



TITAN FIRE EXTINGUISHER RANGE

SERVICE INSTRUCTIONS

2KG CO2 FIRE EXTINGUISHER



Model number	TITAN CARBON DIOXIDE
Capacity	2kg
Fire Rating	55B
Extinguishing Medium	CARBON DIOXIDE
Working Pressure	212 Bar
Temperature Range	-20°C to +60°C
Cylinder Material	ALUMINIUM

Inspection and maintenance:

Visual Inspection:

- An appointed member of staff should regularly check (at least monthly) that the extinguisher is not leaking. If there is any evidence of discharge or obvious damage/corrosion, the extinguisher should be removed for re-charging and/or expert examination. Also check for any obvious signs of damage or corrosion to ensure that the extinguisher is ready for use. Check that the extinguisher is correctly located, is easily accessible and that the service label is clean and clear. Only a qualified person should attempt to refill, repair or replace any affected parts using the manufacturer's supplied parts.
- Refill after complete or any partial discharge in accordance with BS 6643, part 1 and the manufacturer's instructions.
- Service annually in accordance with the recommendations of BS 5306, part 3 and the manufacturer's instructions.
- All servicing and filling should be done by a trained competent person, using only manufacturer's approved products and spare parts.

Initial and annual basic service:

- Only a suitably trained and qualified person should carry out the following inspection and maintenance in accordance with the relevant British Standards using appropriate tools and equipment. Before undertaking an inspection of a fire extinguisher, ensure that the safety pin is in place and that the fire extinguisher has not been discharged. Inspect the service history of the fire extinguisher on the service label before undertaking a service. At least once per year a thorough external inspection of all components should be undertaken. Repair or replace any defective parts using only the manufacturer's supplied or recommended parts or refills.

Hydrostatic testing:

- Carbon Dioxide Fire Extinguishers should be hydrostatically tested every 10 years to test the extinguisher pressure. Hydrostatic testing should include an inspection of the interior of the valve assembly, the spring valve stem assembly as well as the interior of the cylinder.

Extract from Approvals Technical File:

"The TITAN Carbon Dioxide fire extinguisher bodies are manufactured from aluminium alloy AA6061. They have been designed to BS5045 Pt 8 and have PED module B type approvals issued by Lloyds Register. Each cylinder is pressure tested to 212bar. The cylinders are manufactured under PED Module C1. The utmost care and control is exercised during the manufacturing process to ensure a top quality product.

These cylinders must not be modified in any way and should be protected from any heat and mechanical damage. Whilst processing the cylinders, the cylinders should not be allowed to exceed a temperature of 150°C. NOTE! A temperature exceeding 200°C for a maximum time of 4 minutes, and not exceeding 220°C maximum, is permissible for the purposes of powder coating the cylinders only. Exceeding this can result in modifying the mechanical properties and safety of the cylinder. Any cylinder that is damaged in any way should be destroyed.

The cylinders must be fitted with PED approved valves containing a bursting disc rated at 190bar. The valve thread is M25 x 2. The assembly torque for the valve to cylinder joint should be 95 Nm (70 lbf.ft), the threads should be clean and may be lightly lubricated. A suitable "O" ring seal must also be fitted to the valves to ensure a satisfactory seal.

In order to comply with UK Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2004 (SI 2004 / 568), or equivalent other EC country regulations, the Special Provision 594 of ADR section 3.3.1 must be complied with. This means that the extinguishers must be contained in strong outer packaging and must be fitted with a device to prevent inadvertent discharge.

The cylinders should only be filled with CARBON DIOXIDE and should not be overfilled.

The assembled fire extinguishers must be fitted with appropriate data and user instructions as required by current legislation."

Warning:

Extinguishers are pressurised containers that must not be pierced or exposed to excessive heat and on no account must any attempt be made to remove valves while still pressurised. Extinguishers must not be discharged without the discharge horn being fitted, as this will cause serious bodily injury or property damage.

Annual inspection:

- The extinguishers should be inspected annually for charge and damage. The actual weight should be compared with the weight that should have been recorded at the time of installation. It is a requirement of EN 3 that the

extinguisher should not have a leakage rate greater than 5% of its nominal charge per year. For a 2kg extinguisher, this is 100g per year

- If the check weighed cylinder exceeds the limits stated above, it should be withdrawn and examined and the cause of the leakage corrected. The extinguisher should be refilled to its correct weight within the EN 3 filling tolerances.
- The safety pin should be in place and the plastic security tie intact. If the security tie is broken, check weigh the extinguisher to ensure it has not been partially or fully discharged and replace the security tie with a new one.
- If the horn is damaged it should be replaced with one from the manufacturer. If the manufacturer's horn is not used, the fire rating claimed on the extinguisher label cannot be claimed and this should be removed/obliterated on the label. The horn should be assembled to the valve using a torque of 35Nm ~ 40Nm (26 lbf ft ~ 30lbf ft) or until sufficiently tight to ensure that the horn cannot be removed without the deliberate use of tools.
- Protect the cylinder during any removal or replacement of a valve so that the paint finish is not damaged.
- If the valve is removed from the cylinder, the "O" ring should be replaced, the counterbore of the cylinder checked to be clean and the valve should be tightened to a torque of 95Nm ~ 130Nm (70 lbf ft ~ 95lbf ft). It is permissible to use a smear of silicon lubricant on the valve stem thread before assembling to the cylinder.
- If the horn is removed from the valve, it should be replaced and tightened to a recommended torque of 35Nm ~ 40Nm (26 lbf ft ~ 30lbf ft) or until sufficiently tight to ensure that the horn cannot be removed without the deliberate use of tools.
- If in doubt, contact the extinguisher supplier for detailed technical information.

Refilling:

- The cylinders should be inspected for any signs of damage or tampering before any refilling operation. Any cylinders exhibiting dents or gouges or any signs of fire damage should be immediately removed from circulation and destroyed.
- A CARBON DIOXIDE extinguisher should be filled with its nominal charge to a tolerance of +0/- 5 % . i.e. for a 2kg extinguisher, this is +0/- 100g
- The extinguisher must be leak-checked after filling.

Mounting of Extinguisher:

- Mount the extinguisher using the bracket provided. Never mount an extinguisher near a radiator or other heat source as this can cause the safety

release valve to open prematurely.

Operating Instructions:

- Follow the operating instructions on the main extinguisher label that are printed on the main body of the fire extinguisher. Never burn or incinerate a charged fire extinguisher.

Recycling:

- This extinguisher is suitable for recycling in accordance with local regulations concerning waste management. Before disposal or disassembly the fire extinguisher **MUST BE DEPRESSURISED**.