



SV SprayDry® Nozzle

Maintenance and Assembly Guide



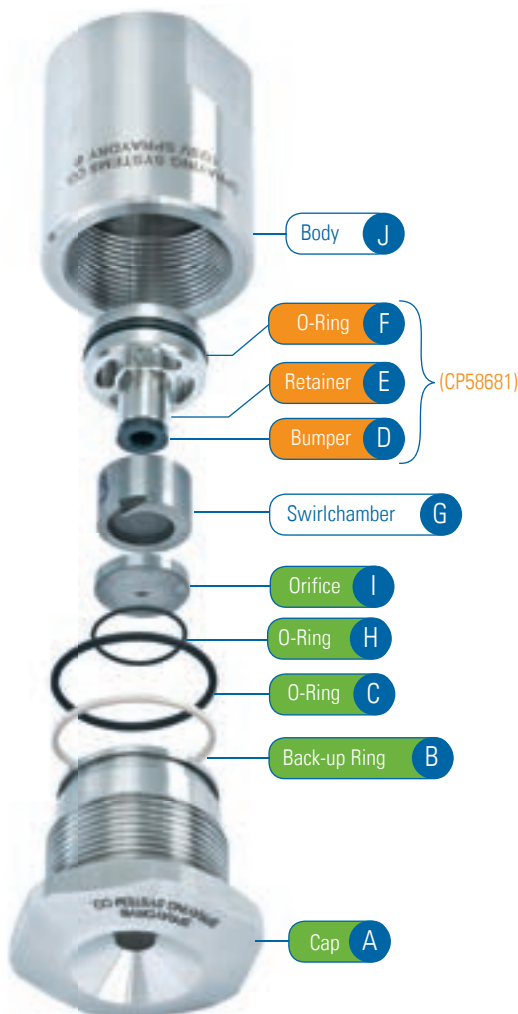
Disassembling the Nozzle

Step One: Disassemble Cap Sub-assembly

- Push out internal components using the plastic tool CP63341-PP supplied with the O-Ring Kit (ABSV-ORING-KIT). Insert the tool into the front of the nozzle, pushing on the orifice. Do not use harder objects on the orifice to avoid chipping. Replace orifice (I) when worn
- Remove orifice face seal O-ring (H) using compressed air inserted into the cap. Do not use metal implements as they will scratch the O-ring groove
- Remove O-ring (C) and back-up ring (B). Discard and replace O-ring and back-up ring with new components

Step Two: Disassemble Retainer Sub-assembly (CP58681) if Required

- Retainer sub-assembly, CP58681 (D, E, F) can be reused or rebuilt by removing O-ring (F) and bumper (D). Rebuild CP58681 (D, E, F) only if swirlchamber (G) is not held firmly in place by bumper (D). Remove swirlchamber (G) from bumper (D) and replace when worn



SV SprayDry Part Number Reference

ITEM	PART NO.	DESCRIPTION
A	CP58667-SS	CAP, 303 STAINLESS STEEL
B	CP63420-3-PEEK	BACK-UP-RING, PEEK™
C	CP63425-3-VIFDA	O-RING, FDA VITON®
D	CP58669-VIFDA	BUMPER, FDA VITON
E	CP58668-SS	RETAINER, 303 STAINLESS STEEL
F	CP7717-2-019-VIFDA	O-RING, FDA VITON
G*	SVS-__-YM	SWIRLCHAMBER, M TUNGSTEN CARBIDE
H	CP63425-4-VIFDA	O-RING, FDA VITON
I*	SVI-__-YM	ORIFICE INSERT, M TUNGSTEN CARBIDE
J*	CP58666-__-SS	BODY, 303 STAINLESS STEEL
NONE	CP63341-PP	REMOVAL TOOL, POLYPROPYLENE

CP58681
SUB-ASSEMBLY

For O-ring repair kit, order ABSV-ORING-KIT (includes items B, C, D, F and H)

* Exact part number depends on orifice, swirlchamber or inlet pipe size

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Assembling the Nozzle

Preparation

Using food-grade O-ring lube or grease, lightly coat the O-rings (C), (F), (H) and back-up ring (B). Coat the exterior of bumper (D) is not desirable.

Step One: Build Retainer Sub-Assembly (CP58681) if Required

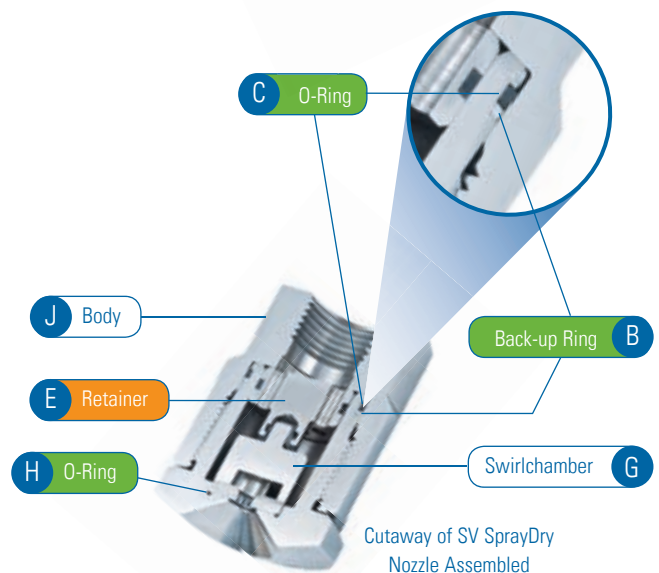
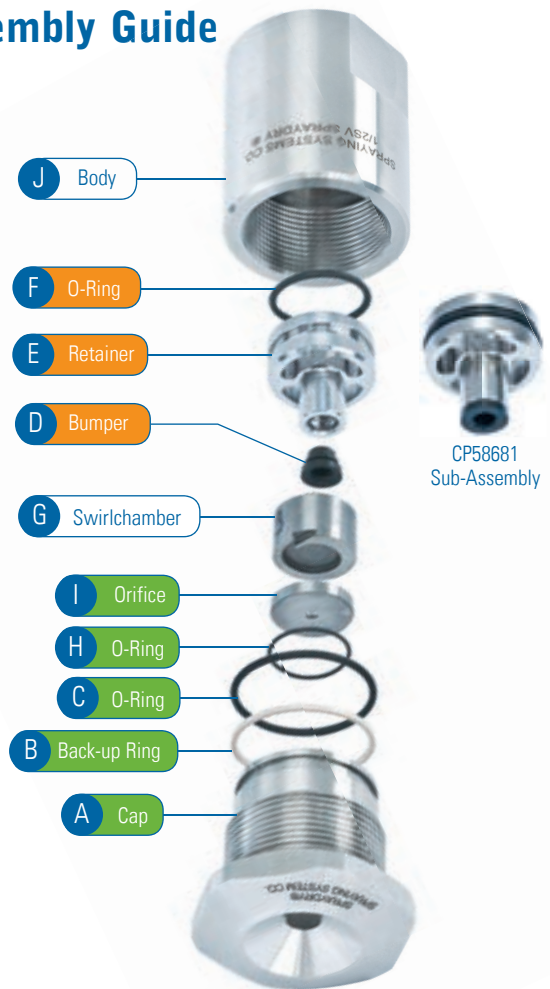
- Retainer sub-assembly CP58681 (D, E, F) can be reused or rebuilt. O-ring (F) and bumper (D) should only be replaced when worn
- Slip O-ring (F) onto retainer (E). Push bumper (D) into retainer (E) while twisting to seat properly

Step Two: Build Cap Sub-Assembly

- Slip back-up ring (B) onto cap (A). Then slip O-ring onto cap. Be sure to maintain the orientation shown in the cutaway. The O-ring needs to be on the pressure side and back-up ring “backs-up” the O-ring
- Insert orifice face seal O-ring (H) into cap (A). Push the O-ring all the way to the bottom groove with your finger
- Slide the orifice (I) into the cap (A) with your finger and be sure the polished radius of the through hole is inside the cap (pressure side). The radius should not be visible from the front. Push the orifice down to seat the face seal O-ring (H)

Step Three: Final Assembly

- Insert the small diameter nib of the swirlchamber (G) into the bumper (D) of the retainer sub-assembly (D, E, F) already assembled
- Insert the swirlchamber/retainer sub-assembly (D, E, F, G) into cap (A) and push down so the swirlchamber contacts the orifice (I) in the cap (A). If the swirlchamber (G) is not held firmly in place by the bumper (D) during assembly, rebuild the retainer assembly (D, E, F) with a new O-ring (F) and bumper (D) as described in step one
- Screw cap (A), with components A through I already assembled, into body (J) until the cap (A) bottoms in the body (J). It is necessary for the cap (A) to bottom out in the body (J). Hand-tight assembly will hold even maximum rated pressure but a maximum torque of 30 in-lbs is advisable to keep cap (A) from unscrewing due to vibration and pump pulsation



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