



Technical Bulletin

Place a copy of this bulletin in the front of each Blueprints Manual.
 Redline drawings as needed and include a TB reference note.
 Reference TB implementation on site Action Item Box-chart and/or
 site tool history management log.

Number: 080
Date Issued: 02/04/11
Expiration Date: n/a

Subject/Key Words:	Fire System CO2 Actuator Inadvertent Discharge			
Classification:	<input type="checkbox"/> Informational	<input checked="" type="checkbox"/> Mandatory	<input checked="" type="checkbox"/> Safety Alert	<input type="checkbox"/> PM Impact
	<input type="checkbox"/> Warranty Impact	<input type="checkbox"/> Purchase Parts	<input type="checkbox"/> No Charge For Parts expires ___/___/___. Reference this TB# when ordering NC parts.	
Applicable Akrion Procedures:	None			
Parts/Reference Documents:	Actuator: 216589-001, 00013216-00, 4090861A-00			
Attachments:	ANSUL Bulletin No. 5706			

Issue: High Pressure CO2 valves may not adequately vent pressure and auto discharge without sounding of an alarm. This would cause all cylinders on a specific system to discharge.

Test/Validate Inspect all high pressure CO2 valves for date code range 10-07 to 06-08. Valves were sold by TFS&BP from March 2007 through July 2009.

Solution/ Action to be Taken: Akrion Systems will directly notify customer sites known to have received CO2 fire systems in the suspect time frame.

Many sites purchase, install, and maintain their own CO2 fire systems and must perform inspections independent from Akrion Systems notification.

Identification of actuators which require service and replacement are to be escalated to ANSUL referring to Bulletin No. 5706.

If you have technical questions or require more information, please contact Akrion Technical Support Department via e-mail at techsupport@akrionsystems.com. Authorized service personnel can obtain copies of the latest Akrion procedures and controlled documents from the Akrion Document Control department at doccontrol@akrionsystems.com. Customers must direct all inquires to their local Akrion field service representative. (Form QA1656F1AC)



Bulletin

by Tyco Fire Suppression & Building Products

One Stanton Street
Marinette, WI 54143-2542
www.ansul.com

Bulletin No. 5706

DATE: November 17, 2010
TO: Authorized ANSUL High Pressure Carbon Dioxide System Distributors
FROM: Quality Assurance
SUBJECT: Inadvertent Discharges of High Pressure Carbon Dioxide Systems



If you own, sell or service ANSUL High Pressure CO₂ Systems please read and follow the instructions in this Bulletin.

WARNING

**FAILURE TO READ AND FOLLOW THE INFORMATION IN THIS BULLETIN
INCREASES THE RISK THAT AN ANSUL HIGH PRESSURE CO₂ SYSTEM MAY
INADVERTENTLY DISCHARGE CAUSING BODILY INJURY OR PROPERTY DAMAGE.**

Tyco Fire Suppression & Building Products ("TFS&BP") has received isolated reports of ANSUL High Pressure CO₂ Systems inadvertently discharging. We have discovered that an internal pressure vent on the cylinder valve may not be adequately venting pressure and, under certain conditions, this may cause a cylinder in the system to actuate without the sounding of an alarm, which would then cause all cylinders on this specific system to actuate.

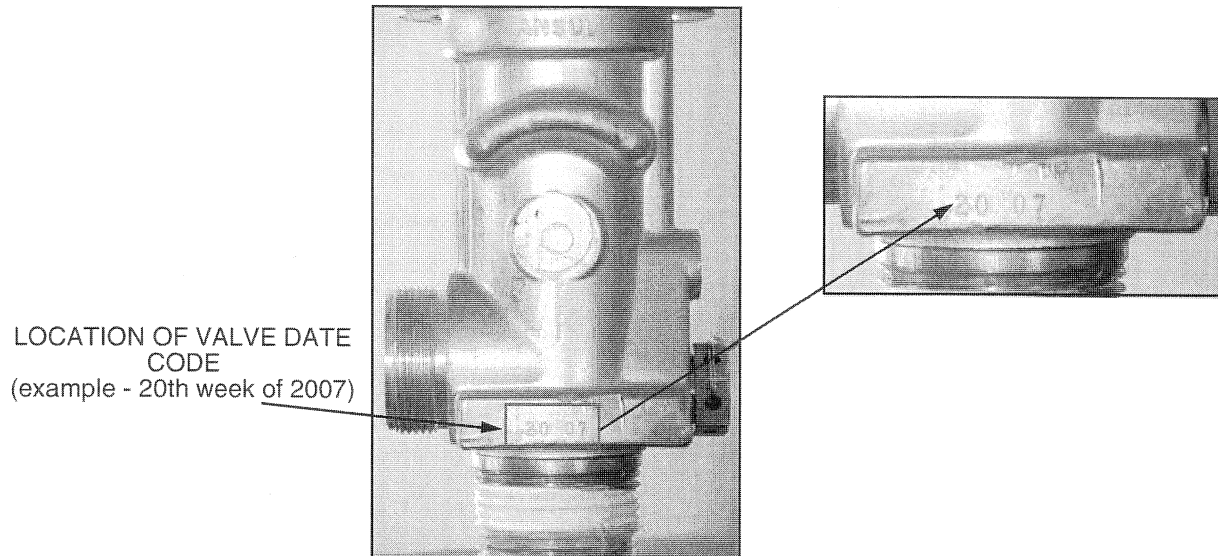
TFS&BP has determined through internal testing that valves with the following date codes (week-year) may be affected:

High Pressure CO₂ valves with a date code range of 10-07 to 06-08.

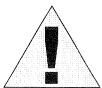
These valves were sold by TFS&BP from March 2007 through July 2009.

Identifying the Date Code

The date code is located on the flat opposite of the valve outlet. The date code represents the **week and year** the valve was manufactured.



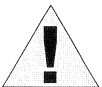
Please follow the Pneumatic Actuation Port Plug Replacement Procedure on Page 3 for any ANSUL High Pressure CO₂ valves with a date code range of 10-07 to 06-08 that you identify.



If you receive empty cylinders with valves in this date code range, contact TFS&BP for further information. **DO NOT** refill the cylinders.

Prioritizing Action

The action(s) below should be taken with respect to all impacted systems, regardless of where they are located. Where many systems are impacted and prioritization is necessary, action should be taken first to address systems installed in: (i) Normally Occupied Enclosure or Space; (ii) Normally Unoccupied Enclosures or Space; and (iii) Occupiable Space –in that order. Thereafter, action should be taken with respect to Unoccupiable Enclosures and Space. See NFPA 12 for clarification on enclosure or space types.



If you are unsure of the space, it is recommended that you address the system as if it were in a Normally Occupied Enclosure or Space.

Action

If you installed or service ANSUL High Pressure CO₂ systems that were installed after March 2007, we recommend that you have a qualified technician take the following actions:

- Immediate steps should be taken to identify the valve date code and complete the Pneumatic Actuation Port Plug Replacement Procedure. A total number of affected valves and their locations should be provided to TFS&BP.
- At the next service/ maintenance cycle, the CV-98 valve should be replaced. TFS&BP will work with you to develop a replacement schedule and will provide you the necessary replacement product to be installed in place of the affected valves.

Pneumatic Actuation Port Plug Replacement Procedure

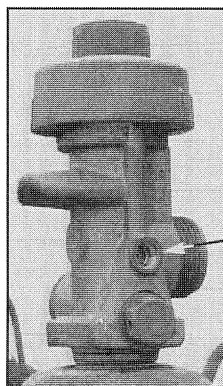
Prior to following the installation steps, make sure you have checked or completed the following.

- Ensure the cylinders are secured in brackets as per requirements in the high pressure CO₂ manual (Part No. 427604)
- Insert lock bar in ANSUL AUTOMAN release or ANSUL AUTOMAN II-C release (if provided) and remove nitrogen cartridge. Install safety shipping cap on cartridge.
- Remove HF or CV-98 electric valve actuator or H.A.D. actuator (if provided) from each cylinder and reinstall actuation safety shipping cap on the valve.
- Remove pneumatic valve actuator or lever actuator (if provided) from each tank.

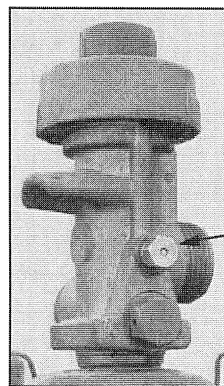
1. Remove the pneumatic actuation port plug using a 3/16 in. hex wrench.

NOTE: If the port is being used for pneumatic actuation, contact TFS&BP for further instruction.

2. Install the CV-98 Vent Plug (Part No. 437612) in the pneumatic actuation port, tightening to approximately 20 in-lbs (2.26 N-m). No thread sealant or teflon tape is required.
3. Upon completion of the installation of all CV-98 vent plugs, return the system to normal operating condition by reinstalling actuators as required and unlocking ANSUL AUTOMAN Release or ANSUL AUTOMAN II-C release as per the High Pressure CO₂ Manual (Part No. 427604)
4. Complete and return the Customer Affidavit/Verification Form (F-2010251).



Remove
Pneumatic
Actuation Port Plug



Install CV-98 Vent
Plug
(Part No. 437612)

Reimbursement

To help offset your costs for identifying affected valves and performing the Pneumatic Actuation Port Plug Replacement Procedure, TFS&BP will credit \$30.00 USD for every affected valve you identify when you return the removed pneumatic actuation port plug with the Customer Affidavit/Verification Form (F-2010251) to TFS&BP.

TFS&BP will entertain reasonable costs associated with the replacement of the valve. Costs associated with the replacement must be pre-approved by TFS&BP.

CV-98 Vent Plugs

Please contact TFS&BP at HPCO2@tycoint.com to request CV-98 vent plugs, Part No. 437612. Please provide your company name, contact information, shipping information and quantity of vent plugs needed.

Next Steps

Please contact TFS&BP at HPCO2@tycoint.com to report any affected valves you find. TFS&BP will work with you to schedule replacement valves.

If you have any questions regarding this bulletin, please contact TFS&BP at the following:

Americas: +1-715-732-3574 / +1-800-323-8492

Europe, Middle East and Africa: +44 (0) 1618750431 or techsupport@tyco-bspd.com

North Asia: +86-21-6163-3373 or NAsiaTech@tycofp.com

South Asia, New Zealand and Australia: +91 80 4052 7000 or SAsiaTech@tycofp.com



If you are unable to take action on the HPCO₂ systems you installed or service, please contact TFS&BP immediately. TFS&BP will coordinate directly with the owner to complete the replacement.

Marine Based HPCO₂ systems: ANSUL General Bulletin #5559 (dated July 16, 2009) addresses marine-based systems under a separate program. Please continue to follow those guidelines for marine HPCO₂ systems.