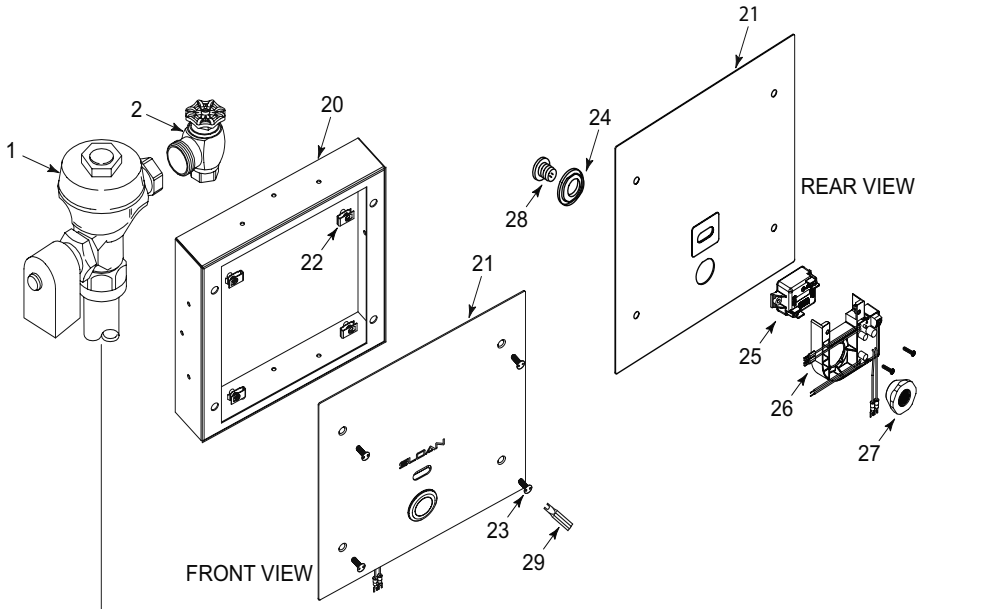
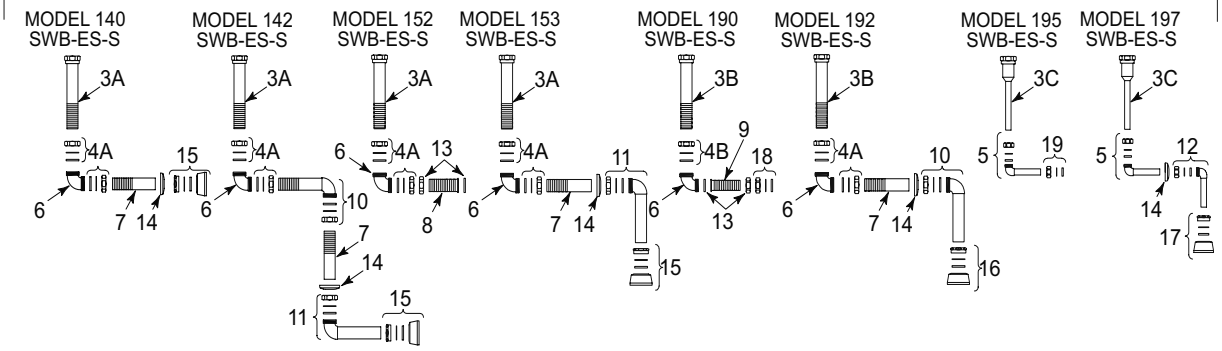
Optima® Royal® ES-S SWB Flushometer

Model 152 ESS SWB





Item No.	Part No.	Description
1.	‡	Valve Body – Solenoid Operated
2.	H-730-A	Bak-Chek® Control Stop
3A.	V-500-AA	1-1/2" (38 mm) x 11-1/2" (292 mm) Vacuum Breaker Assembly RB (Models 140 ES-S & 152 ES-S)
	V-500-AA	1-1/2" (38 mm) x 6" (152 mm) Vacuum Breaker Assembly RB (Model 142 ES-S)
	V-500-AA	1-1/2" (38 mm) x 7-1/2" (191 mm) Vacuum Breaker Assembly RB (Model 153 ES-S)
3B.	V-500-AA	1-1/2" (32 mm) x 11-1/2" (292 mm) Vacuum Breaker Assembly RB (Models 190 ES-S & 192 ES-S)
3C.	V-500-AA	3/4" (19 mm) x 10-1/2" (267 mm) Vacuum Breaker Assembly RB (Models 195 ES-S & 197 ES-S)
4A.	F-2-AA	1-1/2" (38 mm) Slip Joint Coupling RB (Set of Two)
4B.	F-2-A	1-1/2" (38 mm) Slip Joint Coupling RB
5	F-15-A	ELL with 3/4" (19 mm) Tail RB (Models 195 ES-S & 197 ES-S)
6.	F-21	1-1/2" (38 mm) Double Slip Elbow
7.	F-102	1-1/2" (38 mm) Outlet Tube CP†
8.	F-100	1-1/2" (38 mm) Outlet Tube RB†
9.	F-110	1-1/4" (32 mm) Outlet Tube RB†
10.	F-25-A	1-1/4" (32 mm) Elbow Assembly†
11.	F-25-A	1-1/2" (38 mm) Elbow Assembly CP (Model 153 ES-S)
12.	F-15-A	ELL with 3/4" (19 mm) Tail CP (Model 197 ES-S)
13.	F-2-A	1-1/2" (38 mm) Coupling with S-21 Gasket
14.	F-7	Flange
15.	F-5-A	1-1/2" (38 mm) Spud Coupling Assembly CP
16.	F-5-A	1-1/4" (32 mm) Spud Coupling Assembly CP
17.	F-5-A	3/4" (19 mm) Spud Coupling Assembly CP
18.	F-2-A-U	1-1/4" (32 mm) Slip Joint Coupling RB
19.	F-2-AW	3/4" (19 mm) Slip Joint Coupling RB
20.	WB-3	Wall Box Frame
21.	WB-47	Access Panel
22.	WB-18	U-Type Nuts (4)
23.	WB-49	Tamper Resistant Screws (4)
24.	———	Bezel
25.	EL-1500-L	Sensor (Water Closet)
	EL-1500	Sensor (Urinal)
26.	EL-630-A	Sensor Retainer and Circuit Board Assembly
27.	———	Back Nut
28.	EL-438	Override Button
29.	WB-36	Spanner Bit #1/4

† "L Dimension" only available between 2" & 10 ¾"
‡ Part number varies with valve model variation; consult factory.

NOTE: The information contained in this document is subject to change without notice.

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NOTE: Upon detection of the user, the red indicator light flashes slowly for a period of eight seconds. When the user leaves the detection range, the indicator light flashes rapidly and the Sensor initiates the flush sequence. Then the indicator light stops flashing and the valve flushes. The valve will flush after a three-second delay.

1. **PROBLEM: Valve does not function (red light does not flash when user steps in front of sensor).**

   CAUSE: No power is being supplied to sensor.
   SOLUTION: Ensure that the main power is turned "ON." Check transformer, leads and connections. Repair or replace as necessary.
   CAUSE: EL-1500 (Urinal installations) or EL-1500-L (Closet installations) Sensor is not operating.
   SOLUTION: Replace EL-1500 or EL-1500-L Sensor.

2. **PROBLEM: Valve does not function (red light flashes when user steps in front of Sensor).**

   INDICATOR: Red light stops flashing when user steps away and valve makes a "clicking" sound but does not flush.
   CAUSE: No water is being supplied to the valve.
   SOLUTION: Make certain that water supply is turned "ON" and the Control Stop is open.
   CAUSE: EL-128-A cartridge is fouled or jammed.
   SOLUTION: Turn electronic power to valve "OFF" (failure to do so could result in damage to the solenoid coil). Remove the solenoid operator from the valve and remove the EL-128-A cartridge. Clean and/or repair as necessary.
   INDICATOR: The red light stops flashing when user steps away but the valve does NOT make a "clicking" sound and does NOT flush.
   CAUSE: EL-163-A solenoid shaft assembly is fouled or jammed.
   SOLUTION: Turn electronic power to valve "OFF" (failure to do so could result in damage to the solenoid coil). Remove EL-101 or EL-166 nut from the solenoid operator. Remove the coil from the solenoid operator. Use a spanner wrench or pliers to remove the EL-163-A solenoid shaft assembly from valve. Clean and/or replace as necessary. Be sure to replace plunger spring when reassembling Solenoid Shaft Assembly.
   INDICATOR: The red light flashes three (3) short flashes, three (3) long flashes then three (3) short flashes ("S-O-S") and continues to repeat this cycle even when user steps out of the sensor's detection range.
   CAUSE: Sensor wiring connections are incorrect.
   SOLUTION: Refer to Step 10 of this Installation Instructions for proper wiring.
   CAUSE: Wiring to Sensor is ground shorted.
   SOLUTION: Find short in wiring circuit and correct.
   CAUSE: EL-165-2 solenoid coil is burnt out or coil is not connected to solenoid plunger shaft.
   SOLUTION: Reinstall or replace coil as necessary.

3. **PROBLEM: Volume of water is insufficient to adequately siphon fixture.**

   CAUSE: Control Stop is not open wide enough.
   SOLUTION: Adjust control stop for desired water delivery.
   CAUSE: Low Consumption unit is installed on Water Saver or Conventional fixture.
   SOLUTION: Replace Diaphragm component parts of valve with kit that corresponds to appropriate flush volume of fixture.
   CAUSE: Inadequate water volume or pressure available from supply.
   SOLUTION: Increase pressure or supply (flow rate) to the valve. Consult factory for assistance.

4. **PROBLEM: Length of flush is too long (long flushing) or valve fails to shut off.**

   CAUSE: Water Saver valve is installed on Low Consumption fixture.
   SOLUTION: Replace Diaphragm component parts of valve with kit that corresponds to appropriate flush volume of fixture.
   CAUSE: Relief valve in diaphragm is not seated properly or bypass hole in diaphragm is clogged.
   SOLUTION: Disassemble inside Diaphragm component parts and wash parts thoroughly. Replace worn parts if necessary.

5. **PROBLEM: Water splashes from fixture.**

   CAUSE: Supply flow rate is more than necessary.
   SOLUTION: Adjust Control Stop to meet flow rate required for proper cleansing of the fixture.

If further assistance is required, please contact Sloan Technical Support at:
1-888-SLOAN-14 (1-888-756-2614).

!!! IMPORTANT — Control Stop Setting !!!

Never open Control Stop to where the flow from the valve exceeds the flow capability of the fixture. In the event of a valve failure, the fixture must be able to accommodate a continuous flow from the valve.