



**The FIREPOWER
FPFF50G
Fluorine Free Foam Cartridge Operated Wheeled Fire
Extinguisher**

Service & Maintenance Manual

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Unit 5, Duttons Way, Shadsworth Business Park, Blackburn, BB1 2QR



Wheeled / Mobile FPFF50G Extinguisher Service Instructions

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INTRODUCTION

The **TG Products FIREPOWER FPFF50G** wheeled fluorine-free foam fire extinguisher is engineered and tested to deliver significantly larger volumes of fluorine-free foam agent than hand-portable units, making it suitable for demanding industrial applications. The wheeled design allows the extinguisher to be transported and operated easily by a single person.

The unit features **easy-rolling rubber wheels** that minimize effort during movement, enabling rapid deployment through narrow access routes and congested areas to reach the fire scene quickly and safely.

The **FPFF50G** incorporates an external auxiliary nitrogen cylinder system designed to pressurize the agent cylinder upon activation. This configuration ensures reliable performance, controlled discharge characteristics, and long-term operational stability. The extinguisher is manufactured using robust surface preparation techniques, high-quality fabrication processes, and a durable corrosion-resistant paint finish to provide extended service life in demanding environments.

The agent cylinder is internally plastic-lined to protect against corrosion and maintain agent integrity. All cylinder valves, hose couplings, and pressure-bearing components are produced from high-strength, high-quality materials to ensure dependable, trouble-free operation over many years. The nitrogen cylinder is constructed from lightweight, high-strength aluminum alloy and fitted with a rotation-type brass valve equipped with an over-pressure safety disc for enhanced protection.

The nozzle assembly features a lightweight yet rugged design with an easy-to-operate squeeze-grip mechanism and a self-closing shut-off valve, providing precise control of agent discharge. The FPFF50G is also equipped with an integrated safety device to protect against over-pressurization during operation. Each FPFF50G mobile extinguisher is supplied with a **five-year manufacturer's warranty** from TG Products.

TG Products supplies original factory spare parts to ensure correct servicing and long-term reliability of the equipment. **USE OF SUBSTITUTE OR NON-OEM PARTS RELEASES TG PRODUCTS FROM ALL WARRANTY OBLIGATIONS.** TG Products components feature machined surfaces and threaded interfaces manufactured to precise tolerances. O-rings, hose assemblies, nozzles, and all metallic parts are produced to exact specifications and subjected to multiple in-house inspections and acceptance tests. Only the spare parts specified in this manual shall be used, including TG Products' fluorine-free foam extinguishing agents. Approved spares are available through TG Products distributors and at tgproducts.co.uk. **DO NOT SUBSTITUTE.**

This manual is intended as a guide for qualified personnel who have the appropriate training and knowledge, tools, and equipment required to safely carry out the operation, post-use procedures, inspection, maintenance, servicing, and recharging of TG Products **"FIREPOWER"** branded mobile fire extinguishers. Fire extinguishers are pressurised vessels and must always be treated with respect and handled with appropriate care. They are mechanical safety devices that require periodic inspection and maintenance to ensure they remain in safe working condition and are ready to operate effectively when required. TG Products strongly recommends that all inspection, maintenance, servicing, and recharging of mobile fire extinguishers is undertaken by a competent and qualified fire extinguisher service professional. All work must be carried out in accordance with the requirements and procedures specified in this manual, together with any applicable standards, regulations, and additional local requirements in the jurisdiction where the fire extinguisher is installed.

For service or technical support, please contact your qualified local TG Products service provider.

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EXTINGUISHER SERVICING INSTRUCTIONS

- TG Products **"FIREPOWER"** Brand mobile fire extinguishers should be initially serviced, installed in accordance, and maintained in accordance with maintenance standards unless stated otherwise.
- TG Products **"FIREPOWER"** Brand mobile fire extinguishers should be recharged in accordance with these instructions using only parts and refills recommended by manufacturer. It is essential for the correct, effective, and safe operation of TG Products **"FIREPOWER"** mobile fire extinguishers that only the specified parts, materials, charges, and refill additives are used.
- TG Products accepts no responsibility for injury or damage arising out of malfunction of a TG Products **"FIREPOWER"** mobile fire extinguisher not serviced and maintained in accordance with the recommended procedures herein.
- Commissioning, installation, and maintenance may be subject to other local, national, or specific customer requirements.

- This service manual only applies to “**FIREPOWER**” models listed in each section. Do not use it for other extinguisher types or other manufacturers products.

SAFETY PRECAUTIONS

Extinguishers should only be installed and serviced by qualified service personnel. Do not attempt to remove the valve assembly of any extinguisher which may be pressurised without taking appropriate safety measures. Any sudden release of pressure may eject parts or the contents of the extinguisher in a dangerous manner.

At all times when attempting to remove parts from extinguishers, persons should ensure that they are clear of any parts which may be ejected. Respect warnings on extinguisher label.

Before opening any extinguisher, safely depressurize any residual pressure in the extinguisher and ensure that there is no residual pressure in any hose and/or nozzle assembly. Slowly unscrew the valve/collar two complete turns so that any pressure remaining escapes through venting, before completely removing the assembly.

Safety Data Sheets are available for all models.

Recycling and Disposal

The legal provisions must be observed for the disposal of extinguishing agents in accordance with local or national regulations.

GENERAL SERVICING INFORMATION

Recharge Fire Extinguishers Immediately After Any Use

Examination of Threads

Threaded connections of extinguisher parts subject to pressure must always be cleaned and thoroughly checked for any wear, damage or corrosion which may adversely affect their design integrity. Particular attention must be given to extinguishers known to be used for training purposes and/or those subjected to frequent use.

Hose Connections to Cylinder Valves

DO NOT HAMMER levers or valve body when trying to remove valves from cylinder.

Valves should be loosened and tightened with a suitable wrench to ensure no damage to collar or slipping when applying tightening force. **Do not use vice grips as these will damage collar.**

Always ensure the hose assembly is tight to the valve to ensure leak tightness if extinguisher is used. If the hose assembly requires a washer, then check in good condition and in place before assembly.

Tamper Seals *IMPORTANT*

When replacing tamper seals (or pulltite seals) ensure that only types that break < 100N are used. **Do not use more than one tamper seal on the extinguisher or the force will exceed the allowable limit to withdraw the safety device and make extinguisher inoperable.** All tamper seals supplied by TG Products meets these requirements.

Product Certification

- All models unless indicated have BSI Kitemark certification to BS EN1866.
- All products are CE approved to EU Directive 2014/68/EU and GB Regulations for Pressure Equipment (PESR)
- All products are MED approved to 2014/90/EU (as amended) where indicated with Ships Wheel GB Regulations for Marine Equipment (MER)
- See brochure marketing documentation for full specifications.
- Declaration of conformity available upon request.

IMPORTANT NOTICE

Any time an unusual extinguisher discrepancy is noticed or the specific corrective action or procedure required to resolve this condition is not fully understood, personnel should stop and seek proper qualified assistance prior to continuing.

For assistance, you may contact the nearest authorized TG Products fire extinguisher distributor. Your local distributor can be located in the yellow pages phone book or by contacting TG Products. directly Tel: +44 (0) 1254 924924 to assist you with your extinguisher requirements.

INSPECTION AND RECHARGING PROCEDURES FOR FIREPOWER FPFF50G - 50L FLUORINE FREE FOAM WHEELED FIRE EXTINGUISHER WITH EXTERNAL NITROGEN CARTRIDGE



INSPECTION PROCEDURE

1. Verify Safety Pin and Tamper Seal :

- Confirm the safety pin and tamper seal are correctly installed on the external nitrogen cylinder valve. Ensure the pin can be removed freely without binding.

2. Check Pressure Gauge

- Note : Pressure gauge used on this product to indicate whether cylinder has been pressurized by activating nitrogen cylinder. Inspect the pressure gauge connected to the nitrogen cylinder valve body. Verify that no pressure is indicated. **Note:** If the extinguisher shows signs of partial discharge, tampering, or abnormal pressure, discontinue the inspection and proceed directly to the **Recharging Procedure**.

3. Inspect Extinguisher Assembly

- Examine the cylinder body, valve assembly, discharge hose, pistol grip, frame, and wheels for damage and they rotate freely, any visible corrosion, or deformation or damage.
- Confirm that operating and servicing instructions are present and legible.

4. Remove and Inspect External Nitrogen Cylinder

- Ensure the nitrogen cylinder screw down type valve is **fully closed**.
- Loosen the high-pressure hose between the nitrogen cylinder and the extinguisher valve connection adapter; check for obstruction or damage. Set aside.
- Weigh the cylinder and compare it to the marked full weight on cylinder. If the cylinder is **more than 10% underweight**, replace it with a verified full cylinder.
- Check nitrogen cylinder hydro test date. Only suitable hydro testing facilities should perform hydro testing and inspection. The cylinder hydro testing pressure will be indicated on cylinder shoulder.
- If cylinder is within date, within weight and in good condition, reinstall the safety pin through the screw-down valve and apply a new tamper seal. Set aside.

5. Release Valve Safely / Siphon Tube Assembly

- Slowly rotate the main valve one full turn to slacken it using suitable wrench. Do not unscrew further until all residual pressure has fully dissipated.
- Check condition of siphon tube and filter at the end of the siphon tube. Ensure no blockage of filter or bore of tube and ensure the tube connection to valve is tight.
- Check passage through valve and high-pressure hose adapter are free of obstruction and in good condition. Set aside.

6. **Inspect Discharge Hose and Pistol Assembly**
 - Remove the hose and pistol assembly. Check for obstructions, damage, corrosion, cracks, or wear.
 - Verify that the pistol lever operates smoothly.
7. **Inspect Cylinder Neck and Valve Threads**
 - Examine threads for wear, corrosion, or damage.
 - Check that the internal lining is not split, cracked or detached from the inside the neckring.
 - Replace components if any condition is questionable.
8. **Check Fluorine Free Agent Condition**
 - Inspect the agent through the cylinder opening.
 - Ensure no discoloration, contamination or unusual odours.
 - If in doubt replace the fluorine free mixture following the recharging procedure.
 - If the agent is five years old or more the agent will need replacing. Follow the recharging procedure.
9. **Reinstall Agent Cylinder Valve Assembly**
 - Apply a light coating of petroleum jelly to the neck threads and new seal.
 - Install the valve and tighten securely onto cylinder with suitable wrench - **do not overtighten**.
10. **Reinstall Hose Assembly**
 - Fit the hose assembly using a new seal (lightly grease with petroleum jelly) between the adapter and cylinder connection on the top dome. Tighten with a suitable wrench — **do not overtighten**.
 - Wrap the hose to the frame as shown in image above.
11. **Reinstall Nitrogen Cylinder Assembly**
 - Position the nitrogen cylinder assembly in its bracket and secure with retaining straps. Tighten bolts, **but do not overtighten**.
 - Connect high pressure hose between nitrogen cylinder valve and the agent cylinder valve. Ensure tight high pressure hose connections are tight, **but do not overtighten**.
12. **Clean Exterior**
 - Wipe down the extinguisher with a clean cloth.
13. **Weigh Extinguisher**
 - Verify the total extinguisher weight is within the acceptable tolerance range.
14. **Complete Service Documentation**
 - Record all inspection results for compliance.
 - Update the **service label**.
15. **Return Extinguisher to Service Location.**
 - Ensure the extinguisher is restored to its designated position.
 - Place extinguisher back in its assigned location and verify accessibility.

RECHARGING PROCEDURE

1. **Depressurize Extinguisher**
 - If required and in a suitable location, invert the extinguisher, secure the hose by gripping the nozzle, and slowly squeeze the pistol lever/trigger to vent any residual pressure.
2. **External Condition Inspection**
 - Inspect the extinguisher body, cage, gas cylinder, hose assembly and valve for damage or corrosion.
 - Confirm operating and servicing instructions are legible.
3. **Remove and Inspect External Nitrogen Cylinder Assembly**
 - Ensure the nitrogen cylinder screw down type valve is **fully closed**.
 - Disconnect high pressure hose between gas cylinder and connection on agent cylinder valve.
 - Loosen bolt holding securing straps around gas cylinder.
 - Remove gas cylinder assembly and check dates on cylinder before refilling as may need hydro pressure testing.
 - Check condition of cylinder and valve assembly. Set aside.
4. **Discharge Hose & Pistol Assembly Removal**
 - Remove the discharge hose and pistol assembly.
 - Verify the passage is unobstructed and components are in good condition. Set aside.
5. **Release Valve Assembly Safely**
 - Slowly rotate the main valve one full turn to slacken it using suitable wrench. Do not unscrew further until all residual pressure has fully dissipated.
 - Check condition of siphon tube and filter at the end of the siphon tube. Ensure no blockage of filter or bore of tube and ensure the tube connection to valve is tight.
 - Check passage through valve and high-pressure hose adapter are free of obstruction and in good condition. Set aside.
6. **Cylinder Inspection**
 - Empty any remaining contents. Dispose of agent in accordance with local or national regulations.
 - Using a torch, inspect the interior and inside neckring for corrosion, detachments, cracks, splits or damage.

- Failed linings will condemn the cylinder.
- 7. **Refill with Approved Agent**
 - Only refill extinguisher with Victory Fluorine Free Premix per spares section / shown on extinguisher label.
 - **Do not overfill.**
 - **Do not mix with other agents**
 - **Filling tolerances:** 47.5 litres (min) 50.0 litres (max).
- 8. **Reinstall Agent Cylinder Valve Assembly**
 - Apply a light coating of petroleum jelly to the neck threads and new seal.
 - Install the valve and tighten securely onto cylinder using suitable wrench. **Do not overtighten**
- 9. **Reinstall Nitrogen Cylinder Assembly**
 - Position refilled or new check weighed nitrogen cylinder in its bracket and secure with retaining straps. **Do not overtighten.**
- 10. **Reconnect High Pressure Hose Assembly**
 - Reconnect the high pressure hose assembly between nitrogen cylinder valve and agent cylinder valve. **Do not overtighten.**
- 11. **Reconnect Discharge Hose & Pistol Assembly**
 - Refit the hose assembly using a new seal (lightly grease with petroleum jelly) between the adapter and agent cylinder connection on top dome.
 - Tighten with a wrench. **Do not overtighten**
 - Wrap the hose to the frame as shown in image above
- 12. **Clean Exterior**
 - Wipe down the extinguisher with a clean cloth.
- 13. **Weigh Extinguisher**
 - Verify the total extinguisher weight is within the acceptable tolerance range.
- 14. **Complete Service Documentation**
 - Record all inspection results for compliance.
 - Update the **service label**.
- 15. **Return Extinguisher to Service Location.**
 - Ensure the extinguisher is restored to its designated position.
 - Place extinguisher back in its assigned location and verify accessibility.

SPARE PARTS LIST FOR FPFF50G MOBILE FIRE EXTINGUISHER



			Model
No.	Product Code	Description	FPFF50G
1	30120109	Pressure gauge	X
2	200103009	Valve assembly	X
3	30290199	Hose assembly	X
4	200203159	Hose adaptor	X
5	30330028	Nozzle assembly	X
6	30310211	Dip tube	X
7	30240004	Filter	X
8	30290214	Hose assembly	X
9	2011057	Frame	X
10	30250013	Safety Seal	X
11	200302001174	2.0L(N2) Aluminum alloy Assembly	X
12	1A1401454	Premix Refill	X

REFERENCES

Document No.	Document Title
BS EN1866-1:2007	Mobile fire extinguishers - Part 1: Characteristics, performance and test methods;
BS EN1866-2:2014	Mobile fire extinguishers - Part 2: Requirements for the construction, pressure resistance and mechanical tests for extinguishers, with a maximum allowable pressure equal to or lower than 30 bar, which comply with the requirements of EN 1866-1.

Standards are subject to revision, and the latest editions should be checked through BSI standards.

DOCUMENT HISTORY

Date	Rev	Change Details
21-09-2026	1	First release