



# Pressure Gauge Installation & Maintenance Guide

**100, 200, 300, 400/500, 402/502, 600/700, 800 and 900 Series**

## Installation

Prior to pressure gauge installation, the following conditions should be considered: temperature, humidity, vibration, pulsation, shock, and other climatic and environmental conditions of the application, as well as the potential need for protective accessories and/or special installation requirements.

Always use a wrench on the gauge socket when installing a NOSHOK pressure gauge into position; never use force on the gauge case to tighten into position. This may result in a loss of accuracy, excessive friction and/or mechanical damage to the measuring element and case of the NOSHOK pressure gauge. When surface or panel mounting a gauge, be sure the surface is flat and the panel cutout and/or the mounting hole configuration is correct (please refer to the NOSHOK Pressure Measurement Solutions catalog for these specifications). If the surface is uneven or the panel cutout is larger than the gauge's diameter, use an adapter ring to remove mounting strain and/or adapt the gauge to the larger diameter panel cutout. When connecting a gauge to a rigid pipe service, use flexible tubing where possible as a connector to eliminate plumbing strain. Rapid pressure pulsation and extreme mechanical vibration may be damaging to some NOSHOK pressure gauge movement gearing, bushings, and linkage. In extreme cases, steps should be taken to dampen these forces. In pressure ranges over 600 psi, a NOSHOK orifice is recommended for pulsation dampening, but in extreme pulsation applications a NOSHOK Piston Type Pressure Snubber may be required.

When installing a gauge into a corrosive situation, be sure to select a pressure gauge or pressure gauge and diaphragm seal combination suitable for your application. Gauges to be used on high temperature service should have a five foot or longer leg of pipe or tubing connecting the gauge to dissipate heat and protect the gauge measuring element from damage. A gauge to be used on steam pressure service should be installed with a water filled NOSHOK pigtail steam syphon between the gauge and the steam line.

## Maintenance

Apart from occasional calibration, NOSHOK pressure gauges require little or no maintenance. Some applications may be more aggressive than others, resulting in an increased frequency in the need for calibration. The environmental limitations for the specific NOSHOK pressure gauge series should be observed in all cases, and gauges applied in situations outside these requirements may result in premature wear and/or failure of the gauge.

## Warranty

All NOSHOK pressure gauges carry a one or three year warranty. NOSHOK warrants for three years our 300, 500, 502, 660, 760, and 900 series liquid filled pressure gauges to be free from defects in materials and workmanship, to remain within the cataloged accuracy and performance specifications, and to maintain the integrity of the hermetically sealed case preventing leakage. NOSHOK warrants for one year our 100, 200, 400, 402, 640, 740, and 800 series dry pressure gauges. Certain limitations do apply; for more information please refer to the NOSHOK Pressure Measurement Solutions catalog.

## CAUTION

Operating conditions including, but not limited to, system pressure, media compatibility and ambient conditions must be considered when selecting gauges and accessories. Improper selections and use of gauges could possibly cause gauge failure and lead to possible property damage or person injury. Refer to American National Standard ANSI B40.1 for the correct selection and use of gauges. A copy of this standard may be obtained from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, NY 10017.

## WARNING

Glycerin or silicone could result in a spontaneous chemical reaction or explosion when combined with strong oxidizing agents including (but not limited to) chlorine, hydrochloric or nitric acid and hydrogen peroxide. Do not use Glycerin or silicone filled gauges or accessories in these types of service. Consult factory for application assistance.

In keeping with and for the purposes of product and/or manufacturing improvements, NOSHOK, INC. reserves the right to make design changes without prior notice.

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