1724 Low E Installation Instructions

Live Load Kit Designed by Chesterton to fit Fisher® Valve Body Design E

Precaution: System should be shut down, depressurized, drained, and cool before valve is handled. Observe all plant safety requirements.

1. **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 (±0,25 TIR/M).
   - The Packing Box Ring (if used) should be in the bottom of the stuffing box.
2. The stuffing box must be clean, i.e. completely free of any previous packing or foreign material. The valve stem and gland bolt threads must be clean, free of nicks, scratches and burrs.
3. Verify the split sleeve height provided is correct. The height of the sleeve should be 0.187" shorter than 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 1724 Low E Packing set. Install the Split Sleeve in the bottom of the stuffing box. Make sure the two halves align and are seated properly on the stuffing box bottom.
4. Install one ring of the 1724 Low E packing using a Chesterton Valve Tamping Tool. Care must be taken to ensure the skive-cut ends are properly mated. Firmly tamp the ring to the bottom of the box. Install remaining rings in the same manner, staggering joints 90°. *(See Packing Configuration.*)
5. Install the new gland studs provided. Verify the B7 studs and the 2H nuts provided are of the same or better grade than the studs and nuts being replaced.
6. Install packing gland follower. Make sure the packing follower enters into the stuffing box smoothly.
7. Lubricate the gland stud threads with Chesterton recommended anti-seize compound. Verify the springs and flat washers are properly stacked. *(See Packing Configuration.)*
8. Install a live loading assembly on each stud. The cut away portion of the outer guide should face the stem.
9. Install the two packing gland nuts. Tighten each nut until finger tight. Alternately tighten the gland nuts until the top surface of the flat washer is flush or even with the top, flat surface of the outer guide. Verify that the packing gland is square and perpendicular to the stem.
10. To properly consolidate the packing, reference torque values in Torque and Friction Values table (page 2). When seating the packing set, torque bolts to the higher value supplied (for corresponding valve size). Actuate the valve 5 times, retighten the packing gland nuts at the end of the last down/in-stroke. Loosen gland nuts, then torque to the lower value supplied. Actuate the valve 5 more times then check the gland nut torque. Torque the packing gland nuts at the end of the last down stroke as necessary, using the lower value supplied. All final torques will use the lower torque value supplied.
11. Follow normal safety precautions when returning the valve to service.
12. 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 and Friction Values.*)

    Important: In cases where the packing needs such adjustments, additional torque should be applied in 5% increments not to exceed 20% greater that the engineered values (Ref. Torque and Friction Values). It should be further noted that stem and stuffing box conditions greatly affect sealability in this type of service.

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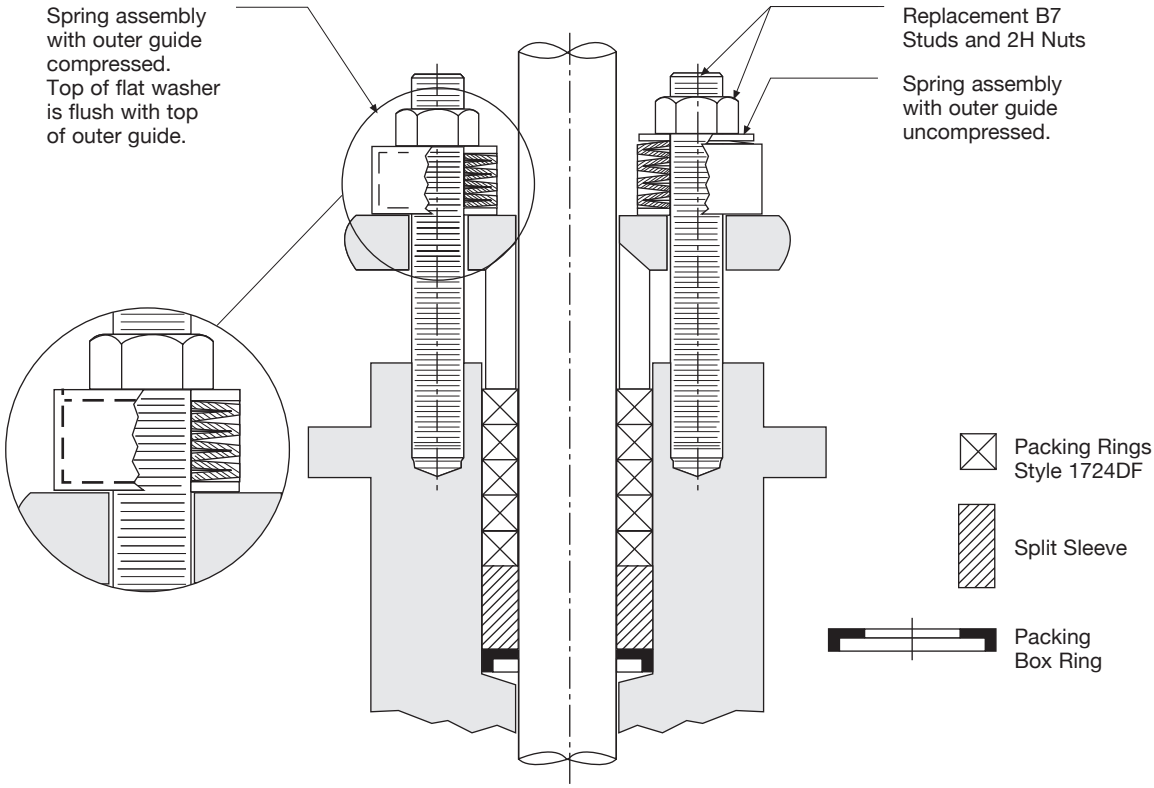
PACKING CONFIGURATION



Radial Min. Inch/mm	Uncompressed Axial Min. Inch/mm	Compressed Height Inch/mm	Bolt/Stud Diameter Inch/mm	Spring Configuration	AWC Live Load Item #
.500"/12,70mm	.800"/20,32mm	.748"/19,00mm	.312"/7,92mm	2 in par/5 in ser	291102
.625"/15,86mm	.730"/18,54mm	.630"/16,00mm	.437"/11,00mm	1 in par/5 in ser	291103
.718"/18,24mm	1.038"/26,37mm	.936"/23,77mm	.562"/14,27mm	2 in par/5 in ser	291104

Torque and Friction Values

BODY RATING: Class 150 & 300													
Valve Size Inch	Stem O.D. Inch/mm	Box I.D. Inch/mm	Bolt/Stud Diameter Inch/mm	Bolt/Stud Length Inch/mm	Box Depth Inch/mm	LL Item #	Complete Kit* Item #	Installed Torque		Operational Torque		Predicted Packing Friction	
								Ft-lb	N.m	Ft-lb	N.m	Lb	kg
1 – 1.5"	0.375 / 9,5	0.875 / 22,2	0.312 / 7,9	2.750 / 69,9	2.518 / 63,96	291102	336688	5	6.7	4	5.4	116	516
2, 3, 4"	0. 500 /12,7	1.000 / 25,4	0.437 / 11,1	3.250 / 82,5	3.565 / 90,55	291103	336689	8	11	7	9.4	155	688
6"/8"	0.750 / 19,0	1.375 / 34,9	0.562 / 14,3	4.250 / 108,0	3.835 / 97,41	291104	336690	19	26	16	22	290	1290
BODY RATING: Class 600													
Valve Size Inch	Stem O.D. Inch/mm	Box I.D. Inch/mm	Bolt/Stud Diameter Inch/mm	Bolt/Stud Length Inch/mm	Box Depth Inch/mm	LL Item #	Complete Kit* Item #	Installed Torque		Operational Torque		Predicted Packing Friction	
								Ft-lb	N.m	Ft-lb	N.m	Lb	kg
6"/8"	0.750 / 19,0	1.375 / 34,9	0.562 / 14,3	4.250 / 108,0	3.835 / 97,41	291104	336690	19	26	16	22	290	1290

**Kits designed to fit the following Fisher® Valve Models: EAC, EAD, EC, ED, EHAT, EHD, EHT, EJ, EP, ES, ENC, END, ENJ, EWPP, and ENS.*