



**Britannia Fire Ltd**

# ***BRITANNIA RANGE***

## ***FIRE EXTINGUISHER SERVICING & MAINTENANCE INSTRUCTIONS***

### **Cartridge Operated Powder Models**



**SPINTRO REV 6: October 2017**

## **PROCEDURES FOR SERVICING THE BRITANNIA RANGE OF HAND PORTABLE FIRE EXTINGUISHERS**

### **Introduction**

The commissioning and servicing of firefighting equipment must be carried out by a competent person using the correct tools to follow these manufacturer's instructions and any National standards required in the relevant Country.

This maintenance should be performed at least annually. The extinguishers should be visually inspected at least quarterly, but preferably monthly, by the user, to ensure that the equipment is in its designated position, has not been used and has not been tampered with.

Servicing and recharging should be carried out in a clean dry environment. All recharge materials and spare parts must be as specified by the manufacturer. Particular attention is drawn to replacement CO<sub>2</sub> cartridges, which must be obtained from the Manufacturer. Minor differences in cartridge design may affect the correct operation of the extinguisher.

In the event that an extinguisher cannot immediately be rendered suitable for continued service, it must be marked 'NOT MAINTAINED' until it can be repaired/recharged. The competent person must advise the user of any equipment, which is either condemned or unfit for service and make any recommendations for replacement and/or remedial work.

Always check the security and suitability of the hanging bracket, and that the extinguisher is of the right type for the prevalent risk.

If the extinguisher is to be sited in a hazardous/corrosive environment i.e. marine use, the inspection periods should be more frequent. The effects of the environment should be considered, with particular reference to corrosion and legibility of marking instructions. Where necessary the extinguisher should be protected from the environment i.e. PVC cover or box. If there is corrosion or the markings are not legible, then the extinguisher should be withdrawn from service. This is a requirement of the Marine Equipment Directive.

It is essential that extinguishers are not subjected to temperatures outside of the temperature range stated on the extinguisher.

Extinguishers should remain in their allocated location, and should be used only for the purposes of extinguishing a fire. On no account should the extinguisher be removed for any other purpose, and should not be subjected to any impact, force, heat, abrasion or any other misuse or condition that may be detrimental to the integrity of the extinguisher.

Failure to use the recommended spare parts and adhere to these maintenance instructions may cause the extinguisher to malfunction or prevent it from operating altogether. This may invalidate the warranty and the manufacturer accepts no liability in the event that these instructions are not followed.

Care must be taken to ensure that residual media (powder and foam) are disposed of in accordance with environmental legislation. Where facilities exist, condemned extinguishers and components should be recycled.



SPCOP REV 3: October 2010

## SERVICING PROCEDURE FOR BRITANNIA RANGE CARTRIDGE OPERATED DRY POWDER EXTINGUISHERS

**MODEL NO'S: BA4, BS6, BA6, BS9, BA9, BS12, BA12, BM9, B9MP**

1. Remove extinguisher from hanging bracket and check security of the bracket, rectify if necessary. Check exterior of extinguisher for corrosion or damage, if found withdraw from service.
2. Ensure safety pin and operational seal are in position and the extinguisher has not been completely or partially discharged. If the extinguisher has been completely or partially discharged, discontinue servicing procedure and commence recharge procedure (ref. RPCOP).
3. Ensure instruction label is legible, rectify as necessary. Check for damage/corrosion to extinguisher body. If damage/corrosion is found, mark the extinguisher as condemned and/or remove from service.
4. Checkweigh the extinguisher against the gross weight recorded on service label. If underweight by more than 10% of contents, the extinguisher should be removed from service and recharged.
5. Invert extinguisher to loosen powder.
6. **Ensure your body/head is not directly over extinguisher.** Remove the headcap using the nutring spanner [Part Ref: HCS] (warning: should pressure issue from vents, allow pressure to escape before complete removal of headcap). Do not use blunt instrument, i.e, screw driver, etc.
7. Check powder for caking or contamination, if apparent, empty powder, dispose of environmentally, and commence recharge procedure.
8. Unscrew CO<sub>2</sub> cartridge from headcap with cartridge spanner 22mm, clean and check for damage, corrosion and age of cartridge (must be changed if older than 10 years from date of manufacture). Replace if necessary with new cartridge from manufacturer.
9. Checkweigh cartridge against marked weight. Replace if loss of contents is in excess of 10%.
10. Wipe headcap valve clean, check for damage. Remove safety pin and squeeze levers ensuring free movement of the firing pin/spindle. Check for blockages and valve shut off by blowing with compressed air through hose whilst opening and closing valve. Ensure nutring relief vents are clear.



11. Clean and check condition of firing pin and spindle, cartridge holder, discharge tube and gas tube. Pay particular attention to balance valve, ensuring free movement and no powder in the housing. Replace if any part shows signs of deterioration. (When replacing balance valve holder, ensure locating mark lines up with locating lug in the headcap). Fit new 'O'ring.
12. Check discharge hose, nozzle and hose clips for wear, cuts or abrasion, replace if necessary.
13. Refit safety pin, service indicator and operating seal (in accordance with service colour code). Refit original or new CO<sub>2</sub> cartridge.
14. Clean extinguisher neck threads and refit headcap using nutring spanner [Part Ref: HCS] (do not use blunt instrument).
15. Fill in details of service on service label, including extinguisher weight, using indelible pen. Clean extinguisher and hang on wall bracket.



RPCOP REV 3: October 2010

## RECHARGING PROCEDURE FOR BRITANNIA RANGE CARTRIDGE OPERATED DRY POWDER MODELS

MODEL NO'S: BA4, BS6, BA6, BS9, BA9, BS12, BA12, BM9, B9MP

### THESE RECHARGE PROCEDURES SHOULD BE USED IF COMPLETE OR PARTIAL USE OF THE EXTINGUISHER IS SUSPECTED

1. Check for signs of damage or corrosion to extinguisher. If found, do not continue recharge procedure, mark extinguisher 'COMDEMNED' and inform user. Ensure instruction label is legible, rectify as necessary.

2. Ensure pressure is relieved by inverting extinguisher and squeezing the levers together slowly (whilst pointing nozzle down and away). Ensure your body/head is not directly over extinguisher.

**This should be done in a suitable location.**

3. **Ensure your body/head is not directly over extinguisher.** Loosen headcap, using nutring spanner [Part Ref: HCS]. (Do not use hammer or other blunt implement). Remove headcap slowly, allowing residual pressure to escape through vent holes.

4. Empty residual powder from extinguisher body. Dispose of in an environmental way.

5. Inspect the extinguisher inside, checking for caked powder or corrosion, indicating moisture inside the cylinder, rectify or replace extinguisher if found.

6. Recharge the extinguisher body with new dry powder, **ensuring correct quantity and type in accordance with marking. Never mix different types of powder as pressure and moisture may develop as a result of a chemical reaction.**

7. Remove CO<sub>2</sub> cartridge with cartridge spanner 22mm and dispose in a safe manner. Remove gas and syphon tubes, remove balance valve and clean the balance valve chamber. (If replacing balance valve holder, ensure locating mark lines up with locating lug in the headcap). Remove cartridge holder with a spanner 27mm and firing pin/spindle and wipe clean. Replace firing pin/spindle, spring and cartridge holder. Replace the cleaned balance valve, ensuring free movement. Replace the syphon tube and gas tube.

8. Fit safety pin and seal and service indicator (in accordance with service colour code). Checkweigh replacement CO<sub>2</sub> cartridge and fit to headcap ensuring it is the correct size and type as supplied by the manufacturer.

9. Fit new headcap 'O' ring and check nutring vent holes. Refit headcap assembly to extinguisher body using nutring spanner [Part Ref: HCS].

10. Record recharge details, including weight, on service label and return extinguisher to original position.