ANSUL®
Nitrogen Cylinder Valve
Pressure Gauge Replacement Procedure
Nitrogen Cylinder Valve Pressure Gauge Replacement Procedure

In October 1985, the Rego Company began supplying Johnson Controls with nitrogen cylinder valves (Part No. 3392) equipped with replaceable pressure gauges. Previously, these valve gauges could only be replaced by an authorized Rego repair facility. (Refer to Johnson Controls General Bulletin No. 1896.)

The new valves, with replaceable gauges, are now standard items for use on the 23 ft\(^3\) (0.65 m\(^3\)), 55 ft\(^3\) (1.56 m\(^3\)), 110 ft\(^3\) (3.11 m\(^3\)), and 220 ft\(^3\) (6.23 m\(^3\)) nitrogen cylinder valves in the “Standard Valve Configuration” (Part No. 3392). Note that replaceable gauges are not yet available for the Quick-Opening type valves.

The replaceable gauge (Part No. 3398) is a 3,000 psi (206.84 bar) “MIJA” gauge which is threaded directly into the valve body. This gauge CANNOT BE incorporated for use on the pre-October 1985 valves because of a different valve body machining design.
For safety, the following replacement instructions must be performed in sequence and only by trained and qualified personnel familiar with working on high pressure vessels.

### WARNING

Handle with care. High pressure cylinders are extremely hazardous and may cause serious personal injury, death and property damage if gauge replacement is attempted while cylinder is still pressurized.

Make certain tank is secured before attempting to relieve pressure. Ensure all pressure is relieved from cylinder before attempting gauge replacement.

1. Slowly open hand wheel on nitrogen cylinder valve to ensure that all pressure has been relieved from vessel. If vessel is still under pressure, properly relieve all pressure before proceeding.
2. Remove Bezel cover (Part No. 3459) with strap wrench to avoid damage to Bezel surface.
3. Remove gauge using narrow 7/16 in. open end wrench.
4. Ensure threaded surfaces of valve port are clean. Use of air source is recommended.
5. Obtain proper replacement gauge (Part No. 3398).
6. Apply teflon tape to gauge threads leaving first 1-2 threads of the gauge uncovered to help ensure that there is no blockage of orifice.
7. Properly install gauge and tighten to approximately 70 inch pounds.
8. Then orientate gauge to horizontal reading position by turning the gauge additionally in a clockwise direction. This should require less than one turn.

### WARNING

To prevent personnel injury while pressurizing, ensure proper test and safety practices are observed in accordance with CGA Pamphlets P-1 and P-15.

9. Have the cylinder pressurized and filled with nitrogen gas by trained and qualified personnel.
10. During pressurization, ensure the gauge is checked for leakage with a soap solution.
11. Thoroughly dry the valve; then apply a small amount of thread sealant to threaded portion of Bezel and re-install hand tight. Avoid getting thread sealant on plastic Bezel and wipe clean any areas of excess compound.

If you have any additional questions, contact Johnson Controls Technical Services.