
Hazard Information Bulletin



U.S. Department of Labor
Occupational Safety and Health Administration

Potentially Hazardous Sherwood TV Series Valves with Compressed Gas Association (CGA) 580 Cylinder Connections

HIB 00-09-25

Purpose

The purpose of this Hazard Information Bulletin is:

1. to alert users of CGA 580 cylinder connections (used for argon, helium, nitrogen and nonflammable gas mixtures), with Sherwood TV series compressed gas cylinder valves (date codes "48-99" or "03-00"), that the valves may have had excessive torque applied during assembly. Cylinders fitted with these valves may fail when the cylinders are filled; and
2. to inform users of CGA 580 cylinder connections fitted with the affected Sherwood TV series compressed gas cylinder valves of the corrective procedures offered by Sherwood and compressed gas cylinder suppliers.

Background

The Atlanta Regional Office brought to the attention of the Directorate of Technical Support potential hazards associated with two specific lots of compressed gas cylinder valves manufactured by Sherwood, a division of Harsco Corporation's Gas & Fluid Control Group. These valves were sold for use throughout the industrial gas industry. The valves have CGA 580 cylinder connections with a date code stamped into the wrench flat of the valve body. (See Illustration No. 1). The potentially impacted lots are identified by the date codes "48-99" and "03-00."

This HIB is not a new standard or regulation, and it creates no new legal obligation. It is advisory in nature, informational in content, and is intended to assist employers in providing a safe and healthful workplace.

For a fuller description of the nature and effect of Hazard Information Bulletins, see the Important Information box at the end of this bulletin.

Description of Hazard

Sherwood has received five reports involving Sherwood TV5861 valves in which the bonnet, upper stem, and hand wheel assembly ejected from the valve body when the cylinder was filled for the first time after the valve was installed. The CGA 580 connections are designed for pressure up to 3000 psig. These failures produced expulsions of sufficient force to potentially injure workers; however, no injuries were reported with respect to any of these incidents. Sherwood's initial investigation revealed that the bonnet thread strength of the valves may have been compromised due to over torquing during the valve installation.

Sherwood has issued a safety alert to its customers. In the alert, Sherwood states that it does not believe the potential hazard involves the TV series valves with date codes 48-99 and 03-00, if the valves have one of the following manufacturing process identifier marks: ")", "O", or "X" imprinted before

the word “Sherwood” directly below the hand wheel assembly. (See Illustration No. 2).

Corrective Actions by Sherwood and the Compressed Gas Industry

Sherwood has requested that its customers immediately quarantine the following TV series valves and attached cylinders with date codes of 48-99 and 03-00, **unless the valves are imprinted with the manufacturing process identifier marks “), “O”, or “X”:**

TV 5881-28	TV 5861-38KF
TV 5881-32	TV 5861-32
TV 5861-28-4KF	TV 5861-32-7
TV 5861-32B	TV 5861-35-7
TV 5861-35	TV 5861-35KF
TV 5861-38-7	

Sherwood will repair or replace quarantined valves as appropriate.

Sherwood has issued the following instructions for inspecting cylinders with the TV series 48-99 and 03-00 valves:

1. Inspect all CGA 580 valves.
2. Do not stand directly over the hand wheel of the valve.
3. Do not attempt to operate the valve.
4. If you locate a valve that is the subject of the safety alert, quarantine the cylinder and valve and immediately contact Ron Kelsey (716-283-1010, ext. 2129).

Sherwood notes that it is committed to assisting the industry in the quick and safe retrieval of this product from the industrial marketplace.

It is the understanding of the Occupational Safety and Health Administration (OSHA) that many suppliers of compressed gas cylinders that use the Sherwood TV series cylinder valves have issued a bulletin and sent letters to all known customers requesting that customers immediately quarantine and

Illustration No. 1

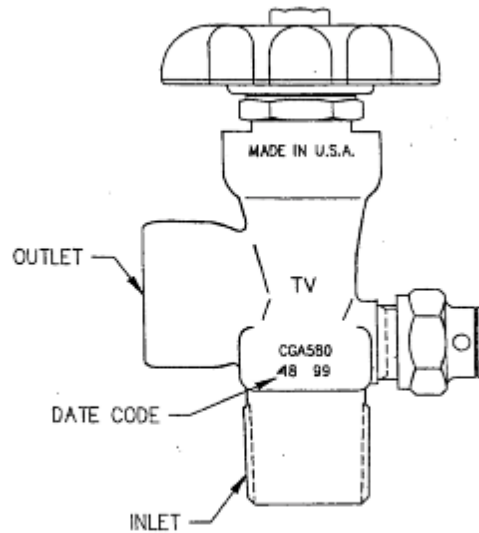
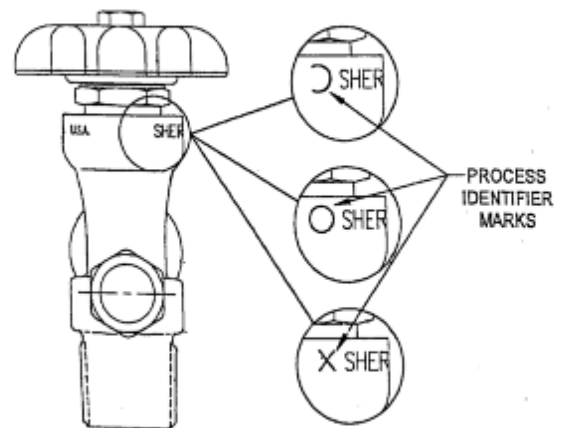


Illustration No. 2



label with a “DO NOT USE” tag all affected cylinders if they are not connected and in use. If they are connected, users are instructed to not operate the valve, secure the area, and contact their cylinder suppliers for assistance.

Recommendations

OSHA recommends that all users of compressed gas cylinders fitted with the CGA 580 cylinder connections and the subject Sherwood cylinder valves follow the manufacturer and the suppliers’ instructions with respect to the proper method for inspecting and handling such cylinders and connections.

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Important Information on the Nature and Effect of Hazard Information Bulletins

The Directorate of Technical Support issues Hazard Information Bulletins (HIBs) in accordance with OSHA Instruction CPL 2.65 to provide relevant information regarding unrecognized or misunderstood health and safety hazards, as well as potential hazards associated with particular materials, devices, techniques, and engineering controls. HIBs are initiated based on information provided by the field staff, studies, reports, and concerns expressed by safety and health professionals, employers, employees and their representatives, and the public. HIBs are developed based on a thorough evaluation of available facts and in coordination with appropriate parties.

The *Occupational Safety and Health Act* requires employers to comply with hazard-specific safety and health standards. In addition, employers must provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm under Section 5(a)(1), the General Duty Clause of the Act. Employers can be cited for violating the General Duty Clause if there is a recognized hazard and they do not take steps to prevent or abate the hazard. However, failure to implement HIB recommendations is not, in itself, a violation of the General Duty Clause. Citations can only be based on standards, regulations, and the General Duty Clause.

Further information about this bulletin may be obtained by contacting OSHA’s Directorate of Technical Support at 202-693-2200