

SAFETY NOTICE

Sherwood Valve, LLC (Sherwood) recently learned of an incorrect burst disc being inadvertently used in some recent shipments of **650-19F9-28** pressure relief devices (PRD). This does not present an immediate safety risk under normal circumstances, but could contribute to the burst of full cylinders under extreme conditions such as a fire.

What products are affected? Specific lots of **650-19F9-28** pressure relief devices are affected. The parts in question would have been **received by our customers between the dates of August 27, 2014 and April 17, 2015**. No other lots or products are affected. Sherwood will provide replacement safety sub-housings (including the disc) for all affected products (with the incorrect disc) returned to Sherwood.

How do we know if our products are affected? All potentially affected products (details below) should be inspected to ensure the appropriate burst disc is fitted to a cylinder according to DOT 49 CFR regulations, The pressure rating of the *incorrect* burst disc is 3775 psig versus the *correct* pressure relief device rating of 3000 psig. See Figure 1 and 2 below for identification of the pressure relief device markings and the incorrect burst disc marking. You should visually inspect and return any 650-19F9-28 PRD plug that has a "3775" marked burst disc and a lot code of 1N109 as shown in Figures 1, 2, and 3 below. For purposes of verification, the appropriate burst disc would have "3000" markings as shown in Figure 1.

If a suspect PRD is already installed onto a valve that is in a cylinder, you or your customer should replace the PRD **at the next fill cycle** with a new PRD.

Is this a safety risk? This does not present an immediate safety risk under normal circumstances, but could present a safety risk under extreme conditions such as a fire.

The purpose of the pressure relief device is to protect a full cylinder from rupture during a fire, by making sure the PRD opens before the DOT cylinder reaches its burst pressure. The 650-19F9-28 pressure relief device should be fitted to an 1800 psig service pressure cylinder. The minimum burst pressure of an 1800 psig cylinder is at least 2.4 times the service pressure (depending on the cylinder design), thus providing a minimum burst pressure of at least 4320 psig.

The burst pressure rating of a pressure relief device is 5/3 (1.667) times the service pressure of a DOT cylinder. Thus, under normal circumstances both the correct (3000 psig) and incorrect (3775 psig) burst disc should discharge before the 1800 psig cylinder reaches its burst pressure, providing it was at full cylinder service pressure. The flow capacity of this PRD is sized for both liquefied and non-liquefied gases and would be expected to vent properly.



Who should we contact if we have questions? Please contact Sherwood's Customer Service Department at 1-888-508-2583 for disposition and handling instructions, or if you have any other questions about this subject.



Figure 1 (650-19F9-28, burst disk correctly rated for 3000 psig)

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Figure 2 (650-19F9-28, burst disk incorrectly rated for 3775 psig)

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Figure 3 (Suspect Lot Code)