Manway Gasket/Live-Loading Installation Instructions

IMPORTANT:

It is expected that the installer(s) are well acquainted with the equipment and will observe all necessary de-pressurization and cooling requirements such as they apply to the operation on which this installation will occur. Read all instructions before proceeding.



You have been supplied with a Chesterton Manway Gasket Live-Loading Solution. Your manway sealing solution may include: Chesterton 459 manway gasket or Selco® Steel Trap manway gasket; pre-stacked Live Loading assemblies (*Figure 1*); Chesterton 772 Premium Nickel Anti-Seize.

Equipment Preparation

- 1. Completely remove the old gasket from gasket sealing surfaces. Thoroughly and carefully clean both the manway cover plate surface and manway ring surface, removing all foreign material and debris.
- Inspect the gasket sealing surfaces for wire drawing, pits, gouges, cracks, scratches, tool marks and warping. If damage to the gasket sealing area is observed, area must be repaired so that the sealing surface faces are parallel and shall have a surface finish of 3.2 to 6.3 μm (125 to 250 μin) RMS. The manway cover plate, manway ring, manway yokes, stud bolts/nuts and washers should be replaced if damaged beyond repair.

KEY
1 - Stacked Set of Disc Springs
2 - Flat Washer(s)

CAUTIONS

These instructions are general in nature. It is assumed that the installer is familiar with mechanical packing and with the plant requirements for the successful use of mechanical packing. If in doubt, get assistance from someone in the plant that is familiar with the product, or delay the installation until a packing representative is available. All necessary auxiliary arrangements for successful operation (heating, cooling, flushing) as well as safety devices must be employed. These decisions are to be made by the user. The decision to use this or any other Chesterton product in a particular service is the customer's responsibility.

Figure 2: Bolt Patterns



2 Bolts and Studs with 2 Yolks



6 Bolts and Studs with Bolting Plate

Installation

- 1. Handle the Chesterton 459 gasket or Selco[®] Steel Trap gasket with care so as not to damage the gasket before installation. Inspect the gasket for damage before installation.
- 2. Peel away the protective paper backing from gasket adhesive. Center the gasket on the manway cover plate and press into place to adhere the gasket to the sealing surface.
- 3. Follow proper plant/OEM procedure when closing the manway door. Be sure there is no contaminating debris obstructing contact of the gasket to the sealing surface.
- 4. Bolts, nuts, springs and washers should be liberally lubricated on all surfaces with Chesterton 772 Premium Nickel Anti-Seize. Caution should be used so that Chesterton 772 Premium Nickel Anti-Seize does not make contact with gasket or gasket sealing area.
- 5. Install flange springs and washers in the correct orientation detailed in *Figure 1*. If an odd number of springs will be used, the first spring installed should be placed cup side towards the manway door. Install the nut; tighten until finger tight to keep spring/washer assembly in place.
- 6. Using a calibrated torque wrench and the corresponding pattern shown in *Figure 2*, tighten the bolts to 30% of the final OEM recommended torque value.
- 7. Using a calibrated torque wrench and the pattern shown in *Figure 2*, tighten the bolts to 60% of the final OEM recommended torque value.
- 8. Using a calibrated torque wrench and the pattern shown in *Figure 2*, tighten the bolts to 100% of the final OEM recommended torque value.
- 9. Using a calibrated torque wrench torque all bolts, in a clockwise manner around the bolt circle, to 100% of the OEM recommended torque value. Multiple passes may be needed until 100% of torque value is uniformly applied to each bolt.
- 10. Once the boiler has been shut down and allowed to cool, the bolts should be re-tightened to the OEM recommended torque value before re-pressurizing the boiler.

Selco® is a registered trademark of Sealing Corporation



860 Salem Street Groveland, MA 01834 USA Telephone: 781-438-7000 Fax: 978-469-6528 www.chesterton.com

© A.W. Chesterton Company, 2013. All rights reserved. ® Registered trademark owned and licensed by A.W. Chesterton Company in USA and other countries. Chesterton ISO certificates available on www.chesterton.com/corporate/iso