

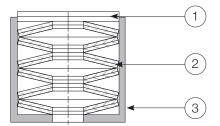
# **CLL Type Live Load Assembly** (With Outer Sleeve Guide)

#### INSTALLATION INSTRUCTIONS

IMPORTANT: Follow all plant and equipment manufacturer safety procedures throughout installation process. Observe all necessary de-pressurizing and cooling requirements. Read all instructions prior to installation.

You have been supplied with a pre-stacked valve live-loading assembly. Each assembly consists of:

Figure 1



#### KEY

- 1 Flat Washer(s)
- 2 Stacked Set of Disc Springs1
- 3 Outer Sleeve Guide

<sup>1</sup> Example Shown: 2 in Parallel, 6 in Series

#### **Equipment Preparation**

- 1. Follow standard valve repacking procedures and instructions.
- Verify gland studs and nuts are clean and in good condition; nuts should turn freely by hand the entire length of the threaded portion. Replace studs and nuts with same grade material if necessary.
- Lubricate all bolts, nuts and live load assembly components with a Chesterton recommended anti-seize compound.
- Verify packing flange top surface is flat and perpendicular to the valve stem to ensure correct installation and operation of the live load assemblies.

#### Live Load Assembly Installation

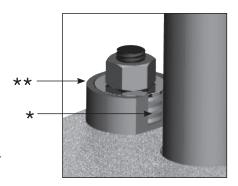
- Install (1) CLL Live Load Assembly on each stud with cut-away side facing valve stem.\*
- Install gland nuts; alternately tighten until top surface of the top flat washer is even with the top surface of the outer sleeve guide\*\*.

## Packing Consolidation and Equipment Start-up

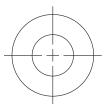
- 7. To Properly consolidate the packing: Actuate the valve 10 times, retighten the packing gland nuts at the end of the last down/in stroke. Repeat this step one time. If necessary, repeat this step again until top surface of the top flat washer is even with the top surface of the outer sleeve guide.
- 8. Follow normal safety precautions when returning the valve to service.
- 9 It is advisable to check the gland adjustment after a few hours of service. Take up as necessary. Verify packing gland flange is perpendicular and square.

If the valve does not actuate properly at the compressed assembly height, release all packing gland load completely. Then gradually tighten the packing gland nuts until no leakage is observed. Do not tighten to the point where the stem will not actuate. Reference Consolidated Spring Assembly Height provided by your Chesterton Specialist; contact Chesterton Application Engineering for assistance.

Figure 2

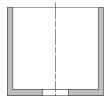


#### **FLAT WASHER**

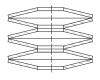


Quantity: \_\_\_\_\_\_
Top: \_\_\_\_\_
Bottom: \_\_\_\_\_

### **OUTER SPRING GUIDE**

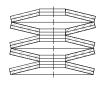


### STACKED DISC SPRING SET



\_\_\_\_\_ in Series

Example Shown: 6 in Series



\_\_\_\_\_ In Parallel

\_\_\_\_\_ In Series

Example Shown: 2 in Parallel, 5 in Series



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