

BULLETIN

#16-35K

Date: August 16, 2016

To: All Kidde Fire Systems Distributors

From: Product Management

Subject: Safety Bulletin: Engineered Mechanical Control Heads on Nitrogen Pilot Cylinders – Remediation Plan

Reference: Bulletin #16-24K dated May 26, 2016

IMPORTANT SAFETY NOTICE

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

This safety bulletin details the remediation plan referenced in Bulletin #16-24K dated May 26, 2016 and requires hardware replacement for specific applications using Kidde Nitrogen (N2) Pilot Cylinders with Engineered Mechanical Control Heads. Action may be required on your part. Please read the following carefully and note REQUIRED FIELD ACTIONS.

Issue Description

We have identified a tolerance stack up in our Clean Agent and HP-CO2 system Mechanical Control Heads listed in Table 1 which when fitted on N2 Pilot Cylinders may result in extrusion of an O-ring and consequential N2 pressure loss through the Control Head body.

If assemblies with this tolerance stack up are installed in a system configuration where the N2 Pilot Cylinder feeds a Discharge Time Delay or CO2 Stop Valve, then the leakage described above may cause reduced N2 pressure being supplied to the Discharge Time Delay or Stop Valve, which then would be unable to meet time performance requirements for those units. Since the Discharge Time Delay and Stop Valve are intended to provide building / vessel occupants with sufficient time to seal the protected area and evacuate (in the case of CO2 applications), we are providing this notice of our intention to carry out a mandatory remediation program to resolve timing issues of affected product in the field.

Note: There is no impact on notification appliances and automated sealing of the protected area, if necessary, since these are activated by other controls.

Solution Being Implemented

We have internally modified the Engineered Mechanical Control Heads listed in Table 1 to preclude timing issues caused by tolerance stack-ups and, as advised in Bulletin 16-24K, have externally modified the manual levers to help differentiate from the respective legacy versions as shown in the following Figures 1A and 1B:

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Kidde is committed to ensuring that all actuation systems function fully as intended. To ensure correct functionality, referring table 1 below, this bulletin requires the mandatory replacement of the *Suspect P/Ns* (Stainless steel levered Control Heads and Pilot Cylinder combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement P/Ns* (Black levered Control Heads and Pilot Cylinder Combination) by the *Replacement* (Black levered Control Heads and Pilot Cylinder Cylinder Combination) by the *Replacement* (Black levered Control Heads (Black levered Control Heads (Black levered Control Heads)) by the *Replacement* (Black levered Control Heads) by the *Replacement* (Black levered Control Heads) by the *Replacement* (Black levered Control Heads) by the *Replac*

Suspect	Short Description of Suspect P/N	Replacement P/Ns	Remedy in applications using:	
P/Ns			N2 Service Discharge Time Delay Units	CO2 Stop Valves
Mechanical Control Heads			81-871072-001 Delay, 30-sec	81-870023-000 Stop Valve, 1/2"
WK-870652-000	Lever	WK-870652-000	81-871072-003 Delay, 30-sec	81-870022-000 Stop Valve, 3/4"
85-870652-400	Operated		81-871072-002 Delay, 60-sec	81-870122-000 Stop Valve, 1"
82-878751-000	Lever & Pr	82-878751-000	81-871072-004 Delay, 60-sec	81-870032-000 Stop Valve, 1-1/4"
85-878751-400	Operated			81-870123-000 Stop Valve, 1-1/2"
85-878737-400	Marine, Pr Operated,	82-878737-000		81-870049-000 Stop Valve, 2" 81-890010-000 Stop Valve, 3"
Nitrogen Pilots				81-890208-000 Stop Valve, 4
85-877940-000	Marine	WK-877940-000		
85-877940-001	Marine	WK-877940-001	7	
	(Empty)			
85-877940-200	Marine w/ Pr	WK-877940-200		
	Switch)			

Required Field Actions

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Please take the following actions.

- 1. Completely read this document and attachments
 - a. Appendix-A Site Remediation Instructions (this document)
 - b. Attachment 1: Bulletin 16-35K Receipt Acknowledgement Form (click the text-box to open)

Click to Show/Hide Attachments

c. Attachment 2: Bulletin 16-35K End-User templates – Standard notification, Vessel at sea, Serviced by 'others' (click the text-box to open)

Click to Show/Hide Attachments

d. Attachment 3: Bulletin 16-35K Remediation Completion Form (click the text-box to open).

Click to Show/Hide Attachments

- Complete the Bulletin Receipt Acknowledgement Form and return to <u>kidde_techsupport@fs.utc.com</u>. We will
 follow up to ensure receipt of this bulletin and your acknowledgement starting 30-days from the date of the
 bulletin.
- 3. Kidde Technical Support will email you your purchase history starting 2005 for the affected part numbers in remediation within 3 weeks of this bulletin date. Please review your records and as-built drawings for prior years and to determine which of the shipped parts were installed in the application types detailed above and therefore require remediation. Please contact Kidde Technical Support referencing this bulletin in case of any discrepancy between our data set and yours. See below for contact information.
- 4. Notify your affected end-users of this issue using either the attached templates or creating your own notices. Please copy us at <u>kidde_techsupport@fs.utc.com</u> for our records of this communication.
- 5. 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. In order to ensure remediation of all available systems by August 31, 2017, your Purchase Orders must be received no later than December 31, 2016 and the last requested ship date should be no later than May 30, 2017.
- 6. Visit the affected sites to perform remediation during your next scheduled service <u>or no later than August 31,</u> <u>2017, whichever is earlier</u>.
- 7. At site, physically replace the affected parts using processes described in Kidde Manuals and Appendix-A to this bulletin. Please contact Kidde Technical Support if you have any questions regarding the remediation process.
- 8. Render the suspect items recovered from site unusable and permanently discard them in manner compliant with local laws, safety standards, rules and regulations.
- 9. Complete the Remediation Completion Form and return to <u>kidde_techsupport@fs.utc.com</u>for mutual record keeping purposes.

If you have any questions or concerns, please contact us at:

Regional Sales Managers:	Domestic Click here or International click here
Vertical Market Managers:	Click here
Product Management:	(508) 881-2000
Customer Service:	(508) 881-2000
	Email: Domestic_CS@kidde-fenwal.com
	Email: International_CS@kidde-fenwal.com
Technical Support:	(866) 287-2531
	Email: kidde techsupport@fs.utc.com

As always, we thank you for your business and continued support.

Appendix A Site Remediation Instructions

Please use the following procedure to ensure that the existing SS-lever control head is replaced by the new 'black-lever' version:

- 1. Please follow standard precautions detailed in the appropriate DIOM manual and including those listed below PRIOR to performing any service work on the suppression system.
 - a. Please notify the site-owner and any monitoring systems of your intent to remedy the system.
 - b. Kidde Clean Agent, CO2 and N2 cylinder 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, the relevant NFPA codes, and CGA pamphlets C-1, C-6, G-6, G 6.3 and P-1. CGA pamphlets may be obtained from Compressed Gas Association at <u>www.cganet.com</u>
 - c. Please refer to the material safety data sheets on our website at www.kiddefiresystems.com
 - d. All actuation devices (control heads, discharge heads, etc.) must be removed from the system cylinders prior to performing remediation.
 - e. Please observe all safety precautions applicable to handling pressurized equipment.
 - f. Please refer the "Safety Summary" and "Maintenance" sections in the applicable Kidde Suppression and, if applicable, the Control Unit DIOM manuals for additional information.
- 2. Disconnect the actuation line from any device(s) that are downstream of the pilot cylinder.
- 3. Disconnect the actuation line from the pilot cylinder.
- 4. Remove the existing SS-levered control head mounted on the pilot cylinder and dispose of it in manner compliant with local laws, safety standards, rules and regulations.
- 5. Remove the male connector (WK-699205-010) from the pilot cylinder.
- 6. Position the control head with the black lever in the desired orientation and hand tighten the hex-nut.
- 7. Position a 1-1/2" smoothed jawed adjustable wrench on to the pilot cylinder valve body flats so as to secure the pilot cylinder (see Figure 1). Alternate methods to directly secure the pilot cylinder (to prevent its movement) are also acceptable. Please exercise caution to not damage the pilot cylinder.



Figure 1. Outlet Fitting (P/N: WK-699205-010) Removed and Wrench Shown on Valve Flats

Using the torque wrench* fitted with 1-1/2" crowfoot wrench tighten to a minimum torque of 60 ft. lb.** (see figure 2).

*Recommended 10-100 ft.lb. ½" drive torque wrench. Other ranges are acceptable provided 40-60 ft. lb. is within optimum tolerance for the tool.

**Set wrench to a minimum setting of 55 ft. lb.



Figure 2. Lever Operated Head (P/N: WK-870652-000) tightened using Torque Wrench with 1-1/2" Crowfoot. Always use black lever style per Bulletin 16-24K.

- 9. Reconnect the actuation line to the downstream device(s) disconnected in step 1.
- 10. Reattach the male connector to the pilot cylinder.
- 11. Reconnect the actuation line (hose/tube) to the male connector.
- 12. Reconnect all disconnected suppression hardware
- 13. If applicable, reconnect all disconnected control unit components and ensure that the control unit is in 'Normal' standby state.
- 14. Please notify the site-owner and the monitoring systems of completion of the remediation.