



SAFETY ALERT

October 11, 2021

Dear Valued Customer

Matheson was recently notified by the Compressed Gas Association (CGA) about potential leaks of oxygen when using certain non-conforming medical gas regulator yokes with CGA 870 pin-indexed valves. Matheson is providing this Safety Alert to bring to your attention the issues identified with the medical gas regulator yokes. The attached CGA Safety Alert provides the details with respect to the issue.

Matheson has provided you a copy of the CGA Safety Alert to inform you and/or your customers of the situation with the medical gas regulator yokes. Matheson recommends the CGA Safety alert be issued to all end users and administrators of oxygen therapy using Matheson oxygen cylinders with the CGA 870 pin-indexed valves. Matheson encourages users of medical regulator yokes designated CGA 870 to inspect their regulator yokes and the interface with the CGA 870 medical oxygen valve for the connection issue identified in the CGA Safety Alert. If the condition in the CGA Safety Alert exists, immediately cease using the CGA 870 regulator yoke and contact the supplier of the regulator yoke for guidance. As indicated in the CGA Safety Alert, a leak of oxygen as a result of the non-conforming regulator yoke may present a risk of danger, such as the user not receiving a proper flow of oxygen, the potential for an oxygen-enriched atmosphere, and an associated potential for fire, serious personal injury, or death.

Please take immediate action to inspect, and have your customer inspect, the medical regulator yokes interface with the CGA 870 medical oxygen valve on Matheson supplied cylinders. A copy of the CGA Safety Alert is also available online at: <https://portal.cganet.com/Publication/Details.aspx?id=SA-40>

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CGA 870 MEDICAL OXYGEN REGULATOR YOKE CONNECTION ISSUE

The Compressed Gas Association, Inc. (CGA) has received reports of certain medical gas regulator yokes available for purchase and use in the United States and Canada that do not meet CGA standards. Use of these non-conforming regulator yokes may result in these regulator yokes not achieving a proper connection and seal with oxygen cylinders that utilize certain CGA 870 pin-indexed valves that conform to applicable CGA standards.

Certain available regulator yokes designated CGA 870 and intended for use with CGA 870 medical oxygen valves are not configured in accordance with CGA V-1, *Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections* [1]. Specifically, the interior radius of the face of the non-conforming regulator yokes, where the regulator yoke connects and seals with the medical oxygen valve, uses a configuration that is greater in diameter than is specified in CGA V-1, thereby interfering with the corners of the valve body as shown in Illustration 1 below. See, in comparison, Illustration 2, which shows a regulator yoke with a configuration that complies with CGA 870.

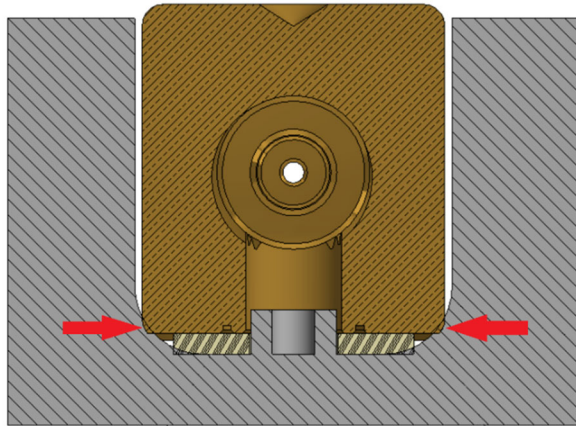


Illustration 1—Out of specification yoke with interference

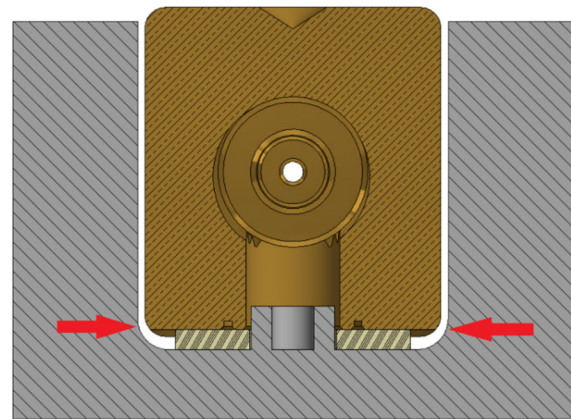


Illustration 2—In specification yoke with no interference

Interference resulting from the non-conforming regulator yoke may prevent a proper connection and seal with a CGA 870 valve outlet, resulting in a leak of oxygen. The leak of oxygen may present a potential risk of danger, such as the user not receiving a proper flow of oxygen, the potential for an oxygen-enriched atmosphere, and an associated potential for fire, serious personal injury, or death.

CGA encourages users of regulator yokes designated CGA 870 to inspect their regulator yokes and the interface with the CGA 870 medical oxygen valve for this condition. If the condition identified in this Safety Alert exists, immediately cease using the CGA 870 regulator yoke and contact your supplier for guidance.

A regulator yoke that is configured as specified in CGA V-1 should not require excessive force to connect and make a leak-free seal to the medical oxygen valve. Do not use excessive force to connect a regulator yoke to a CGA 870 medical oxygen valve. If a connection is achieved and an oxygen leak is detected, immediately shut off the oxygen cylinder valve. If excessive force is needed to connect the regulator yoke, or a leak is detected after connection, contact your supplier for guidance.

Reference

Unless otherwise stated, the latest edition shall apply.

[1] CGA V-1, *Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections*, Compressed Gas Association, Inc. www.cganet.com

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This document is subject to periodic review, and users are cautioned to obtain the latest edition. The Association invites comments and suggestions for consideration. In connection with such review, any such comments or suggestions will be fully reviewed by the Association after giving the party, upon request, a reasonable opportunity to be heard. Proposed changes may be submitted via the Internet at our web site, www.cganet.com.

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A listing of all publications, audiovisual programs, safety and technical bulletins, and safety posters is available via the Internet at our website at www.cganet.com. For more information contact CGA at Phone: 703-788-2700, ext. 799. E-mail: customerservice@cganet.com.

Cylinder Valve Committee

FIRST EDITION: 2021

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