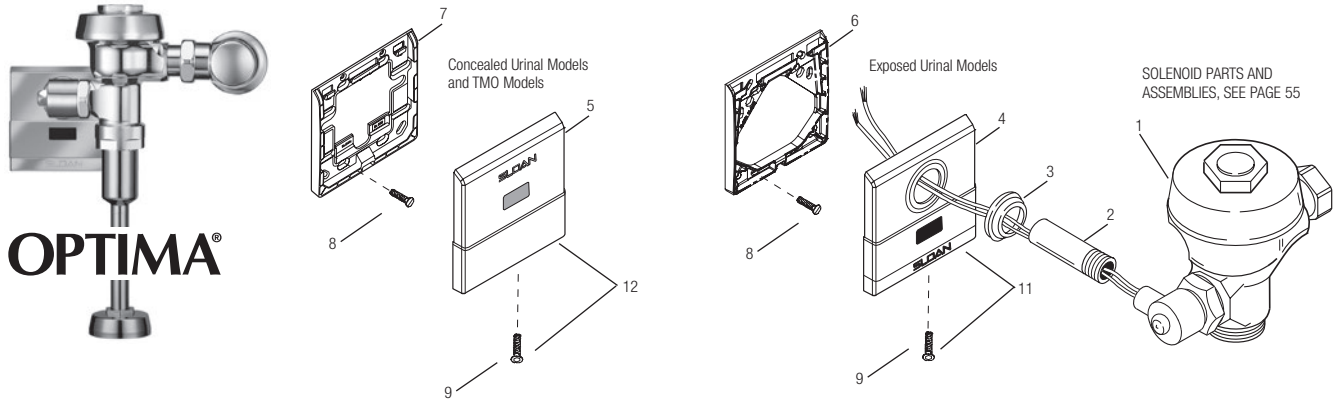


Optima® Flushometers

Current style Royal® (after 09/26/10)



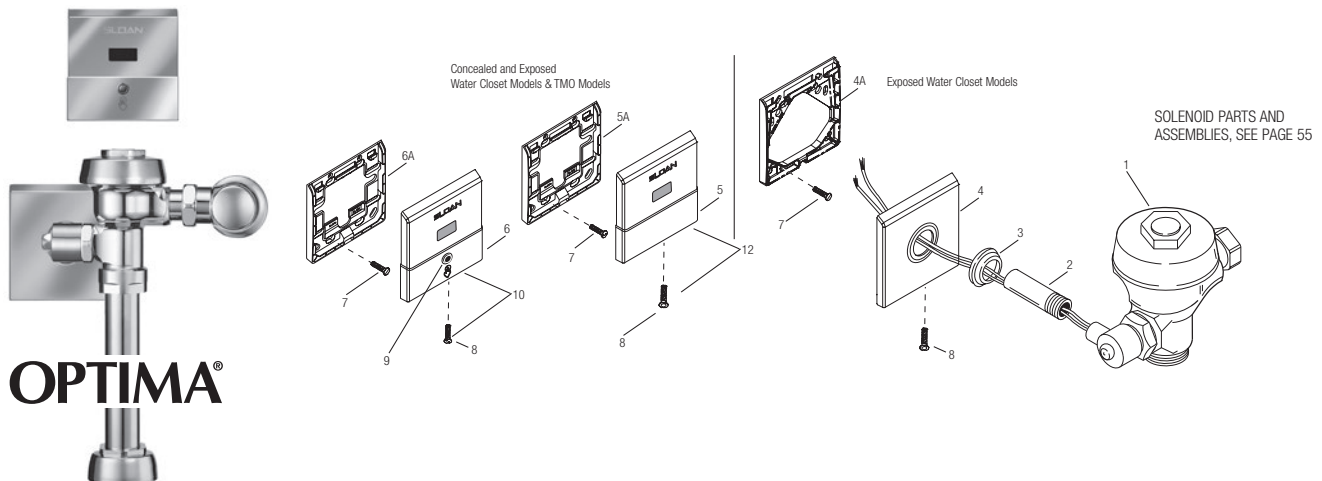
CURRENT COVER AND MOUNTING PLATE PARTS FOR ROYAL® URINAL FLUSHOMETER

Item No.	Code No.	Part No.	Description
1.	‡		Solenoid Activated Valve Assembly
2.	0306249PK	F-15	Tail Assembly 3/4" x 6"
3.	0345150	EL-431-A	Flange Assembly
4.	3305100	EL-640-A	CP Cover Plate with Sensor and Mounting Hardware Assembled (Exposed Models) (includes EL-549 mounting plate)
5.	3305101	EL-645-A	CP Cover Plate with Sensor Assembled (Concealed Models) (includes EL-592 Mouting Plate)
6.	0305251PK	EL-549-A	Exposed Urinal Mounting Plate Kit

Item No.	Code No.	Part No.	Description
7.	0305292PK	EL-592-A	Concealed Urinal Mounting Plate Kit
8.	—		Screws (Flat Head Slotted #6/32)
9.	5305100	EL-674	Wall Plate Screw Kit (#6-32 x 15.87mm)
†	3305620	EL-1500	Urinal Sensor Replacement (Exposed and Concealed Models, not shown)

† NOTE: For exposed & concealed solenoids manufactured before 2003 or not shown here, consult factory for individual part assembly.

‡ Part number varies with valve model variation; consult factory. For Solenoid Breakdown, See Pg 48.



CURRENT COVER AND MOUNTING PLATE PARTS FOR ROYAL® CLOSET FLUSHOMETER

Item No.	Code No.	Part No.	Description
1.	‡		Solenoid Activated Valve Assembly
2.	0306249PK	F-15	Tail Assembly†
3.	0345150	EL-431-A	Flange Assembly
4.	3305105	EL-625-A	CP Cover Plate with Mounting Hardware (Closet only) (includes EL-549 mounting plate)
4A.	0305251PK	EL-549	Exposed Closet Mounting Plate
5.	3305107	EL-635-A	Concealed CP TMO Cover Plate with Sensor (includes Mounting Kit)
5A.	0305292PK	EL-592	Concealed Closet TMO Mounting Plate

Item No.	Code No.	Part No.	Description
6.	3305104	EL-595-A	CP Cover Plate with Sensor and Override Switch Assembled (Closet only) Exposed ES-S
6A.	0305292PK	EL-592	Exposed & Concealed Closet Mounting Plate
7.	—		Screws (Flat Head Slotted #6/32)
†	3305621	EL-1500-L	Closet Sensor Replacement Kit (Closet only, not shown)
	3345095	EL-1034-AB	Button Assembly Repair Kit
8.	5305100	EL-674	Wall Plate Screw Kit (#6-32 x 15.87mm) (6 per kit)
9.	3345095	EL-1034-A	ESS Override Repair Kit for EL-595-A

PLATES ONLY

Item No.	Code No.	Part No.	Description
10.	3345090	EL-1030-A	Plate Assembly Only w/ Set Screw*
11.	3345091	EL-1031-A	Plate Assembly Only w/ Set Screw*
12.	3345092	EL-1032-A	Plate Assembly Only w/ Set Screw*

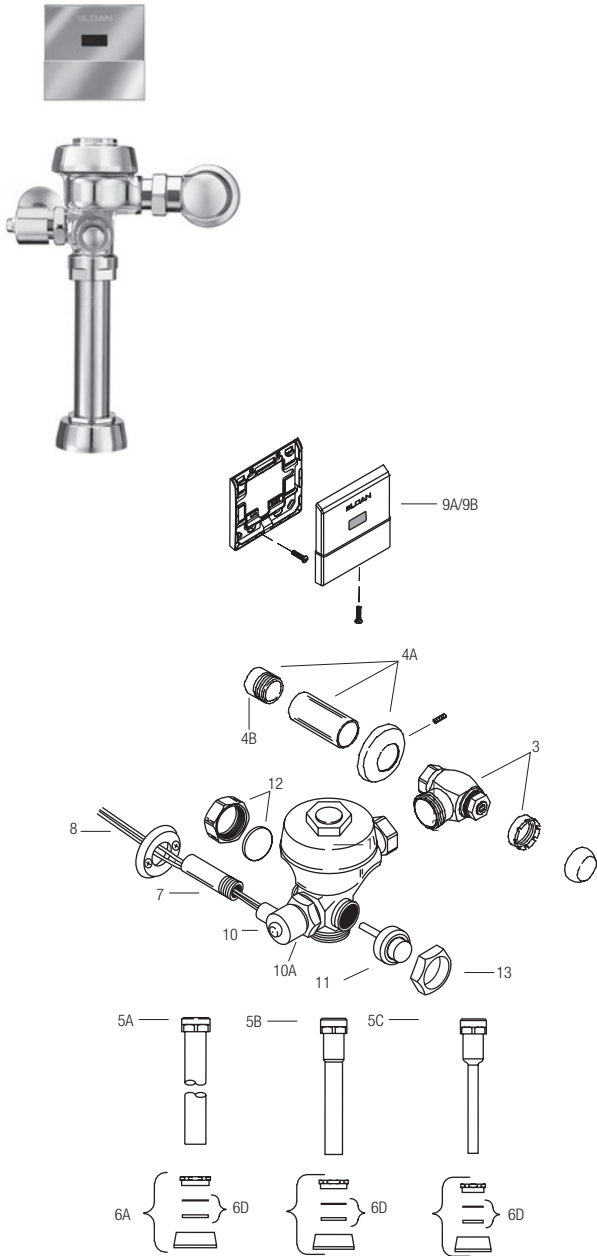
† NOTE: For exposed & concealed solenoids manufactured before 2003 or not shown here, consult factory for individual part assembly.

‡ Part number varies with valve model variation; consult factory.

* Mounting plates do not include sensor.

For Solenoid Breakdown, See Pg 48.

Optima® Royal® ES-S TMO Exposed Flushometers



ROYAL® OPTIMA® ES-S TMO EXPOSED FLUSHOMETER PARTS LIST

Item No.	Code No.	Part No.	Description
1.	‡		Solenoid Activated Valve Assembly
2.	‡	H-700-A	Bak-Chek® Control Stop
3.	3308772	H-1010-A	Vandal Resistant Stop Cap
4A.	3308782	H-633-AA	1" (25 mm) Sweat Solder Kit
4B.	3308603	H-532	Adapter, 1" NPT to 1" Tube
	3308607	H-535.	Adapter, 3/4" NPT to 3/4" Tube
5A.	—	V-600-AA	1-1/2" (38 mm) Vacuum Breaker Assembly CP (Models 110/111, 115, and 116)
5B.	—	V-600-AA	1-1/4" (32 mm) x 9" (229 mm) Vacuum Breaker Assembly CP (Model 180 ES-S)
5C.	—	V-600-AA	3/4" (19 mm) x 9" (229 mm) Vacuum Breaker Assembly CP (Model 186 ES-S)
6A.	0306146	F-5-AT	1-1/2" (38 mm) Spud Coupling Assembly CP (Models 110/111, 115, and 116)
6B.	0306140	F-5-AU	1-1/4" (32 mm) Spud Coupling Assembly CP (Model 180)
6C.	0306125	F-5-AW	3/4" (19 mm) Spud Coupling Assembly CP (Model 186)
6D.	SEE SLIP JOINT GASKETS AND RINGS ON TABLE BELOW		
7.	‡	F-15	Tail Assembly
8.	0302323PK	B-110-A	Flange Assembly
9A.	3305107	EL-635-A	CP Cover Plate with Sensor (Mounting Plate and Screws included) (Models 110/111, 115, and 116)
9B.	3305101	EL-645-A	CP Cover Plate with Sensor (Mounting Plate and Screws included) (Models 180 and 186)
10.	0305329	EL-124-2	CP 24V Solenoid Assembly Only
10A	3305043	EL-128-A	Actuator Cartridge Assembly (not shown detailed)
	3305045	EL-1028-A	Solenoid Assembly w/ Cartridge Assembly
11.	0303009	C-2-A	True Mechanical Override Button
12.	3325814	EBV-1017-A	CP Valve Handle Cap
13.	0301082PK	A-6	CP Nut
—	3345080	EL-1026-A	ES-S to ES-S-TMO Conversion Kit Exposed includes Body/Tail assembly (no inside parts or covers) #11, #12, #13, DO-22 and EL-110 o-rings
—	3305043	EL-128-A	Actuator Cartridge
14.	3302306	B-51-A	Triple Seal Handle Repair Kit
15.	3345080	EL-126-A	ESS to TMO Retrofit Conversion Kit (Exposed*)
	3388015	H-1015-A	Flow Control Kit (HEU Only) (not Shown)

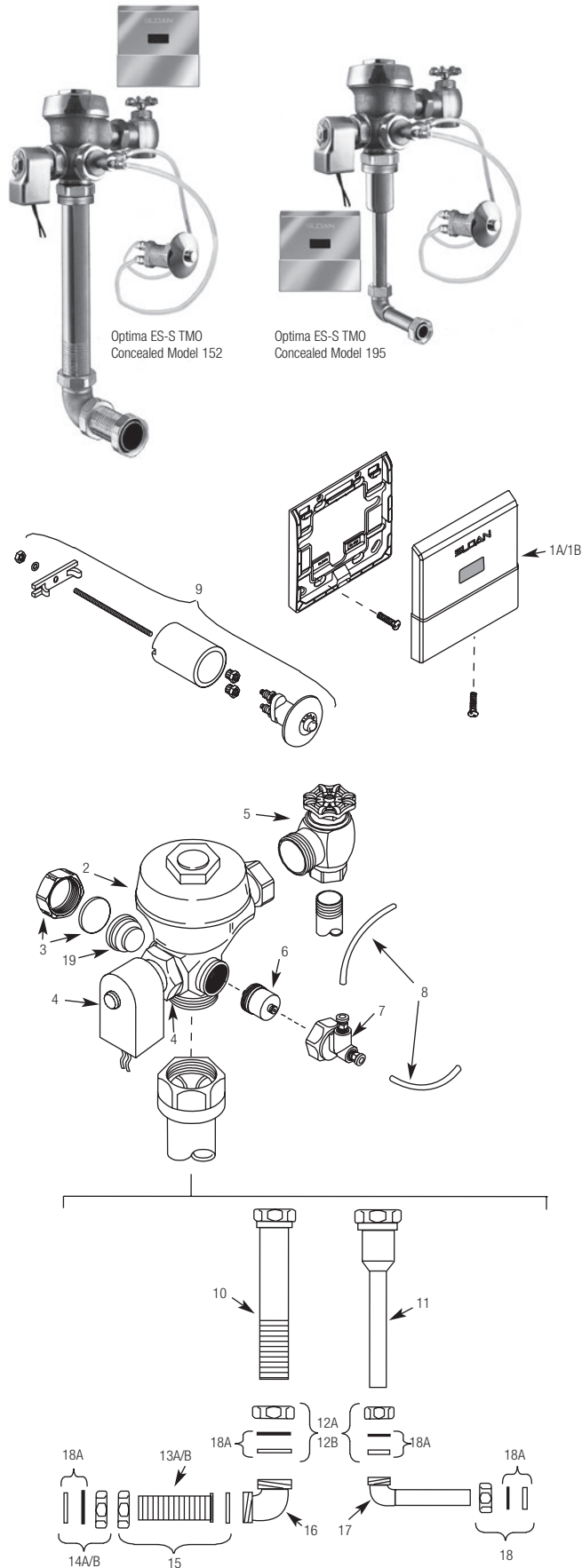
‡ Part number varies with valve model variation; consult factory.

* Not shown

ITEM 6D. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

Optima® Royal® ES-S TMO Concealed Flushometers



ROYAL® OPTIMA® ES-S TMO CONCEALED FLUSHOMETER PARTS LIST

Item No.	Code No.	Part No.	Description
1A.	3305107	EL-635-A	CP Cover Plate with Sensor (Mounting Screws included) (Model 152)
1B.	3305101	EL-645-A	CP Cover Plate with Sensor (Mounting Screws included) (Model 195)
2.	‡	—	Valve Assembly
3.	3301093	A-1013-A	Concealed Valve Handle Cap RB
4.	0305331	EL-138-2	RB Concealed 24V Solenoid Assembly
4A.	3305043	EL-128-A	Actuator Cartridge Assembly Only
5.	‡	H-730-A	RB Bak-Chek® Control Stop
6.	3318001	HY-83-A	Actuator Cartridge
7.	3318005	HY-109-A-1	Valve Actuator Assembly
8.	0318093	HY-30	1/4" (6 mm) x 48" (1219 mm) Connecting Tubes
9.	0318117	HY-100-A-1	Metal Push Button Assembly
10.	‡	V-500-AA	1-1/2" (38 mm) Vacuum Breaker Assembly RB (Model 152)
11.	‡	V-500-AA	3/4" (19 mm) Vacuum Breaker Assembly RB (Model 192)
12A.	0306088	F-2-AT	1-1/2" (38 mm) Slip Joint Coupling Assembly RB (Model 152)
12B.	0306054	F-2-AW	3/4" (19 mm) Slip Joint Coupling Assembly RB (Model 192)
13A.	‡	F-110	1-1/4" (32 mm) Outlet Tube with Flange and Scoring (Model 152)
13B.	‡	F-100	1-1/2" (38 mm) Outlet Tube with Flange and Scoring (Model 152)
14A.	0306059	F-2-AU	1-1/4" (32 mm) Slip Joint Coupling Assembly RB (Model 152)
14B.	0306088	F-2-AT	1-1/2" (38 mm) Slip Joint Coupling Assembly RB (Model 152)
15.	0306091	F-2-A	1-1/2" (38 mm) Coupling with S-21 Gasket (Model 152)
16.	0206146PK	F-21	1-1/2" (38 mm) Double Male Slip Joint Elbow
17.	‡	F-15-A	ELL with 3/4" (19 mm) Tail
18.	0306054	F-2-AW	3/4" (19 mm) Slip Joint Coupling
18A.	SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW		
19.	0305190	EL-190-A	Handle Adapter Assembly
20.	3345020	EL-1033-A	ESS to TMO Retrofit Kit (Concealed)*
	3388015	H-1015-A	Flow Control Kit (HEU Only) (not Shown)

‡ Part number varies with valve model variation; consult factory.

* Not Shown

ITEM 18A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket