to 1,40 mm) MS33556-4
Discharge Outlet Valve Data Thread Size Torque Lockwire Size	MS33656G12 (2 typical) 25 to 30 foot-pounds (33,9 to 40,7 N·m) 0.032-inch (0,81 mm)
Outlet Boss Data Boss Minimum Height Boss ID Chamfer	0.725-inch (18,4 mm) Not required
Mounting Clip Data Torque	30 to 35 inch-pounds (3,4 to 4,0 N·m)

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**ASSEMBLY (INCLUDING STORAGE)**

The Nitrogen gas charge pressure for the actual temperature of the fire extinguisher is listed in Table 701.

**Pressure Versus Temperature Fill Chart**  
**Table 701**

TEMP °F	600- to 625-PSIG at 70°F	
	MIN	MAX
60	565	590
61	568	593
62	572	597
63	575	600
64	579	604
65	582	607
66	585	610
67	589	614
68	592	617
69	597	622
70	600	625
71	603	628
72	607	632
73	610	635
74	614	639
75	618	643
76	621	646
77	625	650
78	629	654
79	632	657
80	637	662

TEMP °C	4137 TO 4309 KPAG at 21,1°C	
	MIN	MAX
15,6	3896	4068
16,1	3916	4089
16,6	3944	4116
17,2	3965	4137
17,8	3992	4165
18,3	4013	4185
18,9	4034	4206
19,4	4061	4234
20,0	4082	4254
20,6	4116	4289
21,1	4137	4309
21,7	4158	4330
22,2	4185	4358
22,8	4206	4378
23,3	4234	4406
23,9	4261	4434
24,4	4282	4454
25,0	4309	4482
25,6	4337	4509
26,1	4358	4530
26,7	4392	4565



**SPECIAL TOOLS, FIXTURES, AND EQUIPMENT**

Special tools, fixtures, and test equipment required for maintenance of the fire extinguishers are listed in Table 901. Equivalent items may be substituted.

**Special Tools, Fixtures, and Equipment**  
**Table 901**

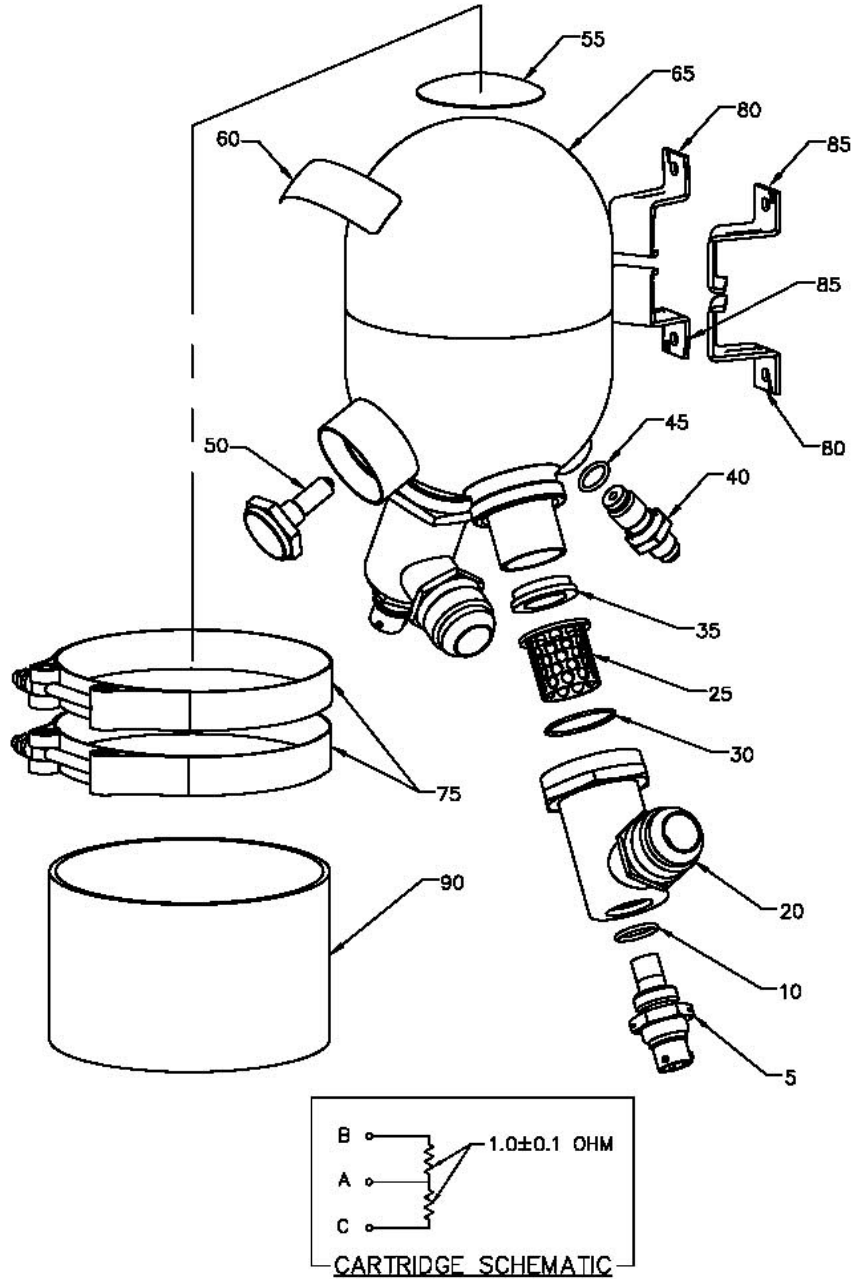
<b>NOMENCLATURE</b>	<b>PART OR SPECIFICATION NUMBER</b>	<b>SOURCE (CAGE)</b>
Cap, Hydrostatic Test, Discharge Boss	91021-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Charging Fixture	23540-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Cradle	91033-60	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Discharge Tool	91097-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Outlet Safety Cap	27319-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Resurfacing Tool, Discharge Boss	91044-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Resurfacing Tool, Fill Boss	91045-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Safety Chamber, Cartridge	91035-2	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)
Welding Fixture	91100-1	MASS Systems, A Unit of Ameron Global, Inc. (0FRR4)



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**ILLUSTRATED PARTS LIST**



IPL FIGURE 1. FIRE EXTINGUISHER EXPLODED VIEW



**ILLUSTRATED PARTS LIST**

FIG. ITEM NO.	PART NUMBER	AIRLINE PART NO.	NOMENCLATURE							EFF	UNITS PER ASSY
			1	2	3	4	5	6	7		
1 -1	51900-1		FIRE EXTINGUISHER, 60-CUBIC INCH (CUST. P/N 76306-07901-101)								RF
5	30600-31		. CARTRIDGE (CUST. P/N 76306-07901-108)								2
10	MS29513-016		. . O-RING								2
-15	24626-1		. . TAG, CAUTION								2
20	27370-2		. OUTLET VALVE, DISCHARGE								2
25	22740-1		. . SCREEN WELDMENT								2
30	MS29513-023		. . O-RING								2
35	M33440018-3		. DISC, OUTLET								2
40	M842117		. FILLER VALVE, SAFETY RELIEF								1
45	MS29513-013		. O-RING								1
50	13900-1		. GAUGE, PRESSURE								1
55	51913-1		. PLATE, IDENTIFICATION								1
60	25719-1		. DECAL, TEMPERATURE VERSUS PRESSURE								1
65	51910-1		. WELDMENT, CONTAINER (CUST. P/N 76306-07901-107)								1
-70	51905-1		MOUNTING KIT * (CUST. P/N 76306-07901-109)								1
75	25316-1		. CLAMP								2
80	25318-1		. MOUNTING CLIP, RIGHT SIDE								2
85	25318-2		. MOUNTING CLIP, LEFT SIDE								2
90	51914-1		. SLEEVE, RUBBER								1

- Item not illustrated

\* MOUNTING KIT ITEM 70 IS PURCHASED SEPARATELY.