

Fenwal Engineered Fire Suppression System

Effective March 2005

F-44.1933

Designed for use with 3M™ Novec™ 1230 Fire Protection Fluid

FENWAL®

Initiator Assemblies for Bottom Discharge Cylinders Component Sheet

P/N: 44-191001-001

FEATURES

- UL Listed and FM Approved for use with the Fenwal Bottom Discharge Cylinders
- Exempted from Regulation 27 CFR Part 555 as Special Explosive Devices
- 3-Pin Connection
- Supplied with Shorting Device for Safe and Easy Installation
- UNO255-1.4B Explosive

DESCRIPTION

Once in place, an electric current (2 Amps) activates the initiator assembly. The current charges the initiator to burst the rupture disc, which contains the agent in the storage container. Once the initiator assembly ruptures the burst disc, the agent storage container releases the agent into the distribution piping network.

⚠ WARNING

The initiators are Class “C” explosives; handle and store with care in accordance with appropriate safety regulations. Rough handling of the initiators, or static electricity, could cause inadvertent actuation of the initiators causing possible personal injury and/or property damage.

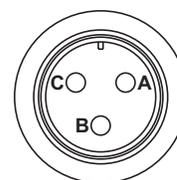
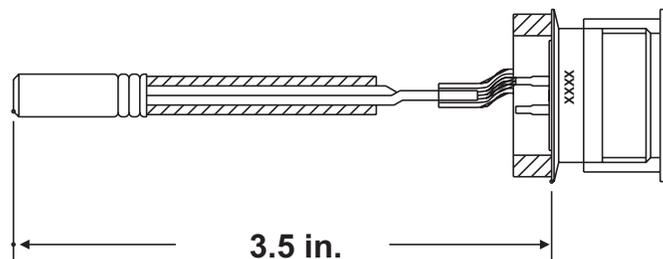
INSTALLATION

1. To install the initiator assembly, slip the initiator through the gasket and insert into the well trapping between the flat of the well and the base of the initiator. Ensure the gasket is seated flat.
2. Secure the assembly in place by tightening the retaining nut one-half turn past hand tight. Verify the connector is snug.

⚠ CAUTION

The two types of initiators must not be mixed on the same firing circuit. Initiator P/N 44-191001-001 has a solid aluminum shell.

See instructions for applicable Fenwal control panel for the maximum number of initiators per firing circuit. Exceeding the maximum number of initiators on one circuit will reduce energizing current below the levels required to actuate the initiators.



VIEW SHOWN WITH
SHORTING DEVICE REMOVED

3. Before connecting the initiators to the Fenwal control unit, refer to system installation/checkout procedures and ensure that all manual pull stations are in the standby position with the safety guards intact. Connecting the initiators to the control unit with detectors or manual pull stations in alarm will actuate the system and discharge 3M™ Novec™ 1230 Fire Protection Fluid.
4. Remove the shorting cap from the initiator and connect the cable assembly to the initiator receptacle.

⚠ WARNING

The shorting device must not be removed from the initiator until the initiator is installed and secured in place in the initiator well of the agent storage container. Removal of the shorting device could cause a buildup of static electricity, which may result in an inadvertent actuation of the initiator. Failure to follow these instructions could result in injury to personnel and damage to property. Initiators should only be handled by the base.

5. Hand tighten the connector and safety wire the well assembly to the cable assembly to secure the initiator in its well. Use standard procedure in safety wiring so the connector cannot come unscrewed.

6. Check the initiator circuitry for continuity.

⚠ CAUTION

Do not check external wiring or system components with any instrument other than a blasting galvanometer or device with a maximum current output of 50 milliamperes. Higher currents may actuate initiators and discharge Novec 1230 fluid.

7. Using a megohmmeter, check for grounds. Note and record the initiator circuit resistance. Resistance should equal 10 ± 1 ohm.

⚠ CAUTION

Use only megohmmeter P/N 29-116112-001 or equivalent (maximum current output of 50 mA) to check initiator circuit for possible grounds.

Note: Refer to the system schematic and install 1-watt balancing resistor so that total initiator firing circuit resistance is 10 ± 1 ohm. This circuit includes the initiator, initiator field wiring and balancing resistor.

8. Connect the initiator cable assembly field wiring to the appropriate terminals in the control unit per the system schematic.

MAINTENANCE

The initiator assembly should be stored in an area maintained at 70°F to 75°F (21°C to 24°C). The storage area must be dry and secure from unauthorized access to these units. The combined shelf life and service life of an initiator assembly shall not exceed seven (7) years. The service life varies with the maximum temperature to which it is exposed for an appreciable length of time. See Table 1.

Table 1. Service Life

Maximum Exposed Temperature		Service Life (Years)
°F	°C	
80	27	5
100	38	3
120	49	2
140	60	1

At the end of its service life or seven years, whichever occurs first, in initiator assembly must be removed and destroyed in accordance with local regulations.

If an initiator is installed in an agent storage container that has relieved as a result of an overpressure, both the initiator and well assembly should be replaced regardless of the initiator's age. The initiator must be destroyed in accordance with local regulations.

SPECIFICATIONS

Table 2. Specifications

Part Number	Assembly Weight		Dim. "A"		Appropriate ASC
	oz.	gm	in.	mm	
44-191001-001			3.50	88.90	44-192040-00X 44-192041-00X 44-192042-00X

DOT CLASSIFICATION

- Description: Detonators, Electric
- Hazard Class: Class C Explosive
- Identification No.: UN 0255
- UN Class and Div.: 1.4B

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