

CHESTERTON®

5700B SOOTBLOWER KITS

INSTALLATION INSTRUCTIONS

Precaution

Observe all depressurizing cooling requirements, maintenance and safety procedures before installation. Read all instructions before proceeding. Before removing feed tube packing, shut off steam supply line to the poppet valve. Disconnect the power source to prevent automatic operation of the blower and possible electric shock.

General

Verify the axial clearance is sufficient to install the new studs and live loading assemblies when the carriage is retracted. If the clearance is insufficient, have the stop adjusted accordingly. 5700B Sootblower Packing (5300G Die-Formed Rings and 1600 End Rings) will provide a seal between the feed tube O.D. and stuffing box I.D. The feed tube is highly finished to provide a satisfactory sealing surface and should be protected from damage during maintenance. If the feed tube is detached from the beam, care should be taken in reassembling to ensure that the feed tube is centered in the lance hub without any off center binding when the feed tube is properly located. Proper alignment must be maintained to avoid scoring the feed tube or causing premature wear of the packing.

Tools Required

Jack stand, Torque wrench and socket, 6" (152 mm) measuring scale, flash light and dental mirror.

5700B Sootblower Kit Installation

- Remove old packing with a Chesterton flexible packing extractor. Direct the hook at the bore of the stuffing box to avoid damaging the feed tube.
- Carefully clean stuffing box, gland and all components. A solvent may be required to remove all traces of residue.
- Inspect the feed tube and stuffing box for scratches, nicks, and wear. Repair or replace any damaged parts.
- Measure the depth of the stuffing box.
- Tap on the throat bushing in the bottom of the stuffing box to make sure that it is properly seated. If possible look into the stuffing box and inspect it for excessive wear. If the clearance is $>.062"$ (1,50mm) total clearance, or $>.031"$ (0,75mm) clearance per side, the throat bushing should be replaced.
- Remeasure the depth of the box to get a repeat of the depth measurement.
- Install half of the bronze split bushing onto the feed tube (shaft O.D.) and position it 2" into the stuffing box. Now rotate it around the stuffing box to check for concentricity between the feed tube and box I.D. If the feed tube is not concentric in the stuffing box, the easiest method is to use a pump jack to center the feed tube. Half of the bronze bushing should now rotate completely around the stuffing box.
- Coat the inside of the stuffing box liberally with Chesterton 772 Premium Nickel Anti-Seize.
- Coat the outside of the bushing with Chesterton 772 Premium Nickel Anti-Seize. Insert the bushing with the splits at 6 and 12 o'clock. Tamp to the bottom of the box. Once it is bottomed out release the jack stand if used. This will hold the bushing in place.
- Install the packing in the stuffing box with 1600 top and bottom with 5300G in the center of the set. If additional rings are required, use the extra 1600 ring (s) supplied to fill the remainder of the stuffing box. Be sure to stagger the joints of each ring. Rings that are single cut must be carefully twisted open and installed around the feed tube rather than spreading them apart. Be sure to seat each ring individually to the bottom of the stuffing box.

- If necessary, install new studs to accommodate for spring assembly height. Reference minimum axial and radial clearance needed on the table below:

5700B Sootblower Kits
680 psi (47 bar) Maximum Operating Pressure

TORQUE TABLE

ITEM NO.	TORQUE		CONSOLIDATED SPRING ASSEMBLY HEIGHT APPROX.		* AXIAL CLEAR.	* RADIAL CLEAR.
	FT-LBS	N-M	IN	MM		
34814	12	16	.896	22.7	1.096	.635
34815	15	18	.896	22.7	1.096	.635
34816	14	19	.896	22.7	1.096	.635
34817	19	26	.896	22.7	1.096	.635
34818	12	17	1.240	31.5	1.530	.635

* MINIMUM CLEARANCE NEEDED IN ORDER THAT 5150 SPRING ASSEMBLY WILL FIT.

- Coat the gland O.D. with Chesterton 772 Nickel Anti-Seize. Install it into the box and tighten the gland bolts finger tight.. Check to make sure that the gland is centered to the steam tube and parallel with the stuffing box face. Use a torque wrench and tighten the gland to 2/3 of the specified torque shown in table. Remove nuts.
- Install spring assemblies well coated with Chesterton 772 Premium Nickel Anti-Seize as per instructions. Replace and tighten gland bolts finger tight. Again, check to make sure that the gland is centered to the steam tube and parallel with the stuffing box face. Use the torque wrench and tighten the gland nuts to the specified torque (in the table). Periodically check gland centering and parallelism with the steam tube and stuffing box face.
- Cycle the soot blower four or five times. Check the torque as the feed tube moves into the bottom. If it was necessary to tighten the gland nuts more to bring them back to the specified torque-repeat this step again. Due to packing consolidation, it may be necessary to retorquer more than once.
- After the soot blower has been in service for a few days, it is recommended to check the torque one final time. Adjust to the specified torque if necessary.

**** CAUTION:** During the initial cycle make sure the lance and feed tube support does not lift up and damage the new extended studs.

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