



Date: July 10, 2017

To: Kidde Marine Distributors

Subject: Safety Bulletin (2-inch Chemical Agent Cylinder Valve assemblies
-Replacement Plan)



WARNING: IMPORTANT SAFETY NOTICE

Please share with your Sales, Design, Purchasing and Installation personnel

This safety bulletin requires the hardware replacement of specific Kidde Chemical Agent Cylinder-Valve assemblies utilizing the 2-inch valve **FOR MARINE APPLICATIONS ONLY**. Action may be required on your part. Please read the following carefully and note **Required Field Actions**.

Issue Description

The 2-inch valve used on the Kidde Chemical Agent Cylinder-Valve assemblies has four (4) retainer screws in its piston design. It has come to our attention that some valves, with one or more of these retainer screws not tightened to the required torque specification, may have escaped the production and inspection process into shipping.

The 2-inch valve operates on a differential pressure design and the loss of any of the screws from its set position could potentially result in equalizing of pressure between the cylinder and the top chamber of the valve. Such pressure equilibrium could prevent the valve from fully opening and the suppression agent from being discharged into the affected space if activated in response to a fire event.

Immediately following identification of this issue, corrective action was taken to ensure accuracy of the required tightening torque. This contained the affected manufacture dates for the above issue to:

- 45-150000-001 2" Valve NOVEC - PI Mark - Jan 16, 2015 - December 31, 2016
- 90-150000-X0X 2" Valve HFC227 - PI Mark - Jan 16, 2015 - December 31, 2016

2-inch valves utilizing the 4-retainer screw design started shipping on Jan 16, 2015 and until December 31, 2016 when the issue was discovered and corrective action taken to ensure accuracy of the required tightening torque.

Solution Being Implemented

Kidde is committed to ensuring that all fire suppression systems function fully as intended.

In order to completely eliminate the possibility of non-operation of any installed system, **we** have decided to replace all ECS 2-inch Cylinder-Valve assemblies complete with Clean Agent that were shipped for marine applications during the period Jan 16, 2015 until December 31, 2016.



At this time, replacement is restricted to marine applications since we believe that the vibrating environment on a marine vessel could exacerbate the loss of any improperly tightened screw from its set position.

If you are aware of ECS systems installed in other environments similarly prone to significant vibration, please contact Kidde.recall@kiddeuk.co.uk

Part numbers of the suspect Cylinder-Valve assemblies are as follows:

| Suspect Part Number | Description | Approved Application |
|---------------------|---|----------------------|
| 45-200200-001 | ECS FK-5-1-12 Cylinder-Valve Assembly, 81L. Capacity | Marine ONLY |
| 45-200350-001 | ECS FK-5-1-12 Cylinder-Valve Assembly, 142L. Capacity | Marine ONLY |
| 45-770200-001 | 81L CYL GCV50 NOVEC (MAR) TPED | Marine ONLY |
| 45-770201-001 | 81L CYL GCV50 NOVEC (MAR) TPED LLI | Marine ONLY |
| 45-770350-001 | 142L CYL GCV50 NOVEC (MAR) TPED | Marine ONLY |
| 45-770351-001 | 142L CYL GCV50 NOVEC (MAR) TPED LLI | Marine ONLY |
| E7763-106-05-EU | ECS HFC-227ea Cylinder-Valve Assembly, 81L. Capacity | Land, Marine |
| E7763-108-01-EU | ECS HFC-227ea Cylinder-Valve Assembly, 142L. Capacity | Land, Marine |
| E7763-106-05 | 81L CONTAINER & GCV50 DOT | Land, Marine |
| E7763-106-06-EU | 81L CONTAINER, GCV50, EMPTY | Land, Marine |
| E7763-107-02 | 81L CONTAINER & GCV50 DOT, LLI | Land, Marine |
| E7763-107-02-EU | 81L CONT, GCV50 VALVE, LLI, PI MARKED | Land, Marine |
| E7763-107-04-EU | 81L CONT, GCV50 , LLI, PI MKD EMPTY | Land, Marine |
| E7763-108-01 | 142L CONTAINER , GCV50, DOT HFC227ea | Land, Marine |
| E7763-108-01-EU | 142L CONTAINER & GCV50 PI MARKED | Land, Marine |
| E7763-108-04-EU | 142L CONTAINER, GCV50, EMPTY | Land, Marine |
| E7763-109-01 | 142L CONT. GCV50 VALVE HFC227ea LLI DOT | Land, Marine |
| E7763-109-01-EU | 142L CONT, GCV50 VALVE, LLI, PI MARKED | Land, Marine |

Note: Cylinders sold to marine applications with 2” (50mm) valves will fall under the scope of this bulletin.

Required Field Actions

Carefully read this document and all attachments;

1. Complete the below Bulletin Receipt Acknowledgement Form and return to Kidde.recall@kiddeuk.co.uk 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.

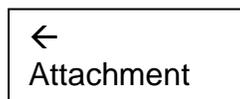


2. Please review your records for the affected period (Jan 16, 2015 to December 31, 2016 which refers to the date stamped on the valve, *see photo below*) to determine which of the suspect shipped parts were installed in marine applications and therefore require replacement. Contact Kidde.recall@kiddeuk.co.uk if you require your purchase history during the affected period.

Note: Where indicated within a yellow circle in the photo below shows an example of a date code 02-16, this means the valve was manufactured in the month of February in the year 2016



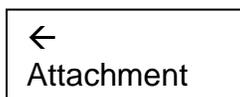
3. Notify the affected shipyards and Owners of this issue using the below attached Shipyard-Owner notification within 30-days of receiving this bulletin. Please copy us at Kidde.recall@kiddeuk.co.uk for our records of this communication.



4. Once the schedule is confirmed by the Owner, send your Kidde Customer Service a “no-charge” purchase order referencing this bulletin number with quantities aligned with your shipment history and shipment request dates aligned to your service schedule.
5. Visit the affected sites to perform replacement during your next scheduled service or no later than June 5, 2018. Since the replacement is being performed during a scheduled service visit, no labour credit will be provided.
6. At site, physically replace the affected parts using processes described in the appropriate Kidde Manuals and Appendix-A to this bulletin. Please contact Kidde Technical Support if you have any questions regarding the replacement process.



Note: Please complete the below Replacement Confirmation Form and return to Kidde.recall@kiddeuk.co.uk for mutual record keeping purposes.



7. Do NOT depressurize the Novec1230 container. 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
Site Replacement Instructions

Please use the following procedure to replace suspect Kidde ECS assemblies utilizing a 2-inch valve in applications specified in Bulletin 171a:

1. Read the “Safety Summary” and “Maintenance” sections from the most current revisions of the applicable manuals listed below PRIOR to performing any service work on the suppression system:

| Kidde Product | Manual P/N | |
|---------------------|---------------|---------------|
| | Land | Marine |
| ECS using HFC-227ea | 06-236115-001 | 06-236225-001 |
| ECS using FK-5-1-12 | 06-236553-001 | 06-236559-001 |

All Kidde manuals are available from Product Management upon request.

2. Notify the site-owner and any monitoring systems of your intent to remedy the system.
3. Kidde Chemical Agent assemblies must be stored, handled, transported, serviced, maintained, tested, and installed only by trained personnel in accordance with the instructions contained in applicable Kidde DIOM manuals.
4. Refer to the material safety data sheets that are available upon request.
5. Follow the steps below to disassemble the charged (pressurized) suspect clean agent cylinder-valve assembly from the system arrangement. The process steps to be used are dependent on the type of actuation mechanism - use steps as appropriate to the equipment at each site and contact Kidde.recall@kiddeuk.co.uk for any assistance:

- A. Pressure Operated Control Heads (For P/Ns, see table below)



| P/N FK-5-1-12 | P/N HFC-227ea | Description |
|---------------|---------------|-------------------------------|
| 870652 | B6793-705 | Lever Op w/ SS Lever |
| 878751 | B6793-706 | Lever-Pressure Op w/ SS Lever |
| 878737 | B6793-707 | Pressure Op |
| 878750 | B6793-708 | Pressure Op, Stackable |

- 1) Disconnect the actuation line from its pressure source (N2 pilot, Master Cylinder, etc)
- 2) Disconnect the swivel nut on the control head from the cylinder valve actuation port.
- 3) Replace the control head with cylinder-safety cap furnished with the cylinder.
- 4) Unscrew the supervisory pressure-switch from the cylinder valve and install a protection cap on the switch connection port.
- 5) Disconnect the discharge hose from the discharge port.
- 6) Replace the Anti-recoil cap to the discharge port.
- 7) Repeat the above steps 1) to 7) for all other cylinders mounted to that system arrangement.
- 8) Loosen the cylinder strap by un-screwing the bolts
- 9) Remove the cylinder from its location and relocate it to an alternate storage location in manner indicated in step 3 above.

B. Cable Operated Control Head (For P/Ns, see table below)

| P/N | Description |
|---------------|-----------------------------|
| 81-979469-000 | Cable Operated Control Head |

- 1) Check if there is any possibility of moving the cylinder closer to the corner pulley, to create a slack in the cable.
- 2) If possible loosen the strap to move the cylinder towards the pulley.
- 3) Tighten the bolts on the strap.
- 4) Very carefully unscrew the swivel nut on the control head from the cylinder actuation port, thread by thread.

CAUTION: Rough handling or wide movements may increase the cable tension and risks accidental discharge

- 5) When the swivel nut is totally unscrewed, lift it just to clear the threads and move it towards cable entry side to create slack in the cable.
- 6) Ensure the control head is fully removed and park it in a safe place.
- 7) Follow above Steps 5.A 5) to 5.A.10).

C. Lever Operated Control Head (For P/Ns, see table below)

| P/N | Description |
|---------------|-----------------------------|
| WK-870652-000 | Lever Operated Control Head |



- 1) Disconnect the swivel nut on the control head from the cylinder valve actuation port.
 - 2) Remove the lever operated control head from the cylinder.
 - 3) Follow above Steps 5.A 5) to 5.A.10).
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6. Install the new cylinder filled with agent in the vacated space with the following steps.
 - A. Position the cylinder at its designated location.
 - B. Secure it in place with the original cylinder strap(s) or wall bracket(s) and mounting hardware.
 - C. Orient the cylinder with the valve outlet angled toward the cylinder discharge piping.
 - D. Remove the safety cap from cylinder valve outlet port.

 - E. Immediately reconnect the valve outlet adapter or flexible discharge hose to the cylinder outlet port.
 - F. Remove the protection cap from the cylinder actuation port.
 - G. Prior to installing the Control Head, ensure that its firing pin is fully retracted or reset.
CAUTION: Failure to follow the above step risks accidental discharge
 - H. Install the control head
 - I. Install the supporting actuation tubing or cable which was removed earlier.
 - J. Install the supervisory pressure switch as instructed in the DIOM manual.
 7. Check the system is complete and no component is missing or loose.
 8. Reconnect all disconnected suppression hardware
 9. If applicable, reconnect all disconnected control unit components and ensure that the control unit is in 'Normal' standby state.
 10. Notify the site-owner and the monitoring systems of completion of the replacement.