

Product Alert

October 22nd, 2018

Type of Notification: Performance Related Concern

FM Approvals has been made aware of a manufacturing defect that affects the performance of the copper burst disk in the carbon dioxide (CO₂) Klem valve, a component of the Kidde Fire Protection High Pressure Carbon Dioxide Extinguishing System.

Company Identity: Kidde Products Limited **Address:** 1st Floor - Stokenchurch House, Oxford Road, High Wycombe, Buckinghamshire, H14 3SX, United Kingdom **Contact Information:** Product Management +44 (0) 1524 264 080 or <u>kidde.recall@kiddeuk.co.uk</u>.

Product Identity: Part Numbers 1-E7194-001-11, 1-K24069/FM, 1-E7194-001-01, 1-E7194-002
Description: Kidde Fire Protection CO₂ Cylinder Valve Assemblies
Nameplate Data: Cylinder Batch Serial Nos. B42140-B43271 manufactured in 2011

FM Approval Status: FM Approved

Hazard Involved: The safety burst discs for the described cylinder valves are designed to rupture as a means of emergency pressure relief when the cylinder storage temperature exceeds $63^{\circ}C$ (145°F). A customer has notified Kidde that certain assemblies in their possession have had the burst discs rupture at ambient temperatures as low as $43^{\circ}C$ (114.8°F). A rupture at temperatures this low can potentially expose personnel to CO₂, which can result in asphyxiation at high enough concentrations, as well as contact frost burns. This type of failure would also result in the loss of system availability.

If you suspect you are in possession of Kidde Fire Protection CO₂ Cylinder Valve Assemblies within the stated cylinder batch serial number range, bearing the FM Approvals certification marking and require further assistnance, please bring that to the attention of:

Antonio L. Pires FM Approvals, Quality Department Norwood, MA, USA +1 (1)781 255 4825 Email: Antonio.pires@fmapprovals.com



Date: September 3, 2018

To: Kidde Fire Protection CO2 Distributors

Subject: Safety Bulletin – CO2 Klem Valve Copper Burst Disc Assembly Return Cylinder Batch Serial Nos. B42140 – B43271 Manufactured in 2011



IMPORTANT SAFETY NOTICE Please share with your Sales, Design, Purchasing and Installation personnel

You are requested to read the following bulletin carefully and to follow all instructions. This safety bulletin seeks the immediate return of CO2 Klem Valve Cylinder assemblies, serial numbers B42140 – B43271, to Kidde Fire Protection for further testing. Hardware replacements will be provided at no additional cost for all equipment returned pursuant to this bulletin.

Issue Description

Copper burst discs fitted in Kidde Fire Protection CO2 Klem Valve Cylinder assemblies are designed to protect the cylinder and valve assembly from excessive pressure due to heat. The copper burst discs are intended to burst at a temperature of 63°C (145°F).

A customer has notified Kidde Fire Protection that certain CO2 Klem Valve Cylinder assemblies that it had purchased and stored contained copper burst discs that burst at temperatures as low as 43°C (114.8°F). If a copper burst disc ruptures at such lower than intended temperatures, service or maintenance personnel may potentially be exposed to CO2, which in high enough concentrations can result in asphyxiation or contact frost burns. Additionally, if a copper burst disc were to rupture at temperatures as low as 43°C (114.8°F), it is possible that the disc could rupture when there is no fire event, resulting in the loss of CO2 fire suppression system availability, because the contents of the cylinder are depleted. Because cylinder weight monitoring is optional and because there is no CO2 gauge on the cylinders, there is the potential that cylinders with discs that rupture at lower than intended temperatures may have discharged their contents without notification and may be unable to suppress a fire.

Requested Actions

Kidde Fire Protection is committed to ensuring that all fire suppression systems function fully as intended and are safe to operate and install. Because safety is our top priority, Kidde Fire Protection is committed to fully investigating the customer report and to determining root cause of the reported condition. In order to do so, Kidde Fire Protection seeks to recover all products from the same batch of CO2 Klem Valve Cylinder assemblies, as listed in the below table, so that Kidde Fire Protection can continue additional testing. Kidde Fire Protection will replace equipment returned pursuant to these instructions at no additional cost with CO2 Cylinder assemblies using nickel burst discs and refilled with CO2 gas. The part number, description, and serial number ranges of the potentially affected cylinder-valve assemblies are as follows:



Part Number	Description	Serial No. Range
1-E7194-001-11	45KG C02 CYL & VALVE ASSY LLOYDS RED	B42140 - B43271
1-K24069/FM	KLEM VALVE & 45KG CYL ASSY	B42140 – B43271
1-E7194-001-01	45KG CO2 CYLINDER & VALVE ASSY NPT	B42140 - B43271
1-E7194-002	45KG CO2 CYL + VAL. ASSY	B42140 - B43271

See Appendix C for further information on how to locate the serial number on the cylinder.

Field Actions

- Complete the Bulletin Receipt Acknowledgement Form (See Appendix A) and return to <u>Kidde.recall@kiddeuk.co.uk</u> within two weeks of the date of the Bulletin. We will follow up to ensure receipt of this bulletin and your acknowledgement starting 30 days from the date of the bulletin.
- 2. Please review your records for the identified cylinder serial number range B42140 B43271.
- Notify the affected owners of this issue by forwarding this bulletin to them within 30 days of receiving this bulletin. Please copy us at <u>Kidde.recall@kiddeuk.co.uk</u> for our records of this communication.
- 4. Once the schedule is confirmed by the owner, send your Kidde Customer Service a "nocharge" purchase order referencing this bulletin number with quantities aligned with your shipment history and shipment request dates as soon as possible from the date of this notice.
- 5. Visit the affected sites to perform replacement as soon as possible from the date of this notice, especially for applications and environments where the ambient temperature may exceed 43°C (114.8°F) in foreseeable operating conditions. In any event, Kidde Fire Protection seeks to have CO2 Distributors return the identified cylinders in the serial number range as soon as practicable from the date of this notice.
- At site, physically replace the affected cylinders using processes described in the CO2 Kidde Manual. Please contact Kidde Technical Support if you have any questions regarding the replacement process.
- Do NOT depressurize the CO2 Cylinder. You should return the complete assembly to Kidde using the RMS process and citing this bulletin as the reason.

If you have any questions, please contact Kidde.recall@kiddeuk.co.uk

Thank you for your continued support.



Appendix A

Bulletin Receipt Acknowledgement Form Please ensure all sections are completed.

Date:	
Company Name:	
Kidde Account No.:	
Invoicing Address:	
Contact Name:	
Job Title:	
Telephone No.:	
E-mail Address:	
Notes:	

Appendix B

Cylinder Serial Number Check List serial numbers of cylinders that need replacing.

No.	Cyl Serial	No.	Cyl Serial	No.	Cyl Serial
	No.		No.		No.
1		21		41	
2		22		42	
3		23		43	
4		24		44	
5		25		45	
6		26		46	
7		27		47	
8		28		48	
9		29		49	
10		30		50	
11		31		51	
12		32		52	
13		33		53	
14		34		54	
15		35		55	
16		36		56	
17		37		57	
18		38		58	
19		39		59	
20		40		60	

Please email the completed document to <u>Kidde.recall@kiddeuk.co.uk</u> If you have any questions or difficulty sending your Receipt Acknowledgement Form, please contact Product Management Tel: +44 (0) 1524 264 080.

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Appendix C Cylinder Serial Location

Cylinder serial number is located on cylinder shoulder, see photos below.

Cylinder Shoulder



Cylinder Serial No. On Shoulder (B43037)



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