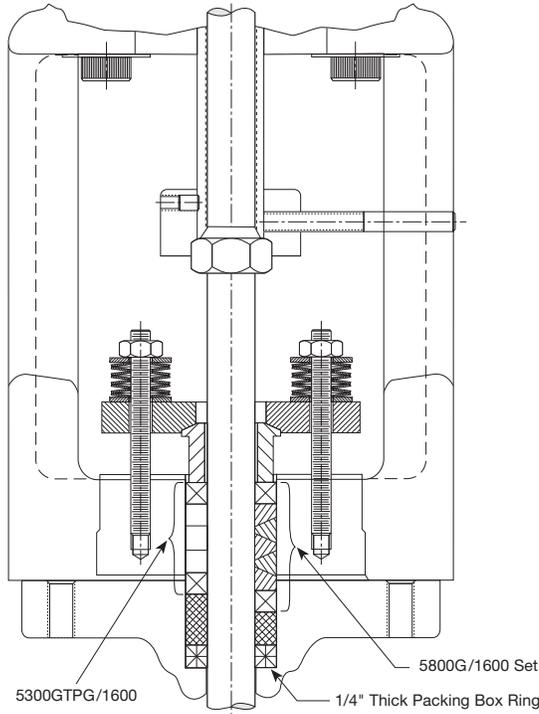


5800G/1600 Set and 5300GTPG/1600 Installation Instructions

Control Valve Kits Designed by Chesterton to fit Leslie® Valves

1. **Precaution:** System should be shut down, depressurized, drained, and cool before valve is handled. Observe all plant safety requirements.
 2. **Check the condition of the valve for the following:**
 - A 10 to 32 RMS (7.5 to 24 Ra) stem finish is required.
 - The stuffing box bore should be 125 RMS (94 Ra) or better finish.
 - The stem run out should not exceed ± 0.010 TIR/FT ($\pm 0,25$ TIR/M)
 - The Packing Box Ring (.250" thick metal ring) should be in the bottom of the stuffing box.
(See *Packing Configuration*)
 3. The stuffing box must be clean, i.e. completely free of any previous packing or foreign material. The valve stem must be clean, free of nicks, scratches and burrs.
 4. Verify the split carbon sleeve height provided is correct. The height of the carbon sleeve should be the calculated height. The calculated height is the difference between the stuffing box depth and the measured packing set height. The packing height is approximately five times the cross section for the 5300GTPG/1600 and approximately six times the cross section for the 5800G/1600 Set. Install the Split Carbon Sleeve (5100, 5101) in the bottom of the stuffing box. Make sure the two halves align and are seated properly on the stuffing box bottom.
For 5800G/1600 Set, proceed to Step 5.
For 5300GTPG/1600, proceed to Step 9.
 5. Install one 1600 cut ring using a Chesterton Tamping Tool. Care must be taken to insure the skive-cut ends are properly mated. Firmly tamp the ring to the bottom of the box.
 6. Carefully install graphite wedge rings starting with an End Cap, followed by an I.D. Sealing Ring, O.D. Sealing Ring, I.D. Sealing Ring, and End Cap.
(See *Packing Configuration*)
 - a) Install rings over the valve stem by twisting slightly, never open rings with a hinge like action.
 - b) Stagger ring joints 90°.
 - c) Use outer most or next ring to push previously installed rings into stuffing box until all rings are in place. **DO NOT USE A TAMPING TOOL**, you may damage the sealing surface on the wedge shaped rings.
 7. Install one 1600 cut ring at the top of the set. The last 1600 cut ring should be flush with or below the top of the stuffing box, never above.
 8. Gently seat the packing set with the Chesterton Tamping Tool. Go to step 10.
 9. Install one 1600 ring using a Chesterton Tamping Tool. Care must be taken to insure the skive-cut ends are properly mated. Firmly tamp the ring to the bottom of the stuffing box. Install three 5300GTPG die formed rings. Rings that are single skive cut must be carefully twisted open and installed around the stem rather than spreading them apart. Gently pre-seat each ring using a Chesterton Tamping Tool. Install one 1600 cut ring at the top of the set; be sure to properly seat the ring. The last 1600 cut ring should be flush with or below the top of the stuffing box, never above.
 10. If necessary, install new gland studs and nuts. Verify the B7 studs and the 2H nuts are of the same or better grade than the studs and nuts being replaced.
 11. Install the packing follower and packing gland flange. Make sure the packing follower enters into the stuffing box.
 12. Lubricate the studs, bottom of the nuts, and live loading assembly components (belleville springs and flat washers) with anti-seize compound (Chesterton Nickel Anti-Seize Compound recommended). Verify the springs and flat washers are properly stacked as shown in the chart. (See *Packing Configuration*)
 13. Install a live loading assembly on each stud.
 14. Install the two packing gland nuts. Tighten each nut until finger tight. Alternately tighten the gland nuts with a torque wrench until the recommended torque is achieved. Verify that the packing gland is square and perpendicular to the stem.
 15. To properly consolidate the packing: Actuate the valve 10 times, retighten the packing gland nuts at the end of the last down / in-stroke. Actuate the valve 10 more times, retighten the packing gland nuts at the end of the last down / in-stroke.
 16. Follow normal safety precautions when returning the valve to service.
 17. It is advisable to check gland adjustment after a few hours of service. Take up as necessary
- 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 Torque Values in chart.*

PACKING CONFIGURATION



- ☒ 1600
- 5300 GTPG
- ▨ SEALING RINGS: *Style 5800 Set*
- ▩ CARBON BUSHING: *Style 5101*
OR
GTPHD RING: *Style 5600* } WHEN REQUIRED
- ☒ 1/4" Thick Packing Box Ring

4800 PSI System Operating Pressure												
Valve Size	Stroke Length	Actuator Size	Stem O.D.	Box I.D.	Stud Dia.	Overall Stud Length Req.	Box Depth *	5101 Bushing Qty. / Hgt.	Live Load Item #	Chesterton Kit Item #	Chesterton Packing	Torque Ft-lbs
1" - 4"	2"	13"	.750"	1.250"	.500"	4.500"	1.875"	1 @ 2.000"	200197	148315	5800G/1600 Set	27

Radial Min.	Axial Min.	Uncompressed Hight	Compressed Hight	Bolt Diameter	Spring Configuration	Chesterton Live Load Item #
.790"	1.701"	1.696"	1.534"	.500"	2 in Parallel, 6 in Series	200197

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Chesterton ISO Certifications are available on www.chesterton.com/corporate/iso



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