**TO: HOLDERS OF THE LAVATORY FIRE EXTINGUISHER COMPONENT MAINTENANCE MANUAL 26-20-01, DATED APR 15/99.**

## REVISION NO. 2 DATED MAR 15/02

## HIGHLIGHTS

THIS PUBLICATION HAS BEEN REPRINTED IN ITS ENTIRETY. REPLACE ALL PREVIOUSLY ISSUED COPIES OF THE COMPONENT MAINTENANCE MANUAL.

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 |
|---|---|---|
| All Pages | Revised dates.<br>Added new logo. | All models |
| Title Page | Added new logo.<br>Added revision date. | All models |
| Page LEP-1 | Added new logo.<br>Added revision date.<br>Revised page dates. | All models |
| Page 102 | Added PROOF PRESSURE TEST paragraph. | All models |

MASS Systems

A Unit of AMERON GLOBAL, INC.

# FIRE EXTINGUISHER

# LAVATORY COMPARTMENT

# P/N 21100 SERIES

## COMPONENT MAINTENANCE MANUAL

## WITH ILLUSTRATED PARTS LIST

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# RECORD OF REVISIONS

| REV. NO. | ISSUE DATE | DATE FILED | BY |
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# RECORD OF TEMPORARY REVISIONS

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# INTRODUCTION

## SCOPE

This Component Maintenance Manual covers the maintenance and overhaul procedures for a line of lavatory fire extinguishers used on commercial aircraft. They are heat activated to discharge the extinguishing agent.

## MANUFACTURING ENTITY & PRODUCT SUPPORT

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Baldwin Park, California 91706
U.S.A.

Telephone: 626-337-4640
FAX No: 626-337-1641

CAGE Code: 0FRR4

In addition to our factory Product Support, Overhaul and Recharge stations are available worldwide.

## USE MANUAL FOR FOLLOWING FUNCTIONS

This manual covers the following topics: Technical Properties, Description and Operation, Testing and Fault Isolation, Disassembly, Cleaning, Check, Assembly and Storage, Special Tools, Fixtures, and Equipment, and the Illustrated Parts List

Recommended tools and materials are listed in each section and in the Special Tools, Fixtures, and Equipment section. Equivalent items may be used.

## REVISION SERVICE

Revised pages will be issued when necessary throughout the service life of the fire extinguisher. The revised part of the page will be identified with a change bar or capital **R** in the left margin.

## ABBREVIATIONS AND UNIT SYMBOLS

Abbreviations and unit symbols used in this manual are defined below.

| | | | |
|---|---|---|---|
| ATA | Air Transport Association | Min | Minimum |
| CAA | Civil Aviation Authority | Mm | Millimeter (1 mm = 0.0394-inch) |
| CAGE | Commercial and Government Entity | N·m | Newton·meter (1 N·m = 8.3 inch-pound) |
| CFR | Code of Federal Regulations | N.O. | Normally Open |
| Cm | Centimeter (1 cm = 0.394-inch) | No. | Number |
| DOT | Department of Transportation | OD | Outside Diameter |
| FAA | Federal Aviation Administration | Psig | Pounds per square inch–gauge |
| $GN_2$ | Nitrogen Gas | Rev. | Revision |
| ID | Inside Diameter | SB | Service Bulletin |
| IPL | Illustrated Parts List | VDC | Voltage-Direct Current |
| Kg | Kilogram (1 kg = 2.205-pounds) | ºC | Degrees Celsius |
| KPag | Kilo Pascal-gauge (1 kPag = 0.15-psig) | ºF | Degrees Fahrenheit |

# DESCRIPTION AND OPERATION

## PURPOSE

Fire Extinguishers are used to protect the Lavatory compartments. The fire extinguishers store extinguishing agent under pressure. When heat activated, the fire extinguishers very rapidly discharge extinguishing agent into the affected fire zone. The fire extinguishers are refurbishable with replacement of appropriate parts.

**WARNING: THE LAVATORY FIRE EXTINGUISHERS ARE PRESSURIZED VESSELS. EXTREME CAUTION MUST BE EXERCISED IN THE HANDLING OF THESE FIRE EXTINGUISHERS. PERSONNEL INJURIES MAY RESULT IF NOT HANDLED PROPERLY.**

## DESCRIPTION AND BREAKDOWN OF PRIMARY COMPONENTS

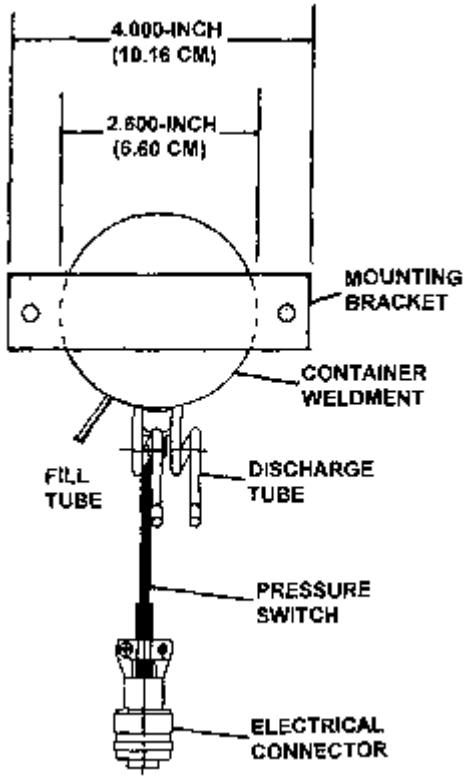
The fire extinguishers are cylindrical container weldments. See Figure 1.

## CONTAINER WELDMENT

The container weldments are made from an advanced stainless steel alloy. The container weldments incorporate an integral mounting bracket and a boss for mounting the pressure switch.

## PRESSURE SWITCH

The pressure switch is normally set to activate below the lowest pressure at -65°F (-53,9°C). This type pressure switch is utilized mainly to indicate an empty fire extinguisher.




**Primary Components**
**Figure 1**

# TECHNICAL PROPERTIES

**Table 1**

| PROPERTY | SPECIFICATION |
|---|---|
| Description | |
| Part Number | 21100 Series |
| Customer Specification Number | BAC 10-61909 Series |
| Nomenclature | Fire Extinguisher, Lavatory |
| Functional Properties | |
| Internal Volume | 10-cubic inches (0,16 liter) |
| Extinguishing Agent | Bromotrifluoromethane ($CBrF_3$) |
| Discharge Time | 7- to 17-seconds |
| Actuation Temperature | 170ºF to 175ºF (77ºC to 80ºC) |
| Pressure Data At 70°F (21°C) | |
| Charge Pressure | 199-psig (1372 kPag) |
| Burst Pressure | 2250-psig (15514 kPag) |
| Ambient Temperature Range | -65°F to +160°F (-54°C to +71°C) |
| Weight Data | |
| Empty Fire Extinguisher | 0.72-pound (327 grams) maximum |
| Extinguishing Agent (full charge) | 0.22- to 0.28-pounds (100 to 127 grams) |
| Charged Fire Extinguisher | 1.00-pound (454 grams) maximum |
| Weight Check Interval | Every five-years is recommended |
| Allowable weight deviation – actual weight versus weight marked on identification plate | Minus 0.022-pound (10 grams) |
| Pressure Switch Data | |
| Voltage | 16- to 30-VDC |
| Switch Operation – Pressurized | Normally Open – N.O. |
| Switch Actuates, Decreasing Pressure | 90- to 50-psig (621 to 345 kPag) |
| Switch Actuates, Increasing Pressure | 50- to 150-psig (345 to 1035 kPag) |
| Electrical Connector | MS24266R-8B-2P-N |
| Connector Mates With | MS24264R-8B-2S-N |

# TESTING AND FAULT ISOLATION

## TEST EQUIPMENT AND MATERIALS

Recommended test equipment and materials are listed in Table 101. Equivalent items may be used.

**Test Equipment and Materials**
**Table 101**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Cradle | 91033-10 | MASS Systems, A Unit of Ameron Global, Inc. (0FRR4) |
| Leak Detector, Halogen | HLD 3000 | Leybold Inficon, Inc. (56507) |
| Multimeter | 630 | Triplett Corp. (60741) |
| Nitrogen Gas ($GN_2$) or Dry Air | 2000-psig (13790 kPag) | Commercially available |
| Power Supply, 28-VDC | --- | Commercially available |
| Pressure Gauge, Master | 0- to 1000-psig (6895 kPag) | Commercially available |
| Weighing Scale, 0- to 100-pounds (0 to 45 kg), ± 0.01-pound (0,005 kg) Full Scale | 3000E (Electronic) | Pennsylvania Scale Co. (03964) |

* Refer to the IPL, paragraph 2, for the address.

## LEAK TEST

1. Place the fire extinguisher in the cradle on a level, solid surface.

2. Set the sensitivity scale on the leak detector to $1x10^{-6}$ standard cubic centimeter per second.

3. Hold the leak detector probe at each discharge tube, filler tube, switch boss, and weld joint. Remove the lavatory fire extinguisher from service if the leakage exceeds the requirement.

| REQUIREMENT: $1.4x10^{-6}$ standard cubic centimeter per second. |
|---|

## WEIGHT CHECK INTERVAL

Weigh the lavatory fire extinguisher before installation or at receiving inspection, and every five-years thereafter,

Weigh the lavatory fire extinguisher and compare the weight with the last weight marked on the identification plate. Remove the lavatory fire extinguisher from service if the weight loss is more than the requirement.

| REQUIREMENT: Maximum weight loss is 0.022-pound (10 grams). |
|---|

## HYDROSTATIC TEST PROCEDURE

1. This requirement is visual inspection as described in the Compressed Gas Association (CGA) pamphlet C-6 and the Code of Federal Regulations (CFR) Title 49, paragraph 173.34(e)(5).

2. The external visual inspection is for corrosion on the tubes, dents and gouges in the container weldment. Dents deeper than 1/16-inch per inch (1,59 mm per mm) of average dent diameter, or gouges deeper than 0.004-inch (0,10 mm) or longer than 2-inches (50,8 mm) shall be cause for rejection.

## PROOF PRESSURE TEST

1. Plug pressure switch boss.

2. Using test fixture, apply 1250 psig (861,8kPag) Nitrogen gas pressure to the fill tube for one minute maximum.

| REQUIREMENT: Zero leakage allowed. |
|---|

## PRESSURE SWITCH TEST

3. Connect the multimeter to the electrical connector pins 1 and 2.

4. Apply 28-VDC-power to energize the pressure switch.

5. Apply Nitrogen gas pressure to open the pressure switch contacts and verify the lamp is off, 100- to 150-psig (689,5 to 1035,0 kPag).

6. Slowly decrease pressure until pressure contacts close and lamp is on.

| REQUIREMENT: Contacts close and lamp is on between 90- to 50-psig (621 to 345 kPag). |
|---|

# DISASSEMBLY

## GENERAL

Perform the Testing and Fault Isolation or the Check procedures, as applicable, to determine probable cause of malfunction. Then use the appropriate procedure listed below to remove the component part. Before proceeding with any removal or disassembly, personnel must familiarize themselves with the various components, their locations, and terminology.

## DISASSEMBLY TOOLS AND MATERIALS

Recommended disassembly tools and materials are listed in Table 301. Equivalent items may be used.

**Disassembly Tools and Materials**
**Table 301**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Cradle | 91033-10 | MASS Systems, A Unit of Ameron Global, Inc. (0FFR4) |

* Refer to the IPL, paragraph 2, for the address.

## DATA PLATES

Do not remove the data plates. Refer to the Assembly section to install new data plate (Item 10A).

## DISCHARGE PROCEDURE

NOTE: Use this procedure to discharge the extinguishing agent.

WARNING: CONCENTRATED EXTINGUISHING AGENT CAN CAUSE LUNG IRRITATION AND NARCOSIS. CAREFULLY DISCHARGE THE EXTINGUISHING AGENT IN A WELL-VENTILATED AREA.

1. Secure the lavatory fire extinguisher in the cradle with the fill tube pointed away from personnel.

2. Cut off the tip of the fill tube.

3. Remove the discharge caps (5) from the discharge tubes.

# CLEANING

## CLEANING MATERIALS

Recommended cleaning materials are listed in Table 401. Equivalent items may be used.

**Cleaning Materials**
**Table 401**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Alcohol, Isopropyl | Federal Specification TT-I-735 | Commercially available |
| Cloth, Lint-Free | --- | Commercially available |
| Cradle | 91033-10 | MASS Systems, A Unit of Ameron Global, Inc. (0FFR4) |
| Detergent Solution | --- | Commercially available |
| Light Probe | --- | Commercially available |
| Oven or Heater, 250°F (121°C) | --- | Commercially available |
| Tape, Duct | --- | Commercially available |

* Refer to the IPL, paragraph 2, for the address.

## METAL PARTS

WARNING: IMPROPER HANDLING OF A CHARGED FIRE EXTINGUISHER CAN CAUSE INJURY

WARNING: USE CLEANING SOLVENT IN A WELL-VENTILATED AREA. AVOID PROLONGED INHALATION OF FUMES. KEEP THE CLEANING SOLVENT AWAY FROM OPEN FLAMES.

1. Clean all metal parts by wiping parts with a lint-free cloth moistened with a detergent solution.

2. Dry the parts thoroughly using a clean, lint-free cloth.

**CONTAINER WELDMENT**

1. Clean the interior of the container weldment after removal of the pressure switch as follows:

2. Pour a small amount of detergent solution (1/4-to 1/2-cup) into the container weldment.

3. Shake the container weldment in a circular motion, and drain into a disposal container.

4. Repeat steps 1 and 2 using isopropyl alcohol until no further metal chips or filings are evident in the drained alcohol. Use a light probe; inspect the interior of the container weldment.

5. Glass bead hone the exterior of the container weldment, if necessary.

6. Install plug in switch boss. Cover the identification plate (Item 10A) with duct plate.

7. Glass bead hone the exterior of the container weldment (wet or dry glass bead), except the threads on the switch bosses.

8. Remove the plug, the duct tape, and thoroughly clean the container weldment.

**CAUTION: IT IS EXTREMELY IMPORTANT TO COMPLETELY DRY THE CONTAINER WELDMENT, ANY WATER LEFT INSIDE DEGRADES PERFORMANCE OF THE CONTAINER WELDMENT.**

9. Insert a vacuum line in the container weldment, place the container weldment in an oven or dryer heated at 225°F to 250°F (107°C to 121°C), while pulling a vacuum, for one hour or until completely dry and all traces of moisture are removed.

# CHECK

## CHECK TOOLS AND EQUIPMENT

Recommended check tools and equipment are listed in Table 501. Equivalent items may be used.

**Check Tools and Equipment**
**Table 501**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Light Probe | --- | Commercially available |
| Power Supply, 28-VDC | --- | Commercially available |
| Weighing Scale, 0- to 100-pounds (0 to 45 kg) ± 0.01-pound (0,005 kg) Full Scale | 3000E (Electronic) | Pennsylvania Scale Co. (03964) |

* Refer to the IPL, paragraph 2, for the address.

## FIRE EXTINGUISHER WEIGHT CHECK

1. Weigh the fire extinguisher; refer to the Technical Properties, Section 1 for the maximum weight. Record the weight to nearest 0.01-pound (0,005 kg).

2. Compare the current weight of the fire extinguisher to the last weight marked on the data plate. If the fire extinguisher weight is 0.022-pound (10 grams) below last marked weight, test the fire extinguisher for leakage per the Testing and Fault Isolation section.

| REQUIREMENT: Maximum weight loss allowed is minus 0.022 pound (10 grams). |
|---|

## CONTAINER WELDMENT

1. Inspect the container weldment for scratches or dents that could reduce its strength as a pressure vessel. Dents deeper than 1/16-inch per inch (1,59 mm per mm) of average dent diameter, or scratches deeper than 0.004-inch (0,10 mm) or longer than 2-inches (50,8 mm) shall be cause for rejection.

2. Inspect all welded joints for fine cracks, or other irregularities, especially at the mounting bracket.

## PRESSURE SWITCH

Verify the functional test has been performed per the Testing and Fault Isolation section.

# REPAIR

## GENERAL

The repair instructions are limited. Refer to the Disassembly and Assembly sections to replace component parts.

## REPAIR TOOLS AND MATERIALS

Recommended repair tools and materials are listed in Table 601. Equivalent items can be used.

**Repair Tools and Materials**
**Table 601**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Alcohol, Isopropyl | Federal Specification TT-I-735 | Commercially available |
| Cloth, Lint-Free | --- | Commercially available |
| Cradle | 91033-10 | MASS Systems, A Unit of Ameron Global, Inc. (0FFR4) |

* Refer to the IPL, paragraph 2, for the address.

WARNING: DO NOT ATTEMPT ANY REPAIRS TO THE CONTAINER WELDMENT UNTIL THE EXTINGUISHING AGENT HAS BEEN DISCHARGED.

Replace all the component parts that fail to meet the Check or Test requirements or are damaged beyond minor repair.

## WELD REPAIRS

1. Repairs that require welding, except those covered in the Assembly section of this manual, are not permitted unless authorized in writing by MASS Systems, Inc.

2. After MASS Systems, Inc. authorization, the welding repairs must be made in accordance with the latest FAA directives and under the supervision of a certified FAA mechanic with an airframe rating. If any doubt exists regarding penetration of the weld, inspect the welded component parts in accordance with MIL-STD-453.

# ASSEMBLY (INCLUDING STORAGE)

## ASSEMBLY TOOLS AND MATERIALS

The recommended assembly tools and materials are listed in Table 701. Equivalent items may be used.

**Assembly Tools and Materials**
**Table 701**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Air Tool, Crimping | CP-0214-ANBEL | Chicago Pneumatics (0EH07) |
| Alcohol, Isopropyl | Federal Specification TT-I-735 | Commercially available |
| Alloy, Low Melting Temperature | Cerroloy 174 | Commercially available |
| Charging Fixture | 91083-1 | MASS Systems, Inc. (0FFR4) |
| Cradle | 91033-10 | MASS Systems, Inc. (0FFR4) |
| Extinguishing Agent | Halon 1301 | Commercially available |
| Flux, Solder | Kester 815 | Commercially available |
| Recharge Stand | 91026-1 | MASS Systems, Inc. (0FFR4) |
| Rubber Sheet, Silicon | 0.032-inch thick | Commercially available |
| Weighing Scale, 0- to 100-pounds (0 to 45 kg) ± 0.01-pound (0,005 kg) Full Scale | 3000E (Electronic) | Pennsylvania Scale Co. (03964) |

* Refer to the IPL, paragraph 2, for the address.

## DISCHARGE TUBES

1. Cut the Silicon rubber sheet into pieces to fit in the machined end of the discharge, and insert.

2. Heat the low melting temperature alloy to 195ºF (90.5ºC). Approximate melting time is 1-hour. Remove the floating crust from the surface.

3. Apply the solder flux to the OD of the discharge tubes and the ID of the discharge caps (5). Dip the discharge tubes with the inserted rubber pieces into the melted alloy. Remove the discharge tubes from the melted alloy and shake off excess. Push the discharge caps (5) onto the discharge tubes.

4. Dip the discharge tubes and discharge caps in the melted alloy for 10-seconds, minimum to allow trapped air in the discharge caps (5) to escape. Remove the discharge caps (5) and discharge tubes from the melted alloy and press the discharge caps (5) against a solid surface.

5. If any air holes are visible, dip discharge caps (5) and discharge tubes in the melted alloy.

6. Perform the leak test, refer to the Testing and Fault Isolation section.

**FIRE EXTINGUISHER RECHARGE** **See Figure 701**

1. Weigh the fire extinguisher, enter the weight on a copy of the fill chart Table 702.

2. Attach the charging fixture to the fill tube.

3. Install the fire extinguisher on an electronic scale with a suitable cradle and attach the flexible hose from the recharge stand to the shut off valve on the charging fixture. Zero the tare reading on the electronic scale.

4. Adjust the air pressure valve to the pump inlet 50- to 60-psig (345 to 414 kPag). Open the outlet valve of the extinguishing agent container.

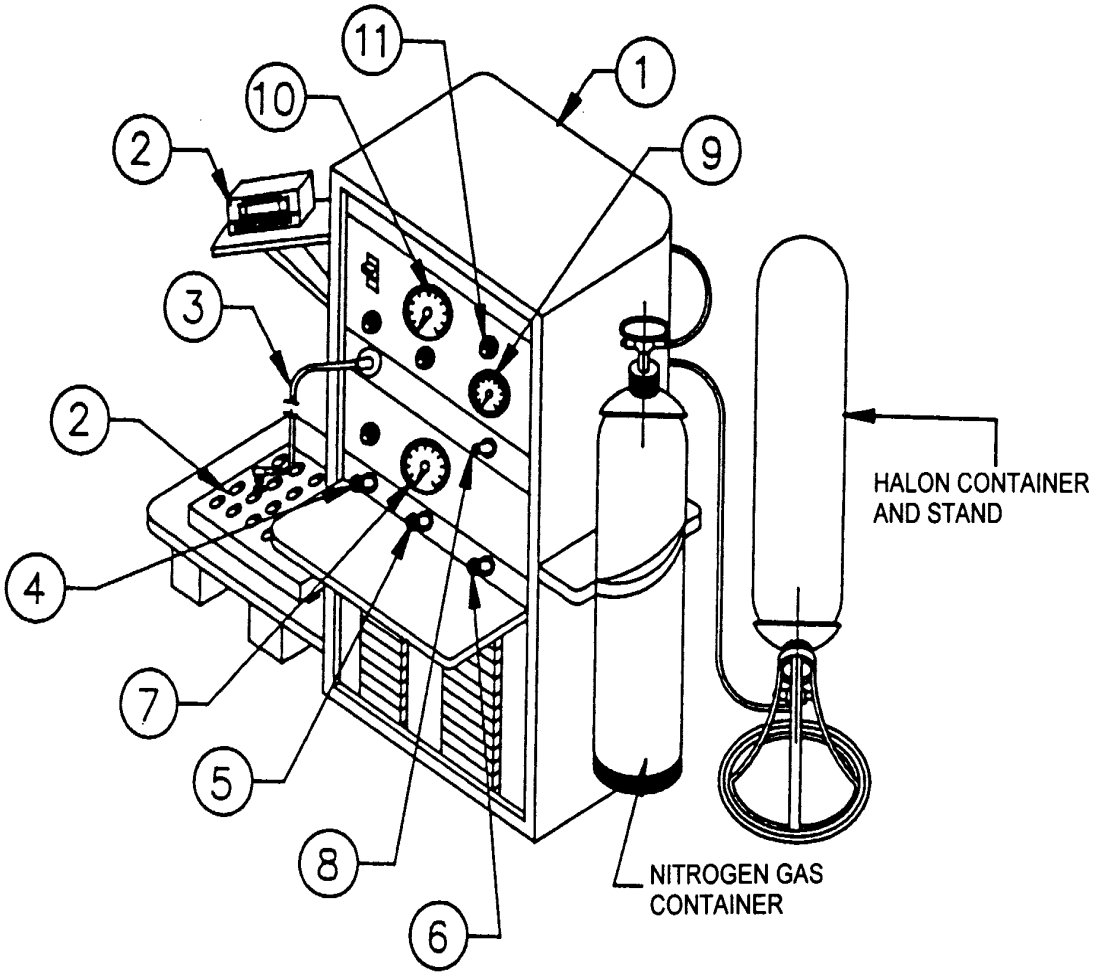
5. Open the recharge stand charging valve and the pump will start introducing extinguishing agent into the fire extinguisher. Open the shut off valve on the charging fixture and pump to desired extinguishing agent weight plus approximately 0.1-pound (0,05 kg) to allow for extinguishing agent trapped in the flexible hose.

6. Shut off the charging fixture valve on the fill tube. Vent the flexible hose and disconnect.

7. Weigh the fire extinguisher and enter weight on the fill chart. Verify the extinguishing agent weight, Line 4 on the fill chart.

8. Use the crimping air tool and crimp the fill tube, then remove the charging fixture.

9. Weigh the charged fire extinguisher. Enter the weight on the fill chart. The final charged weight should not be entered on the identification plate until the fire extinguisher is leak checked. Refer to Testing and Fault Isolation section.




1 RECHARGE STAND
2 ELECTRONIC WEIGHT SCALE
3 FLEX LINE TO FILL FIXTURE
4 HALON CHARGING VALVE
5 NITROGEN GAS VALVE
6 VENT VALVE
7 CHARGE PRESSURE GAUGE
8 AIR PRESSURE FOR PUMP
9 AIR PRESSURE GAUGE FOR PUMP
10 NITORGEN GAS PRESSURE GAUGE
11 NITROGEN GAS PRESSURE REGULATOR

**Recharge Setup**
**Figure 701**

## Fill Chart Record
## Table 702

| | | | |
|---|---|---|---|
| Part Number | _____ | Serial Number | _____ |
| Date of Refill | _____ | Certified By | _____ |

| | | | |
|---|---|---|---|
| 1. | Weight – Empty Fire Extinguisher | _____ | Pounds (kgs) |
| 2. | Weight – Empty Fire Extinguisher With Charging Fixture Attached | _____ | Pounds (kgs) |
| 3. | Weight – Charged Fire Extinguisher With Charging Fixture Attached | _____ | Pounds (kgs) |
| 4. | Final Charged Weight of Fire Extinguisher | _____ | Pounds (kgs) |

**FIRE EXTINGUISHER LEAK CHECK**

Using a leak detector, set the sensitivity to $1x10^{-6}$ standard cubic centimeter per second and using the probe, leak check the fill tube, discharge tubes, and switch boss. Refer to the Leak Test requirement.

NOTE: After charging, use an air hose to blow out all areas of the fire extinguisher because the extinguishing agent tends to accumulate in certain areas of the fire extinguisher immediately after charging.

REQUIREMENT: $1.4x10^{-6}$ standard cubic centimeter per second.

**DATA DECALS**

1. If the data decals are damaged or illegible, install the new identification decal (Item 10A). Remove the old position decal (Item 20), if required.

2. Clean the mating surface with cleaning solvent and press the new identification plate (Item 10A) onto the container weldment.

## STORAGE INSTRUCTIONS

The recommended storage materials are given in Table 703. Equivalent items may be used.

**Storage Materials**
**Table 703**

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Cardboard Carton | 6- x 6- x 6-inches (15,24 cm) | Commercially available |
| Packing Material | --- | Commercially available |
| Plastic Bag | Suitably sized | Commercially available |

The following instructions apply to the fire extinguishers not to be placed in service.

## FIRE EXTINGUISHER

1. Place the fire extinguisher in a suitable sized storage container. Seal the storage container.

2. Mark the storage container.

   a. Part number
   b. Serial number
   c. Overhaul date
   d. Fire extinguisher
   e. UN1044 (Air Shipments Only)
   f. Class 2.2
   g. Bromotrifluoromethane
   h. Net weight of extinguishing agent

3. The storage temperature is +40ºF to +100ºF (+4ºC to +38ºC).

# FITS AND CLEARANCES

**NOT APPLICABLE**

# SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

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

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

| Nomenclature | Part or Specification Number | Source (CAGE)* |
|---|---|---|
| Air Tool, Crimping | CP-0214-ANBEL | Chicago Pneumatic (0EH07) |
| Alcohol, Isopropyl | Federal Specification TT-I-735 | Commercially available |
| Charging Fixture | 91083-1 | MASS Systems, A Unit of Ameron Global, Inc. (0FFR4) |
| Cloth, Lint-Free | --- | Commercially available |
| Cradle | 91033-10 | MASS Systems, A Unit of Ameron Global, Inc. (0FRR4) |
| Extinguishing Agent | Halon 1301 | Commercially available |
| Leak Detector, Halogen | HLD 3000 | Leybold Inficon, A Unit of Ameron Global, Inc. (56507) |
| Multimeter | 630 | Triplett Corp. (60741) |
| Nitrogen Gas ($GN_2$) | 2000-psig (13790 kPag) | Commercially available |
| Oven or Heater, 250ºF (121ºC) | --- | Commercially available |
| Power Supply, 28-VDC | --- | Commercially available |
| Pressure Gauge, Master | 0- to 1000-psig (6895 kPag) | Commercially available |
| Recharge Stand | 91026-1 | MASS Systems, A Unit of Ameron Global, Inc. (0FRR4) |
| Weighing Scale, 0- to 100-pounds (0 to 45 kg), ± 0.01-pound (0,005 kg) Full Scale | 3000E (Electronic) | Pennsylvania Scale Co. (03964) |

* Refer to IPL, paragraph 2, for the address.

# ILLUSTRATED PARTS LIST

## INTRODUCTION

1. Purpose

   This IPL illustrates and lists the spare parts with attaching hardware.

2. Manufacturer Name and Address

| Cage Code | Name and Address | Telephone<br>TeleFAX |
|---|---|---|
| 0FRR4 | MASS Systems,<br>A Unit of Ameron Global, Inc.<br>4601 Littlejohn Street<br>Baldwin Park, CA 91706-2285 U.S.A. | 626-337-4640<br>FAX 626-337-1641 |
| 0EH07 | Chicago Pneumatic, Inc.<br>825G Franklin Court<br>Marietta, Georgia 30067 | 404-427-2611 |
| 03964 | Pennsylvania Scale Company<br>21 Graybill Road<br>Leola, Pennsylvania 17540-1910 U.S.A. | 717-656-2653<br>FAX 717-656-3216 |
| 56507 | Leybold Inficon, Inc.<br>Two Technology Place<br>East Syracuse, New York 13057-9714<br>U.S.A. | 315-434-1129<br>FAX 315-437-3803 |
| 60741 | Triplett Corporation<br>One Triplett Drive<br>Bluffton, Ohio 45817-1055 U.S.A. | 419-358-5015<br>FAX 419-358-7956 |
| 71984 | Dow Corning Corporation<br>2200 West Salzburg Road<br>P. O. Box 997<br>Midland, Michigan 48640 U.S.A. | 800-248-2481<br>FAX 517-496-4586 |

## EXPLANATION OF PARTS LIST COLUMN

The Detail Parts List is arranged in general sequence of disassembly. The parts are illustrated in an exploded-view illustration and listed in the related parts list.

FIG. ITEM Column

1. The first number at the top of each FIG. Item column is the figure number of the corresponding illustration. The number given opposite each part number is the item number assigned to the part in the illustration.

2. A dash (-) in front of an item means the part is not illustrated.

3. Alpha-variants A through Z (except I and O) are assigned to item numbers, when necessary to identify:

   - Added parts
   - Alternate parts
   - Service bulletin modified parts

PART NUMBER column

This column contains the manufacturer's part number for each part, as modified to meet the requirements of ATA 200/2000. These modifications can include.

1. Removal of blank spaces and special characters, with the possible exception of dashes. Dashes are permitted only between numeric characters.

2. Insertion of a reference part number compatible with ATA 200 if the manufacturer's part number exceeds 15 characters. In these cases, the manufacturer's part number is listed in the NOMENCLATURE column.

NOMENCLATURE Column

1. This column contains descriptive nomenclature for each part, the manufacturer's CAGE code (if the part is not manufactured or modified by MASS Systems, Inc.), part number (if longer then 15 digits), service bulletins affecting the part, and obsolete part numbers.

2. The indenture system used in the NOMENCLATURE column indicates the relationship of one part to another, as follows:

   1 2 3
   End Item or Major Assembly
   ATTACHING PARTS
   Attaching Parts for End Item or Major Assembly
   * * *
   . Detail Parts for End Item or Major Assembly
   . Subassemblies
   ATTACHING PARTS
   Attaching Parts of Subassemblies
   * * *
   . . Detail parts for Subassemblies

3. Assemblies, subassemblies, and detail parts subject t o modification, deletion, addition, or replacement by an issued Service Bulletin are annotated to indicate both pre- and post-Service Bulletin configurations. The term (PRE SB XXXX) in designates the original configuration, and the term (POST SB XXXX) identifies assemblies and parts after the modification has been completed.

4. The terms listed below are used when applicable to indicate the interchangeability of parts.

| Term | Abbreviation | Definition |
|---|---|---|
| Optional | OPT | The listed part is optional to and interchangeable with other parts with the same item number variant group or other item numbers if designated. |
| Superseded By | SUPSD BY | The part is replaced by and is not interchangeable with the item number shown in the notation. |
| Supersedes | SUPSDS | The part replaces and is not interchangeable with the item number shown in the notation. |
| Replaced By | REPLD BY | The part is replaced by and interchangeable with the item number shown in the notation. |
| Replaces | REPLS | The part replaces and is interchangeable with the item number shown in the notation. |

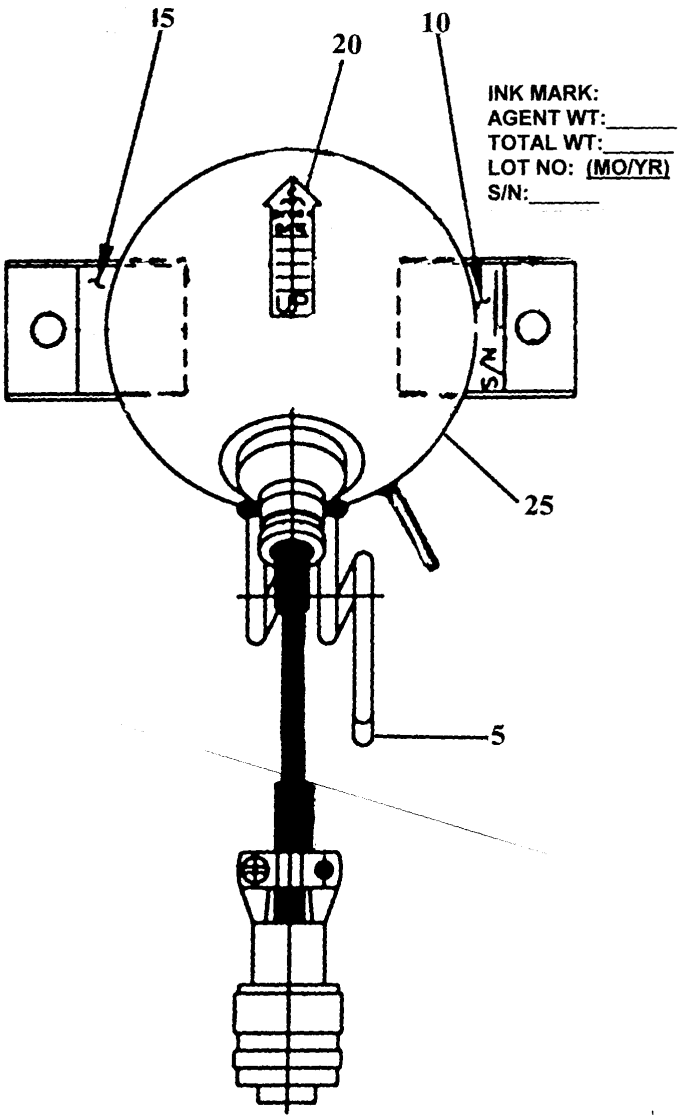
EFF CODE Column

This column contains letter codes (A, B, etc.) to indicate the alternate models or configurations of the end item to which the listed parts apply. Where this column has been left blank, the listed parts apply to all models or configurations included in the parts list.

UNITS PER ASSY Column

The quantity shown in this column represents the units required for one NHA or, when referring to attaching parts, the quantity to attach one such item. The abbreviation RF (reference) indicates that the end item or assembly is shown completely assembled on the illustration referenced in the NOMENCLATURE column.

# ILLUSTRATED PARTS LIST




**IPL FIGURE 1. FIRE EXTINGUISHER EXPLODED VIEW**

# ILLUSTRATED PARTS LIST

| FIG. ITEM NO. | PART NUMBER | AIRLINE PART NO. | NOMENCLATURE<br>1 2 3 4 5 6 7 | EFF | UNITS PER ASSY |
|---|---|---|---|---|---|
| 1 -1 | 21100-1 | | FIRE EXTINGUISHER, LAVATORY | A | RF |
| -1A | 21100-3 | | FIRE EXTINGUISHER, LAVATORY | B | RF |
| -1B | 21100-16 | | FIRE EXTINGUISHER, LAVATORY | C | RF |
| 5 | 21014-1 | | . CAP, DISCHARGE | | 2 |
| 10 | 21113-1 | | . DECAL, IDENTIFICATION (SUPSD BY ITEM 10A) | | 1 |
| 10A | 21115-1 | | . DECAL, IDENTIFICATION (SUPSDS ITEMS 10, 15, 20) | | |
| 15 | 21114-1 | | . DECAL, DATE AND WEIGHT (SUPSD BY ITEM 10A) | | 1 |
| 20 | 21112-1 | | . DECAL, POSITION (SUPSD BY ITEM 10A) | | 1 |
| 25 | 21110-3 | | . WELDMENT, CONTAINER WITH PRESSURE SENSOR | | 1 |

- Item not illustrated