



NATIONAL FIRE EQUIPMENT LTD.
SERVICE, SOLUTIONS, INNOVATION

Extinguisher Service Manual

Water Fire Extinguisher Model **P2.5WLS**

Foam Fire Extinguisher Models **P2.5SFFF and P2.5AFFF**



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Introduction

This service manual is provided as a guide for use only by trained, certified, and qualified personnel fully aware of applicable industry safety practices and procedures. Completion of the RELY FX™ manufacturer training course is mandatory to properly understand and address various product specific service recommendations and procedures.

Any modification, reproduction, or distribution of any part of this service manual is strictly prohibited without written permission.

The recommended procedures identified in this manual were written sequentially and should be followed as intended without deviation.

General Information

All RELY FX™ Water and Foam fire extinguisher models are stored pressure designs that have been tested to comply with all of the applicable industry standards identified on their nameplates. These extinguishers contain the extinguishing agent and expellant contained within the same container at the designated operating pressure.

Fire code requires all fire extinguishers to be installed, inspected, maintained, tested, serviced, and recharged in accordance with the National Fire Protection Association NFPA-10 Standard (Portable Extinguishers) and other requirements dictated by the local authority having jurisdiction.

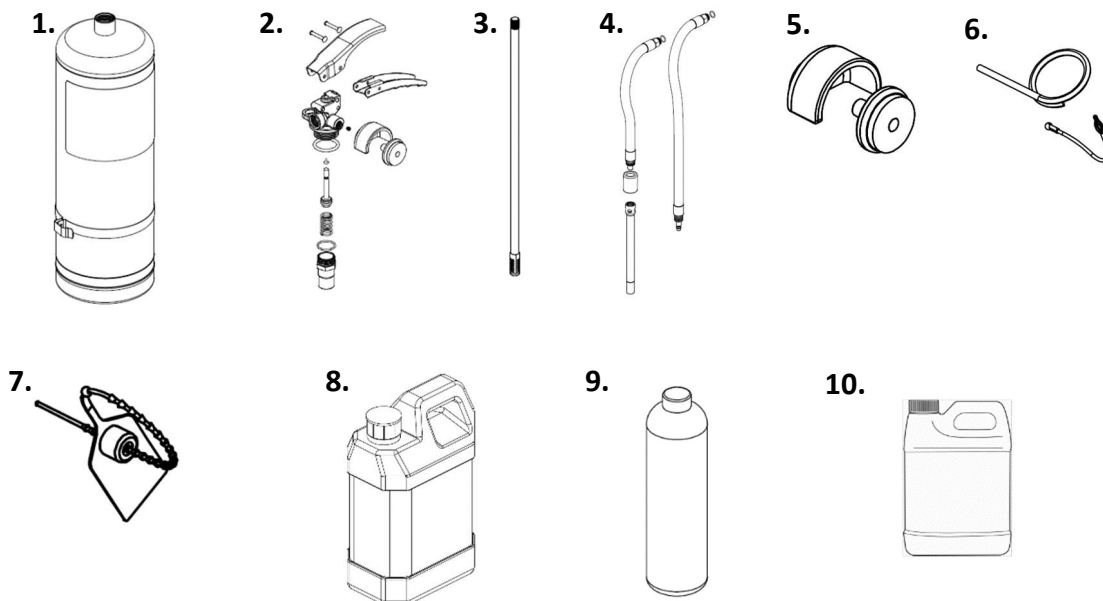
The NFPA-10 portable fire extinguisher standard can be viewed and purchased directly from the NFPA website at www.nfpa.org or by calling them directly at (617) 770-3000.

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Product Descriptions

All RELY FX™ stored pressure fire extinguisher models contain the following basic key hardware items and components:

1. **Agent Cylinder with Hose Band** – stainless steel cylinder containing the designated extinguishing agent and expellant with discharge hose retention band.
2. **Discharge Valve Assembly** - contains the various operational parts that enable agent discharge, and consists of the threaded valve body, operating lever, carry handle, valve stem, tension spring, O-ring seal, and rivets.
3. **Siphon Tube** - provides a means to secure the operating spring and effectively draw extinguishing agent up from the bottom of the cylinder and out the extinguisher discharge hose.
4. **Discharge Hose Assembly** - contains the specific nozzle and flexible length of hose specific to each model that facilitates the effective application of extinguishing agent onto fire.
5. **Pressure Gauge and Gauge Guard** – gauge visually reflects the internal operating pressure charge condition and gauge guard to help protect gauge from physical damage.
6. **Pull Pin and Tether** - device specifically designed to help prevent accidental discharges when installed, which has to be intentionally pulled and removed to discharge the extinguisher.
7. **Tamper Seal** – thin breakable plastic sealing device installed through the pull pin finger loop that helps prevent accidental discharge and provides a visual means to verify and ensure the extinguisher has not been previously used or tampered with.
8. **Loaded Stream Charge** (optional for water extinguishers)
9. **SFFF Concentrate Charge** (SFFF model only)
10. **AFFF Concentrate Charge** (AFFF model only)



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Operating Instructions

1. Remove the fire extinguisher from its mounted hanger or bracket.
2. Use the carry handle to transport the fire extinguisher to a safe position upwind of the fire and to the minimum safe distance from fire referenced on the extinguisher nameplate.
3. Thread finger through pull pin loop and pull to remove the pull pin from the discharge valve assembly, breaking the tamper seal.
4. Remove discharge hose nozzle from the hose retainer band for use.
5. Hold the fire extinguisher by the handle in a vertical/upright position and aim discharge nozzle at the base of the fire.
Note: when discharging foam units, ensure aeration holes on the nozzle are not blocked.
6. Squeeze the operating lever fully open, applying the agent onto the base of the fire with a gentle side-to-side sweeping action to avoid splashing or spreading of fire. As control of the fire is observed, slowly advance and continue discharging until the fire is completely extinguished or the extinguisher is empty.
7. Slowly back away from extinguished fires to help guard against sudden potential re-flash.

For personal safety, never advance or step into fuel or fire areas that could potentially re-ignite!

After Use Instructions

To remove pressure and prepare used extinguishers for safe transport after the fire, the following steps are recommended:

1. After the fire is out and materials have cooled, ensure the hazard is properly disposed of in accordance with local requirements.
2. Invert fire extinguisher so the cylinder is orientated upside down.
3. While securely holding the extinguisher and pointing the discharge nozzle in a safe direction (*figure 1*), slowly squeeze the operating lever to clear the hose and relieve any remaining pressure.
4. Notify proper person of the fire extinguisher use and the need for it to be recharged or replaced.



Figure 1

Note: Per code, fire extinguishers should be recharged immediately after any use or discharge.

Important Warnings and Cautions

Warning: To prevent injury or death, ensure all pressure is completely relieved from an extinguisher prior to attempting any service, repair, or recharge functions.

Warning: Prior to attempting the service or recharge on an extinguisher, personnel should first be thoroughly familiar with all contents of this service manual in order to safely recognize any equipment conditions or discrepancies that might specifically prohibit such actions.

Warning: To prevent injury or death, always ensure all pressure is completely relieved from the extinguisher prior to attempting any service, repair or recharge actions. Anytime audible pressure releases are observed from the valve or cylinder during work related functions; service personnel should immediately stop and wait until all pressure is relieved. Fire extinguisher pressure gauges may not always accurately reflect internal extinguisher pressure.

Warning: Per NFPA-10 only regulated pressurization sources set no higher than 25 psi (172 kPa) over the intended charge pressure can be used or left connected to an extinguisher for extended periods of time. For general safety reasons and to prevent injury or death during the pressurization of a fire extinguisher, never lean directly over the extinguisher or stand directly in front of the pressure gauge.

Warning: Never use any extinguishing agent in a fire extinguisher that is not specifically identified for use on the extinguisher nameplate.

Warning: To prevent product failure, injury, or death only use the recommended replacement service parts and agents specifically identified within the applicable RELY FX™ Service Manual.

Warning: Water and foam based extinguishing agents are conductive and should not be discharged or applied onto energized electrical situations to avoid shock injury.

Caution: Failure to follow the recommended service manual instructions can present various types of product safety, operation, or failure conditions and may void the manufacturer's warranty.

Caution: The applicable service equipment necessary to properly and safely perform various fire extinguisher service-related functions are identified within the NFPA-10 standard and CFR-49 DOT regulations. This RELY FX Service Manual only identifies the model specific hardware service-related items it specifically provides or recommends. The applicable NFPA-10 and DOT requirements dictate and identify the various necessary industry service equipment requirements and tolerances associated with items such as calibrated pressure gauges, weight scales, specialty tools, pressurization sources, agent handling, component drying, and necessary hydro testing equipment.

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Monthly Inspection Procedures

Per NFPA-10 requirements, monthly fire extinguisher inspections are defined as a “quick check” to ensure the fire extinguisher is in its designated place, has not been activated or tampered with, and that no obvious physical damage or condition exists to prevent its operation.

Extinguishers are required to be inspected when initially placed into service and thereafter at monthly periodic intervals as necessary, not to exceed 31 days. Owners can perform fire extinguisher inspections following the list of recommendations identified below.

1. Ensure fire extinguisher is located in its designated place, where it is visible and accessible.
2. Remove the fire extinguisher from its hanger or bracket and visually examine it for any signs of corrosion, leakage, wear, damage, or missing parts.
3. Ensure the fire extinguisher nameplate operating instructions face outward and are legible.
4. Ensure the pull pin is properly installed and the tamper seal is present and intact.
5. Ensure the pressure gauge needle reads within the green operable range.
6. Heft or weigh the fire extinguisher to ensure the weight is in line with the weight indicated on the nameplate.
7. Visually examine the discharge hose and nozzle and/or nozzle guard to ensure it is not obstructed or physically damaged.
8. Date and initial the inspection tag or record in accordance with NFPA-10 and local requirements.

Note: Any time an inspection step reflects an equipment discrepancy, a proper maintenance examination is required to be performed by a trained and certified person.

Annual Maintenance Procedures

Per NFPA-10 requirements, only properly trained and certified personnel are permitted to perform annual maintenance and service-related functions. Extinguisher maintenance is required to be performed anytime an equipment inspection discrepancy is observed and at regular periodic intervals not to exceed one year. When maintenance examinations identify a deficiency, immediate corrective action is required.

For safety and compliance, Rely recommends only properly trained and certified personnel knowledgeable with industry safety practices and having all the applicable code related references and product service manuals perform extinguisher maintenance and service requirements. RELY FX™ Support can offer guidance and assistance to help address product specific service training needs to meet necessary local requirements.

Any time questions or unknown conditions are observed during service-related work, personnel should immediately stop and seek qualified assistance before proceeding. The **Troubleshooting** section of this manual may help address some of these conditions.

NOTE FOR LOADED STREAM EXTINGUISHERS: NFPA-10 requires annual agent examinations of all loaded stream stored pressure fire extinguisher charges. (Refer to **Recharge** section of this manual for proper procedure.) The RELY FX™ Loaded Stream (LS) charge solution can be slowly discharged into a clean pail for visual examination and analysis. If the LS solution is not contaminated and is known to be the correct RELY FX™ LS charge, it can be reused to recharge the same extinguisher provided the solution has a measured specific gravity reading of 1.2 or higher. (*Use of Fisher Scientific model 11-555 hydrometer or similar recommended.*)

NOTE FOR FOAM EXTINGUISHERS: NFPA-10 requires pre-mixed foam agents in stored pressure foam extinguisher models to be replaced per the extinguisher manufactures recommendations, not to exceed the 5-year hydrostatic test interval. (*Reference RELY Product Bulletin PB101*)

For code compliance and safety, only the parts and components that have been designed, tested, and listed by RELY FX™ identified within the **Service Parts** section of this manual should be used.

Tools needed: scale, ft-lb torque wrench

1. Ensure the fire extinguisher is properly installed on the correct wall hanger or within the appropriate RELY FX™ bracket. Ensure it fixture is secure and not corroded, damaged, or worn.
NOTE: Service personnel must additionally ensure the extinguisher location temperature range conforms to the specific temperature limitations identified on the fire extinguisher nameplate.
2. Externally examine the fire extinguisher and components thoroughly for any missing parts or signs of damage, wear, corrosion, or internal sounds dictating any need for repair or replacement actions. Ensure the pull pin and tamper seal is in place to avoid accidental handling discharges during the exam.
3. Check to verify the extinguisher cylinder designated 5-year maximum periodic hydrostatic retest interval has not expired. Manufacture date is stamped onto base of cylinder or printed on nameplates. (*figure 2*)



Figure 2

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4. Examine the extinguisher nameplate and ensure the extinguisher operation, use, service, and extinguishing agent related information markings are legible and intact.
5. Using a calibrated scale, weigh the fire extinguisher to verify it properly complies with the total weight tolerance identified on the nameplate.

Loaded stream charged models: check the recharge tag date. Per NFPA-10, loaded stream charges require annual agent examinations. Refer to the **Recharge** section of this service manual for procedure.

6. Remove the discharge hose assembly from hose band and unscrew from the discharge valve and visually examine hose and nozzle and/or nozzle guard for any signs of wear, damage, cracks, corrosion, or obstructions, replace as necessary. The discharge valve port should be free of any damage, corrosion, or obstructions. Ensure the discharge hose assembly is correct for the model and lightly lubricate the discharge hose O-ring with Parker-O-Lube if necessary, then properly re-install hose assembly securely into the discharge valve port. Tighten to 7.4-9.6 ft-lb using calibrated torque wrench.

7. Visually examine the pressure gauge to ensure it is the proper 100 psi RELY gauge (P/N 4096-018) for water type extinguishers and that the needle reads within the green operable area (*figure 3*). The gauge housing and face should be free of moisture and not damaged, bent, cracked or corroded. The protective gauge guard should also be present and securely attached.



Figure 3

8. Examine the hose retention band to ensure the position on the cylinder does not obstruct the nameplate operating instructions and band is adjusted to properly retain the discharge hose assembly and nozzle.

9. Using a soft cloth dampened with water, wipe all external fire extinguisher surfaces to remove any accumulated dirt or contaminants that may be present.

10. Being careful not to accidentally discharge the extinguisher, carefully pull and remove the pull pin (*figure 4*), breaking the old tamper seal. Examine and verify the pull pin is correct for the model and not bent, damaged or corroded.



Figure 4

11. Examine the external valve assembly mounting post loop, operating lever, carry handle, and attachment rivets to ensure they are not missing, bent, damaged, or corroded. The top of the valve stem positioned under the operating lever should extend approximately $\frac{3}{16}$ " above the surface of valve body and be undamaged (*figure 5*).

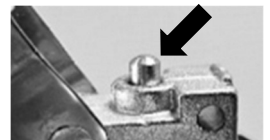


Figure 5

12. Reinstall the pull pin so that the loop is parallel with the top of the operating lever, then reinstall a new tamper seal through the pull pin and around the operating lever (*figure 6*).



Figure 6

13. Upon satisfactory completion of annual inspection, record the date of exam and then tag/label the fire extinguisher in accordance with NFPA-10 and local requirements before placing it back into service.

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Recharge Instructions and Procedures

Per code and NFPA-10 requirements, only trained and certified personnel are permitted to perform fire extinguisher recharge functions. An extinguisher recharge is the replacement of any agent and/or expellant and required to be performed after any use or discharge has occurred and whenever determined as necessary during inspection and maintenance examinations.

Because improper recharge could cause serious bodily injury, affect product operation and impair performance, code dictates that adhering to the recharge requirements identified within the RELY FX™ service manual is required. The use of unauthorized agents, additives, materials, or components can generate various types of problematic material compatibility issues within pressurized vessels like fire extinguishers.

NOTE: NFPA-10 requires annual internal examinations of all loaded stream stored pressure fire extinguisher charges. The RELY FX™ Loaded Stream (LS-40) charge solution can be slowly discharged into a clean pail for visual examination and analysis. If the LS solution is not contaminated and is known to be the correct RELY LS charge, it can be reused to recharge the same extinguisher provided the solution has a measured specific gravity reading of 1.2 or higher. *(Use of Fisher Scientific model 11-555 hydrometer or similar recommended.)*

WARNING: To avoid personal injury or death, always ensure all pressure is completely discharged from an extinguisher prior to attempting any repair or recharge functions. Fire extinguisher pressure gauges may not always accurately reflect internal extinguisher pressure.

Calibrated tools needed: in-lb torque wrench, ft-lb torque wrench, scale, screen funnel (LS-40 use), regulated pressure source

1. Prior to attempting an extinguisher recharge, first verify all pressure is removed. Carefully invert the fire extinguisher and while pointing the discharge nozzle in a safe direction, squeeze and hold the discharge operating lever open (*figure 7*) for at least 5 to 10 seconds after no audible pressure is observed coming from the extinguisher.
2. Visually confirm the fire extinguisher pressure gauge reflects no residual pressure being present.
3. Externally examine the fire extinguisher for any signs of visible damage, wear, corrosion, leakage or any other condition which might prohibit the unit from being recharged. Ensure the cylinder hydro date does not exceed the maximum 5-year periodic retest interval. Original cylinder manufacture date stamped into base of cylinder or printed on nameplate (*figure 2, page 7.*)
4. Unthread and remove the discharge hose assembly from the discharge valve assembly. Flush assembly clean and clear with fresh potable water. Closely examine the discharge hose assembly and nozzle components to ensure they are securely connected and not damaged, corroded, worn or obstructed.
5. Ensure O-ring on hose assembly where it attaches to the discharge valve assembly is not cracked, torn, worn, or deformed in any way. Replace if necessary with P/N 4096-016.
6. Slowly unscrew and remove the discharge valve assembly from the agent cylinder in a counter clockwise direction, being careful not to bend or damage the operating lever or carry handle.



Figure 7

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To avoid personal injury or death, should any audible pressure leakage be observed during extinguisher disassembly, technicians should stop any further service action and wait until all residual pressure has been completely relieved.

7. Disassemble the discharge valve assembly removing the siphon tube, spring, and discharge valve stem assembly (*figure 8*). Ensure siphon tube is straight and ports are clear and unobstructed. Flush valve assembly and components clean and clear with fresh potable water.
8. Closely examine all valve components to ensure they are not cracked, torn, worn, corroded, or deformed in any way.
9. Remove the collar O-ring and examine it to ensure it is not cut, cracked or deformed, replace collar O-ring if necessary with P/N 4089-006. Lubricate collar O-ring with a thin coat of Parker O-Lube and properly re-install onto valve.
10. Closely examine the valve stem shaft for any corrosion or damage and the rubber stem seating surfaces and small shaft O-ring for any cuts, damage or deformation. Lubricate only the stem shaft O-ring with a light coating of Parker-O-Lube. Reassemble the discharge valve assembly. Place spring in siphon tube coupler and using a clockwise turn, screw the siphon tube and valve assembly back together, torque to 75-90 in-lb. Force may be required to compress valve spring.
11. Verify the operating lever functions and operates freely and that valve stem extends approximately $\frac{3}{16}$ " above top of valve surface (*figure 9*).
12. Remove the anti-overfill tube assembly and examine the O-ring to verify it is not cut, cracked, or deformed. Replace anti-overfill tube assembly if necessary with P/N 4096-011. Empty the extinguisher cylinder of any remaining liquid.



Figure 8

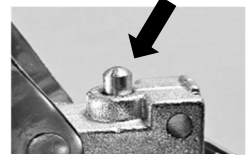


Figure 9

13. Flush the extinguisher cylinder with clean, fresh, potable water. Visually examine the cylinder interior and exterior to verify no unusual odor, corrosion, or damage issues are present that would prohibit cylinder use or recharge. Verify there is no cylinder collar seating surface damage, scratches or thread wear present, then re-install the anti-overfill tube.

14. **Water Model Recharges:** Add 2.5 gallons (20 pints, 9.46 liters, 20.85 lb, or 9.46 kg) of clean, fresh, potable water or fill extinguisher to bottom level of inserted plastic anti-overfill tube.

Loaded Stream Model Recharges: For freeze protection down to -40°F (-40°C) ONLY USE RELY FX™

Loaded Stream Charge P/N 4096-107. Add 1.87 gallons (15 pints, 7.1 liters, 15.59 lb, or 7.1 kg) or fill jug to the water line indicated on jug label of clean, fresh, potable water into the RELY FX™ Loaded Stream dry charge jug, then shake or stir the charge until it is fully into solution. Using a screen funnel, add the pre-measured loaded stream solution into the extinguisher, verifying the fully dissolved solution fills the cylinder to the bottom of the plastic anti-overfill tube.

NUFOAM™ SFFF Model Recharges: Add 2.4 gallons (19.2 pints, 9.1liters, 20 lb, or 9.1 kg) of clean, fresh, potable water to the cylinder. Then add one bottle of RELY FX™ NUFOAM™ SFFF concentrate P/N 4096-106 into the cylinder. To avoid generating bubbles, do not agitate cylinder or solution until extinguisher is fully assembled.

AFFF Foam MIL-Spec Model Recharges: Add 2.25 gallons (18 pints, 8.5 liters, 18.77 lb, or 8.5 kg) of clean fresh potable water to the extinguisher. Then add the designated 1 quart of Mil-Spec 3% AFFF concentrate to meet Navy recharge requirements.

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NOTE: To date, accelerated agent lab examinations of NUFOAM™ SFFF solution and successful live fire testing conducted with aged SFFF charges reflect potentially acceptable 3-5 year shelf life intervals for properly recharged and stored RELY foam fire extinguisher models. To maximize potential shelf life (and reduce potential harmful bacteria contamination within the potable water used to make the 2.5 gallon foam solution), the use of a 397mg Aquatab® into the extinguisher water prior to adding the NUFOAM™ concentrate is allowed. (*Reference RELY Product Bulletin PB101*)

15. Reinstall and thread the discharge valve assembly and siphon tube clockwise into the filled agent cylinder. Using calibrated torque wrench, ensure the valve is properly snugged down to 150-200 in-lb and the pressure gauge is properly orientated to the front of the extinguisher label.
16. Weigh the filled extinguisher cylinder with all of its associated hardware components to verify unit conforms to the total weight tolerances identified on the fire extinguisher nameplate.
17. Determine method of pressurizing unit – charge adaptor or water hose assembly quick connect.
Charge Adaptor with Water and Foam Models: If using the RELY FX™ Charge Adaptor P/N 4089-313 securely install the charge adaptor into the discharge valve outlet port.
Quick Connect with Water Models: RELY FX™ Water extinguishers come equipped with a patented stainless steel machined pneumatic male quick connect fitting. Before pressurizing unit, remove hose assembly and conduct an internal and external examination of the hose assembly to ensure there is no damage, abrasion, corrosion, or other conditions present that might prevent pressurization. Re-install the threaded hose assembly into the discharge valve outlet port using calibrated torque wrench to 150-200 in-lb, ensuring hose O-ring is properly seated to avoid leakage.
18. Connect a properly regulated 100 psi source of dry nitrogen (N₂) or clean air containing a calibrated pressure gauge to the charge adaptor or water hose assembly quick connect and carefully depress the extinguisher operating lever, slowly pressurizing the fire extinguisher to the 100 psi operating pressure indicated on the nameplate. Reference the calibrated pressurization gauge on the regulator to determine and verify the proper charge pressure corresponds with the extinguisher gauge needle. Pressure gauge attached to the extinguisher is not to be used to determine when the intended charging pressure has been reached.

WARNING: Regulated extinguisher pressurization sources should never be set any higher than 25 psi (172 kPa) over the intended extinguisher charge pressure or left connected to an extinguisher for extended periods of time. For safety, never stand in front of pressure gauge or position yourself over valves during pressurization.

19. Upon reaching proper pressurization, release the operating lever then shut off and remove the pressure source from the extinguisher charge adaptor or quick connection. Immediately reinstall the pull pin through the operating lever and valve assembly ports. Verify the extinguisher pressure gauge needle reflects the designated pressure marking within the green operable area, install a new inspection tamper seal through the pull pin loop and around the operating lever (*figure 10*).

Charge Adaptor use: Remove the pressurization charge adapter from the extinguisher valve assembly's outlet port.



Figure 10

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20. Using a soap solution or leak detecting fluid, properly perform a leak check of the valve assembly's outlet port, pressure gauge and cylinder collar area to ensure no pressure leakage is occurring. Upon successful completion of the leak check, properly wipe clean and dry extinguisher surfaces.
21. If not already done, re-install the hose assembly into the discharge valve outlet port and tighten to 7.4-9.6 ft-lb with torque wrench, ensuring hose O-ring is properly seated to avoid leakage. Place and properly adjust the hose assembly into the hose band retainer clip.
22. Weigh the fire extinguisher to verify total charged weight meets designated nameplate tolerances and pressure gauge needle reflects the proper operating charge pressure of 100 psi.
23. Properly record and document the recharge, then tag extinguisher in accordance with NFPA-10 and local requirements.

NOTE: Prior to placing recharged fire extinguishers back into service, it is advisable for extinguisher pressure gauge readings to be re-verified 24 hours after pressurization.

Cylinder Hydrostatic Test Requirements

Hydrostatic testing is the pressure testing of extinguisher cylinders to verify strength against unwanted rupture. It is required to be performed in accordance with specified NFPA-10 standard requirements identified within NFPA-10 Chapter 8, by trained and certified personnel working for organizations, having all of the necessary and appropriate equipment required by code.

RELY FX™ extinguisher hydrostatic test information:

<u>Agent Cylinders</u>	<u>Max Periodic Interval</u>	<u>Test Pressure</u>
Stainless Steel	5 Years	300 psi

Hydrostatic testing (hydro-test) is required to be performed on all water, loaded stream, and foam types of stainless steel fire extinguisher cylinders any time maintenance exams dictate and at maximum periodic intervals of 5 years.

Calibrated tools needed: regulated pressure source, stopwatch

- Remove hose band, valve assembly and over fill tube prior to conducting hydro-test. Only clean fresh potable water should be utilized for hydrostatic testing.
- Per code, cylinders showing any signs of damage, corrosion, cuts, dings, deformation, thread damage, burn marks, repairs, or utilization of unauthorized agents and additives, shall not be tested but instead removed from service and replaced.
- For hydrostatic testing, use RELY FX™ Hydro Adaptor P/N 4089-314.
- Only clean, fresh, potable water should be utilized for hydrostatic testing
- Water, Loaded Stream, and Foam agent charges shall be replaced with new at the time of hydrostatic testing. RELY FX™ also recommends valve collar O-rings and stems be replaced.
- Perform internal and external cylinder examinations prior to and after hydrostatic testing.
- Never stamp or etch any type of markings into cylinders, only authorized hydrostatic testing labels shall be used to record tests.

Condemned cylinders shall be properly destroyed and disposed of at the owner's direction.

Troubleshooting Suggestions and Recommendations

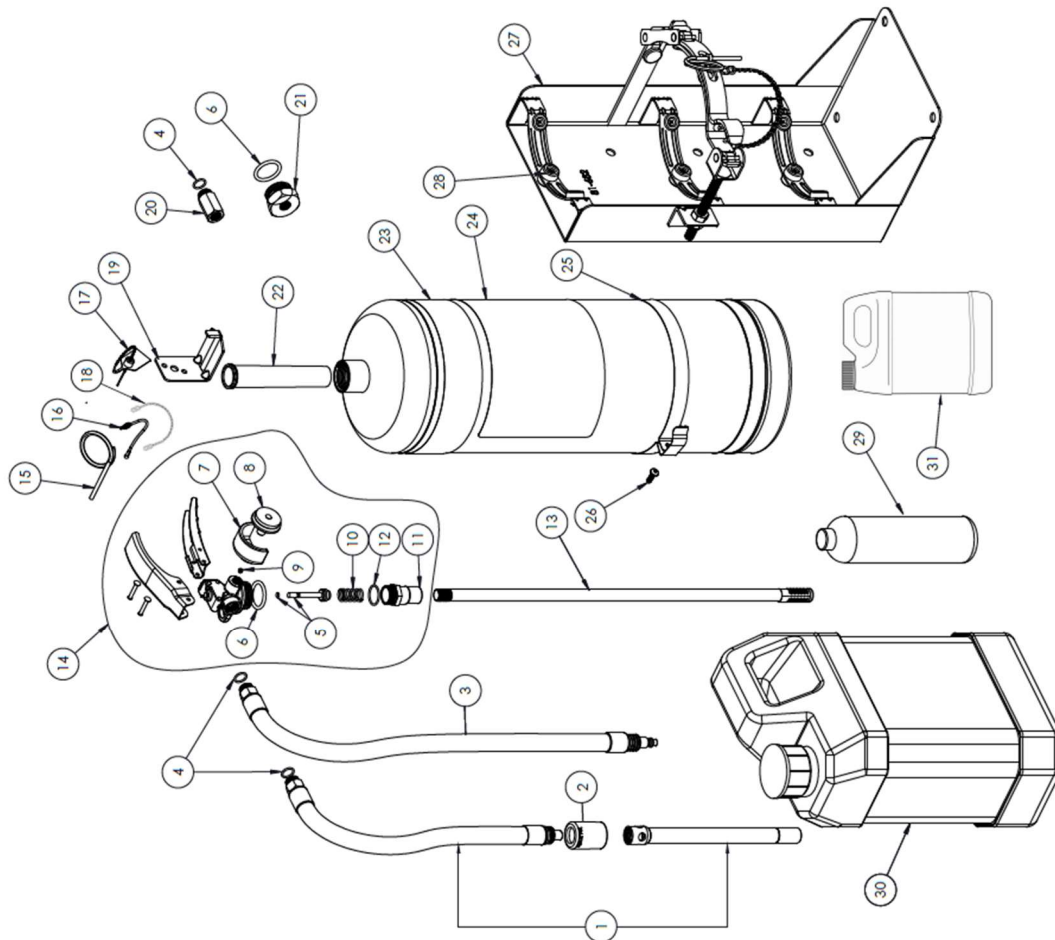
Observed Condition	Recommended Action
Suspected freezing exposure	Empty, examine, replace as necessary
Nozzle or hose obstructed	Flush to clear and dry, or replace as necessary
Nozzle, nozzle guard, or hose damaged or worn	Replace with new
Nozzle guard missing (foam units only)	Replace with new
Hose O-ring damaged/missing	Replace with new
Hose retainer damaged/missing	Replace with new
Valve collar O-ring or stem damage	Replace with new
Valve outlet port obstructed	Empty, clear and recharge
Valve stem extension height incorrect	Empty, replace and recharge
Valve handle/lever damaged	Empty, repair and replace
Valve body/hanger loop damaged	Empty, replace, and recharge
Siphon tube damaged/incorrect	Replace with correct one
Pull pin damaged/missing/bent	Replace with new
Gauge guard loose/damaged/missing	Tighten or replace
Gauge damaged/leaking/incorrect	Empty, replace, recharge *
Gauge face cracked/contains moisture	Empty, replace, recharge *
Total charged weight incorrect	Empty and recharge
Cylinder damage or corrosion observed	Remove from service, empty and replace
Damaged or worn threads	Remove from service and replace
Unusual noise observed within cylinder	Remove from service, empty and examine
Suspected use of unauthorized agent or additives	Remove from service, empty and replace extinguisher per code
Nameplate operating instructions illegible	Remove from service and replace
Extinguisher altered/modified/repared	Remove from service and replace

**Only RELY FX™ pressure gauge 4096-018 should be utilized, using properly applied Loctite-242 thread sealant. Prior to attempting pressurization, ensure the recommended time necessary for the thread sealant to dry and cure has been allowed.*

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RELY FX™ Parts Illustration (Water, Loaded Stream, & Foam Models)

Item Number	Part Number	Description
1	4096-105	Foam Hose Assembly
2	4096-031	Foam Nozzle Guard
3	4096-101	Water Hose Assembly
4	4096-016	Hose O-Ring
5	4089-506	Valve Stem Assembly
6	4089-006	Collar O-Ring
7	4089-045	Gauge Guard
8	4096-018	Pressure Gauge - 100 psi
9	4089-049	Gauge Guard Set Screw
10	4089-010	Valve Spring
11	4096-020	Siphon Tube Coupler
12	4096-023	Siphon Tube Coupler O-Ring
13	4096-021	Siphon Tube
14	81-760	Discharge Valve Assembly
15	4025-294	Pull Pin
16	4089-015	Pull Pin Retention Tether
17	4089-016	Tamper Seal
18	4089-724	Pull Pin Retention Chain
19	4089-043	Wall Hanger
20	4089-313	Charge Adaptor
21	4089-314	Hydro Test Adaptor
22	4096-011	Overfill Tube w/Gasket
23	4096-017	Reflective Label – SFFF
24	4096-026	Replacement Water Nameplate
25	4096-027	Replacement SFFF Nameplate
26	4096-033	Replacement AFFF Nameplate
27	4096-025	Hose Band
28	4089-051	Hose Band Screw SS
29	81-681	Bracket Black Steel
30	81-682	Bracket Red Stainless Steel
31	4089-532	Replacement Bumper (12 pk)
32	4096-106	SFFF Charge
33	4096-107	Loaded Stream Charge
34	4096-108	AFFF Charge



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TOOL SPECIFICATIONS			
Digital Torque Wrench	Resolution: 0.1 ft-lb	Range: 1-20 ft-lb	Accuracy: 2%
Digital Torque Wrench	Resolution: 1.2 in-lb	Range: 10-200 in-lb	Accuracy: 2%
Digital Weight Scale	Resolution: 0.1 lb	Range: 0.1-100 lb	Accuracy: 2%
Regulated Pressure Gauge	Resolution: 5.0 psi	Range: 0-400 psi	Accuracy: 2%
Digital Stopwatch	Resolution: 0.01 sec	Range: N/A	Accuracy: 0.1 sec

Questions?

Contact National Fire Equipment Ltd.



TORONTO HEAD OFFICE
(905) 761-6355
Toll Free: (800) 267-8508

VANCOUVER (604) 420-1131
Toll Free: (800) 667-2138

OTTAWA (613) 723-6071

www.nationalfire.com

EDMONTON (780) 455-3870
Toll Free: (888) 891-1008

CALGARY (403) 236-5661

MONCTON (506) 859-7277
Toll Free: (877) 816-3473

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