



Fire Extinguisher

Safety and Handling Instructions

P/N: TM765300

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LIST OF REVISIONS

Revision Number	Revision Date	Scope of Change Description
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1 GENERAL

1.1 SCOPE

This manual describes the maintenance procedures for the SPECTREX extinguishing cylinders that are installed inside military vehicles as part of the automatic extinguishing system. The manual emphasizes the safety precautions that need to be carried out while removing, installing and transporting the extinguishing cylinders.

1.2 INTENDED AUDIENCE

This manual is intended for operators and maintenance personnel. It is recommended that this manual be always available. It should be regarded as part of the unit.

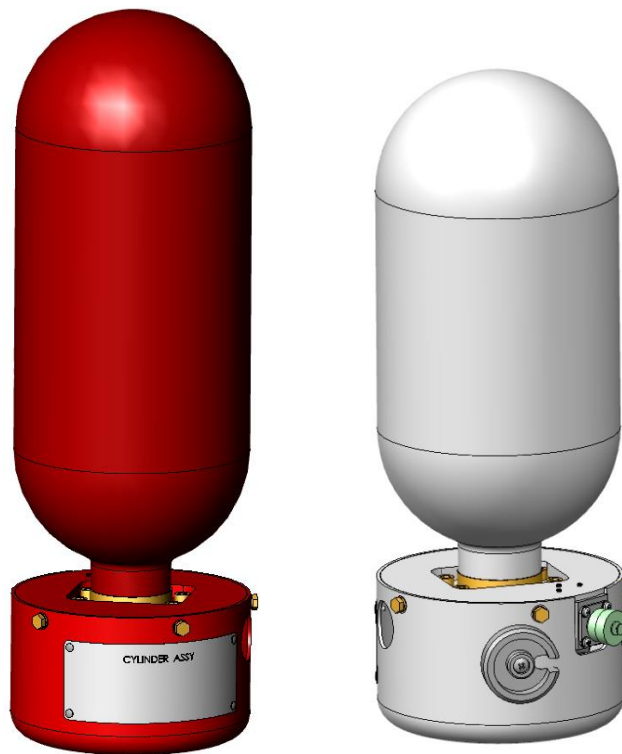


Figure 1-1 - Typical Extinguishing Cylinders

2 SAFETY ELEMENTS

2.1 GENERAL

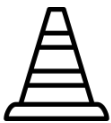
The following chapter describes the safety elements that must be installed on each extinguishing cylinder and Personal Protective Equipment prior to any maintenance activity or transportation.

2.2 CLOTHING

It is strongly recommended that Electrostatic Discharge (ESD) Personal Protective Equipment (PPE) is worn when maintenance activities are being carried out.

2.3 SHUNT CAP

The shunt cap is one of the most important safety elements that protects the extinguishing cylinder against sudden gas discharge. The shunt cap (1) must be installed on the extinguishing cylinder electrical connector (2) prior to cylinder removal/installation or transportation to prevent sudden electrical discharge.



Removal or transportation of the extinguishing cylinder is forbidden if the shunt cap is not properly installed on the electrical connector. Failure to comply may result in crew injury.

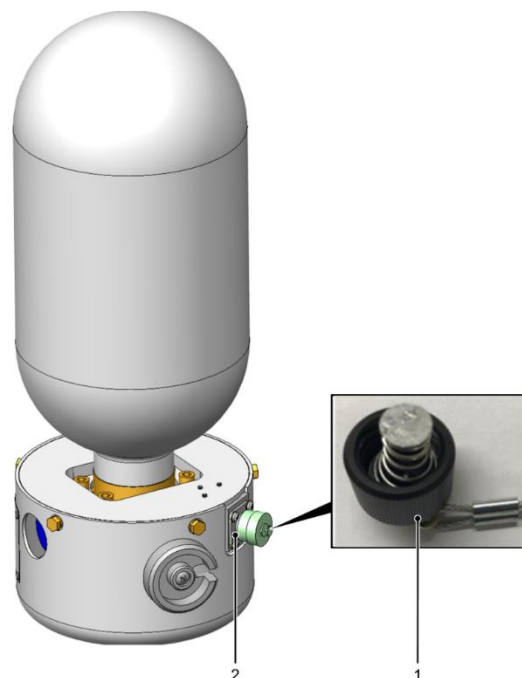
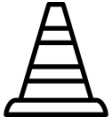


Figure 2-1 - Shunt Cap

2.4 ANTI-RECOIL DEVICE

The anti-recoil device is the second most important safety element that protects the extinguishing cylinder against sudden gas discharge. The anti-recoil device (2) must be installed on the extinguishing cylinder discharge fitting (1) prior to cylinder removal/installation or transportation.



Removal or transportation of the extinguishing cylinder is forbidden if the anti-recoil device is not properly installed on the discharge fitting. Failure to comply may result in crew injury.

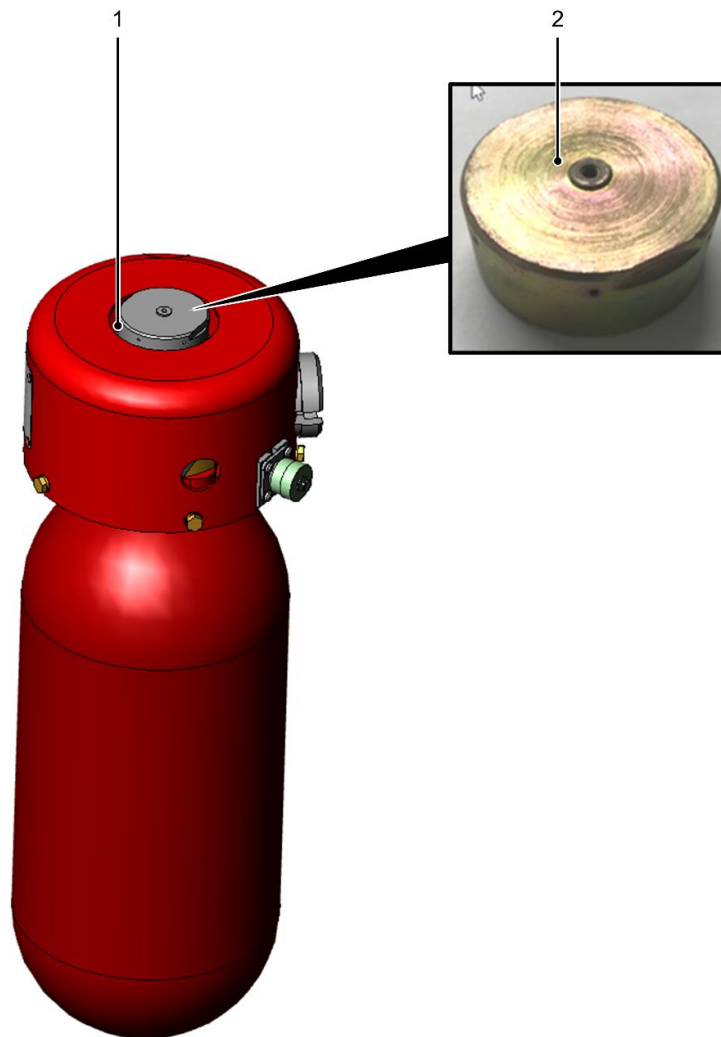


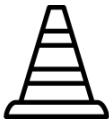
Figure 2-2 - Anti-Recoil Device

3 CRITICAL SAFETY PRECAUTIONS

3.1 GENERAL

Follow these safety instructions whenever the extinguishing cylinder is not firmly mounted in its designated place in the vehicle or in maintenance working station to prevent sudden gas discharge.

- Make sure that the anti-recoil device is firmly installed on the discharge fitting and the electrical connector is protected by the shunt cap.
- Do not expose the extinguishing cylinder to sunlight for extended periods of time.



Removal or transportation of the extinguishing cylinder is forbidden if the anti-recoil device and the shunt cap are not properly installed on the extinguishing cylinder. Failure to comply may result in crew injury.

3.2 STORAGE OR TRANSPORTATION

Follow these safety instructions whenever the extinguishing cylinder is needed to be transported or stored.

- Make sure that the extinguishing cylinder electrical connector is protected by the shunt cap and that the anti-recoil device is installed on the discharge fitting.
- Do not leave the cylinder in close proximity to fire or extreme heat.
- Do not leave the cylinder exposed to direct sunlight for long periods of time.
- Follow all applicable Department of Transport provisions.

3.3 INSIDE THE VEHICLE

Follow these safety instructions prior to any maintenance activity to be carried out on the extinguishing cylinder installed inside the vehicle.

1. Make sure that the extinguishing system power switch is set to OFF.
2. Disconnect the electrical harness from the extinguishing cylinder.
3. Follow the extinguishing cylinder replacement instructions as described in chapter 4.
4. Follow the safety instructions for replacement of the extinguishing cylinder:
 - Do not remove the extinguishing cylinder shield.
 - Do not dismount/replace parts of the extinguishing cylinder's valve or the electrical outlet.
 - Do not position your head near any extinguishing cylinder deflector or discharge fitting.
 - Do not, in any case, look inside the deflector or the nozzle outlets
 - Do not insert your fingers into the deflector or the nozzle.

- Do not leave equipment, objects or tools near the extinguishing cylinder deflector or nozzle.



Figure 3-1 - Typical Vehicle Installation

5. Follow the safety instructions for unmounted extinguishing cylinder when the cylinder is out of the vehicle mounting base:
 - Make sure that the anti-recoil device is properly installed on the discharge fitting and the electrical connector is protected by the shunt cap
 - Do not expose the extinguishing cylinder to sunlight for extended periods of time
 - Do not leave the extinguishing cylinder in hot places or near fire.
 - During transportation, special attention must be given to proper and careful handling of the extinguishing cylinder.

4 EXTINGUISHING CYLINDER REPLACEMENT

4.1 CREW COMPARTMENT INSTALLATION

The following chapter describes the procedures for replacement of an extinguishing cylinder inside the crew compartment.

4.1.1 Extinguishing Cylinder Removal

1. Disconnect the electrical harness (1) from the extinguishing cylinder, and immediately install the protective shunt cap (2) on its electrical connector.



Figure 4-1 - Electrical Harness Disconnection

2. Remove the deflector (2) from the extinguishing cylinder discharge fitting (3). As soon as the deflector is removed, install the anti-recoil device (1) on the discharge fitting (3).

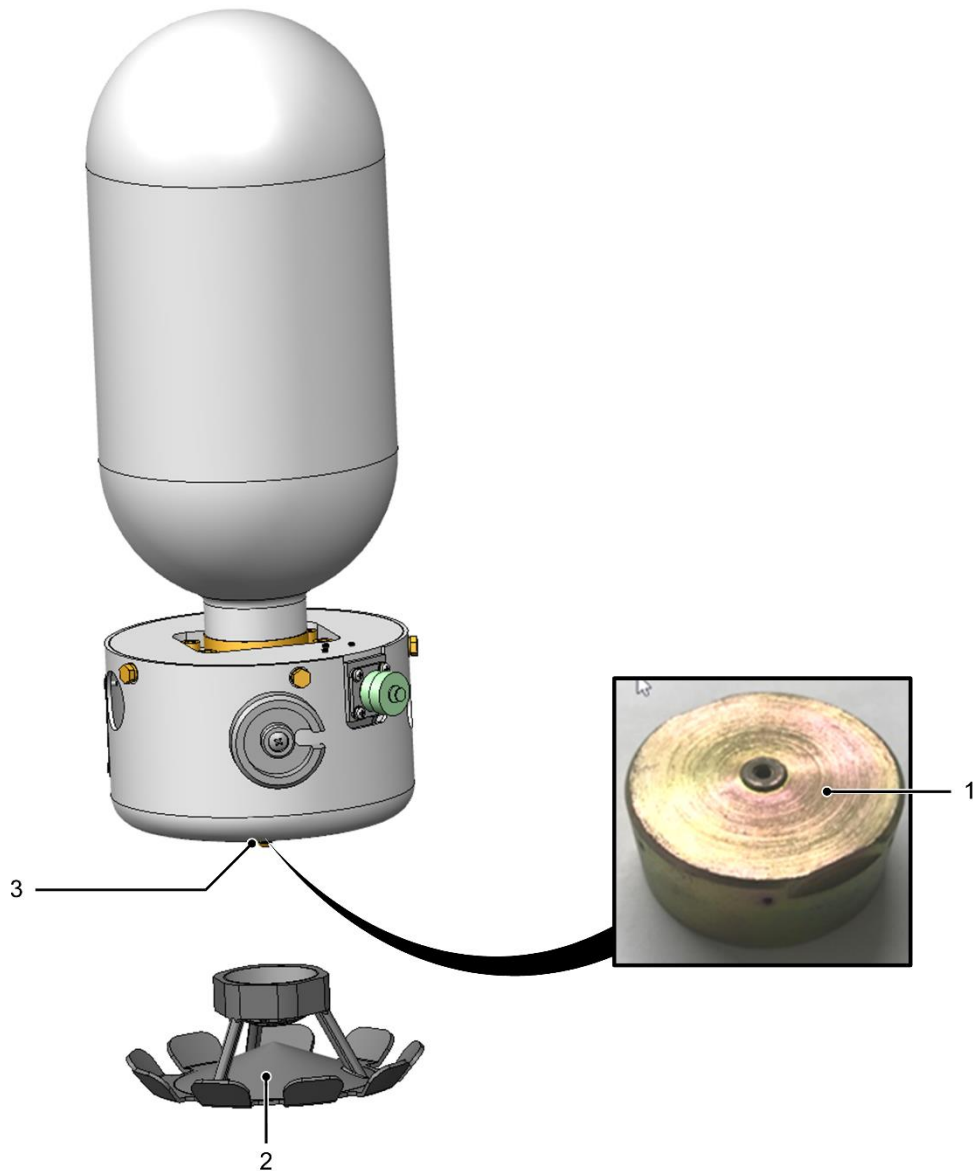


Figure 4-2 - Deflector Removal

3. Slightly release the bolts (2), nuts (4) and washers (1) that secures the attaching clamps (3) to the extinguishing cylinder body (5).
4. Support the extinguishing cylinder (5) with your hands and carefully remove the attaching clamps (3) holding the extinguisher.
5. Remove the extinguishing cylinder (5) from its place.

EXTINGUISHING CYLINDER REPLACEMENT

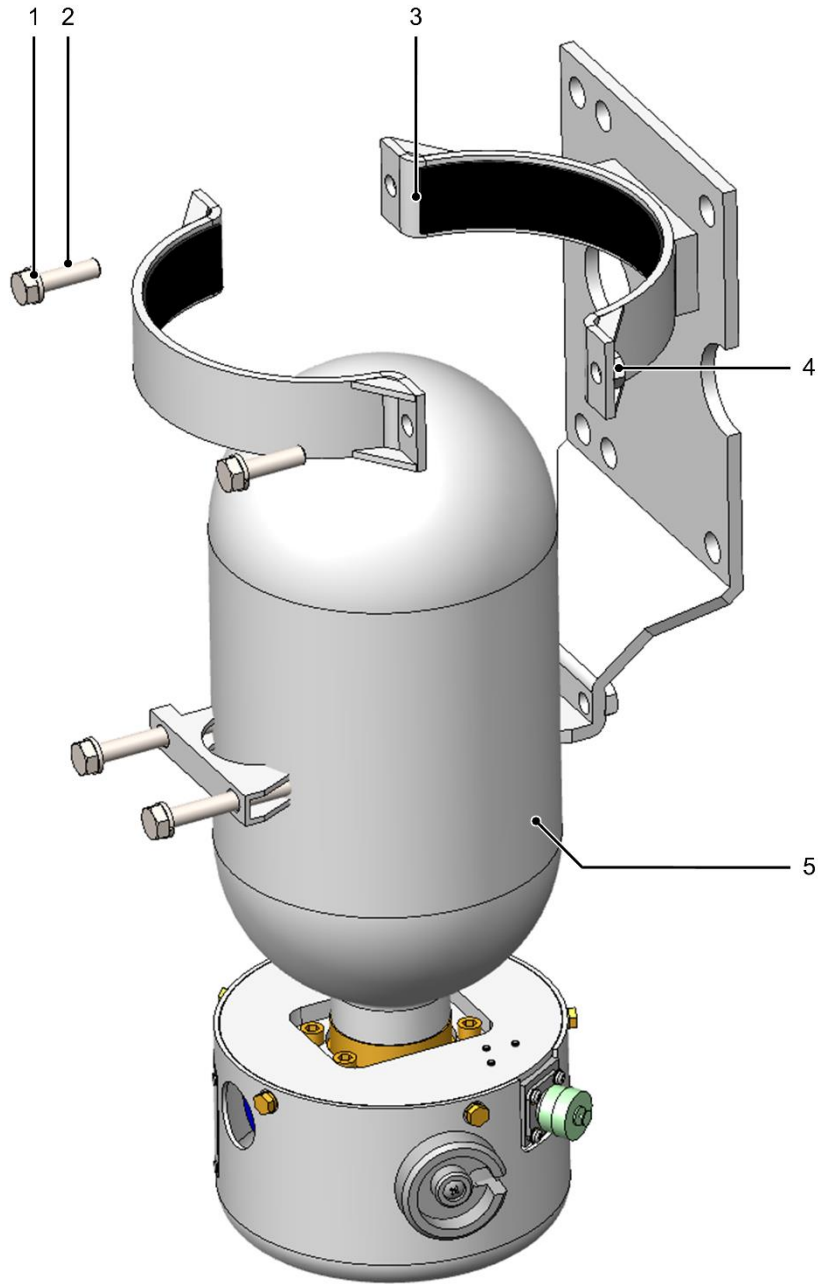


Figure 4-3 - Extinguishing Cylinder Removal

4.1.2 Extinguishing Cylinder Installation

1. Position the extinguishing cylinder (5) on its place.
2. Support the extinguishing cylinder (5) with your hands and carefully install the attaching clamps (3) holding the extinguisher.
3. Tighten the bolts (2), nuts (4) and washers (1) that secures the attaching clamps (3) to the extinguishing cylinder body (5).

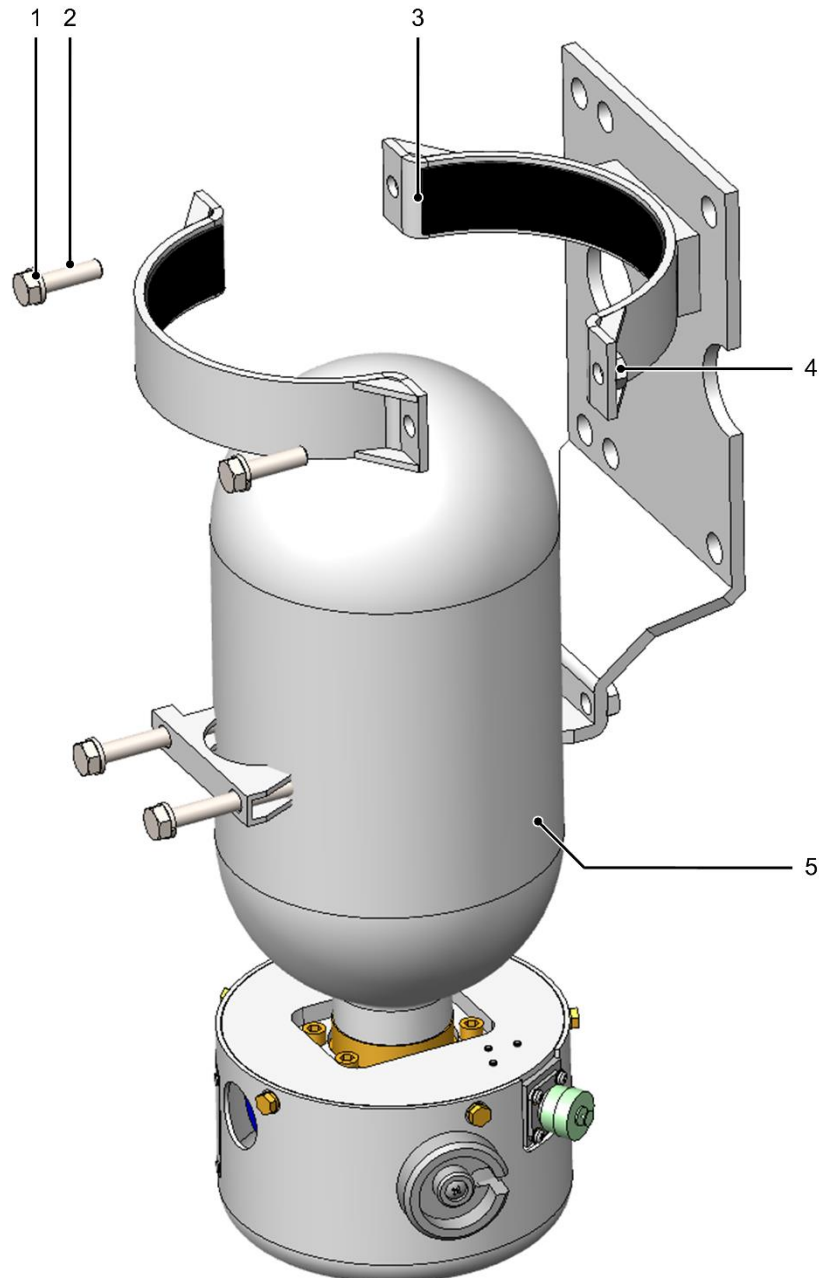


Figure 4-4 - Extinguishing Cylinder Installation

4. Remove the anti-recoil device (1) from the discharge fitting (3). Install the deflector (2) to the extinguishing cylinder discharge fitting (3).

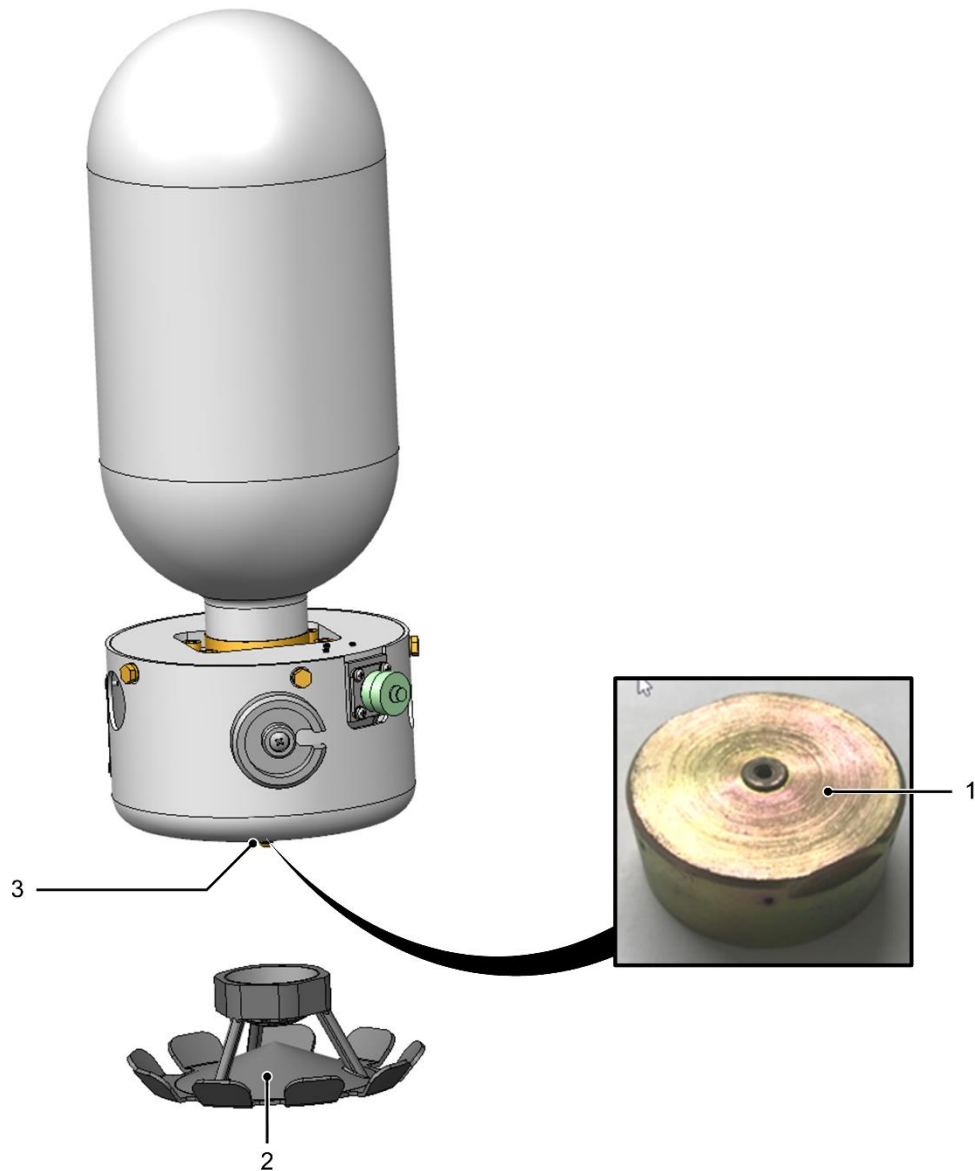


Figure 4-5 - Deflector Installation

5. Remove the protective shunt cap (2) from the extinguishing cylinder electrical connector and connect the electrical harness (1) to the extinguishing cylinder.
6. Check the extinguishing cylinder for proper installation.



Figure 4-6 - Electrical Harness Disconnection



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