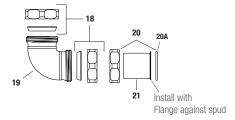


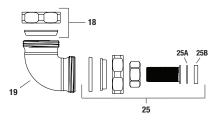
CX Sensor Flushometer Hardwired with Battery Backup

Sensor Closet Flushometers Sensor Urinal Flushometers CX 8158 - 1.6 gpf (Wall Hung) CX 8198 - 0.5 gpf CX 8158 - 1.28 gpf (Wall Hung) CX 8198 - 0.25 gpf CX 8158 - 1.1 gpf (Wall Hung) CX 8198 - 0.125 gpf CX 8154 - 1.6 gpf (Floor Mount) CX 8154 - 1.28 gpf (Floor Mount) CX 8154 - 1.1 gpf (Floor Mount) 11 10 12 5 2A 11A 8 13 PARTS LIST

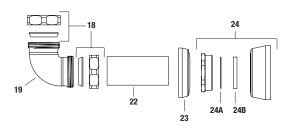
For Model 8158, Wall Hung



For Model 8198, Urinals



For Model 8154, Floor Mount Exposed Rear Inlet



| PARTS | S LIST | | | | |
|-------------|---------------------------|------------|--|--|--|
| Item No. | Code No. | Part No. | Description | | |
| 1 | See table on | next page | Piston Assembly | | |
| 2 | See table on next page | | Activation Assembly (Includes Item 2A) | | |
| 2A | See table on | next page | Solenoid Assembly | | |
| 3 | 0340062 | GBL-56 | Inlet Adapter 1-1/2" NPT x 1" NPT Closet | | |
| | 0340063 | GBL-171 | Inlet Adapter 1-1/2" NPT x 3/4" NPT Urinal | | |
| 4 | | | Sensor CX Valve Body and Box Assembly* | | |
| 5 | _ | _ | Conical Spring** | | |
| 6 | 3340011 GBL-1011-A | | Safety Collar (Collar for Bonnet) | | |
| 7 | 33400011 GBL-214-A | | C-Bracket with (2) Lock Nuts and Screws | | |
| 8 | | | Sensor CX Wall Bracket* | | |
| 9 | 9103681PK ELG-79 | | Battery Pack | | |
| 10 | See table on | next page | Sensor Assembly Closet | | |
| | See table on | next page | Sensor Assembly Urinal | | |
| 11 | See table on | next page | Finished Wall Plate | | |
| 11A | See table on | next page | Override Button Only | | |
| 12 | 3340012 | GBL-1012-A | Activation Assembly Tool | | |
| 13 | 33400035 | GBL-1062-A | Replacement Mud Guard, Sensor (4 pack) | | |
| 14 | 0340085 | GBL-66-A | Shut Off Sleeve (with O-Ring) | | |
| | | | | | |

FLUSH CONNECTION PARTS

| Item No. | Code No. | Part No. | Description | | | | |
|-------------|--|---|--|--|--|--|--|
| 15 | 3323183 | V-651 | Vacuum Breaker Repair Kit | | | | |
| 16 | 0323011 | 323011 V-500-A RB Vacuum Breaker Assembly | | | | | |
| 17 | 33060011 | F-227-A | Adjustable Tube 6.5" Replacement Kit, 8158, 8198 | | | | |
| | 33060012 | F-228-A | Adjustable Tube 10.5" Replacement Kit, 8154 | | | | |
| 18 | 0306395 F-211-A CX Poly Washer and Coupling (set of 2) | | | | | | |
| 19 | 0306392PK F-305 CX E | | CX Elbow for CX Poly Washer | | | | |
| 20 | 0306091 | 1-1/2" Coupling Set with S-21 Gasket | | | | | |
| 20A | 0319079 | S-21 | 1-1/2" Rigid Gasket | | | | |
| | | | | | | | |



CX Sensor Flushometer Hardwired with Battery Backup

FLUSH CONNECTION PARTS CONTINUED

| Item No. | Code No. | Part No. | Description | | | | |
|-------------|------------------------------|---|---------------------------------------|--|--|--|--|
| 21 | 0306031PK | F-1 | 1-1/2" x 6" Tube | | | | |
| 22 | 0396119PK | F-101 | F-101 CP Tube Outlet 1-1/2" x 10-1/2" | | | | |
| 23 | 0306237PK | D306237PK F-7 Tube Flange 1-1/2" x 2-3/4" with Prong | | | | | |
| 24 | 0306146 | F-5-AT | 1-1/2" Spud Coupling Assembly CP * | | | | |
| 24A | 5306058 | F-3 | Friction Ring 1-1/2" | | | | |
| 24B | .4B 5322001 VBF-5 Sli | | Slip Joint Gasket 1-1/2" | | | | |
| 25 | 0306396 | _ | Urinal Flush Connection Repair Kit | | | | |
| 25A | 5306055 | F-3 | Red Friction Ring 3/4" | | | | |
| 25B | 5306113 | F-5 | Gasket 3/4" | | | | |

ADDITIONAL PARTS

| Code No. | Part No. | Description |
|--|---|--|
| _ | F-304 | Poly Washer 1-1/2" (Only available in F-211-A, Item 18) |
| 33400019 | GBL-1050-A | Sensor CX Finished Wall Plate and Button Assembly, SF‡ |
| 33400021 | 0021 GBL-1051-A Sensor CX Finished Wall Plate and Button Assembly, CF | |
| 33400022 GBL-1052-A Sensor CX Finished Wall Plate and Button Assembly, | | Sensor CX Finished Wall Plate and Button Assembly, BN [‡] |
| 33400023 GBL-1053-A Sensor CX Finished Wall Plate and Button Assembly | | Sensor CX Finished Wall Plate and Button Assembly, PB [‡] |
| 33400024 | 33400024 GBL-1054-A Sensor CX Finished Wall Plate and Button Assembly, | |
| 33400025 GBL-1055-A Sensor CX Button Only Replacement Kit, SF | | Sensor CX Button Only Replacement Kit, SF |
| 33400026 GBL-1056-A Sensor CX Button Only Replacement Kit, CP | | Sensor CX Button Only Replacement Kit, CP |
| 33400027 | 33400027 GBL-1057-A Sensor CX Button Only Replacement Kit, BN | |
| 33400028 | GBL-1058-A | Sensor CX Button Only Replacement Kit, PB |
| 33400029 | GBL-1059-A | Sensor CX Button Only Replacement Kit, GR |
| | | |

[‡] Includes mounting screws and wrench.

ITEM NO. 1 - SENSOR PISTON ASSEMBLY SELECTION GUIDE

| Code No. | Part No. | Description | Piston Color* |
|----------------------------|------------|--|--------------------|
| 3340053 | GBL-1037-A | 1.6 gpf/6.0 Lpf Closet Piston Assembly | Green |
| 33400079 GBL-1098-A | | 1.28 gpf/4.8 Lpf Closet Piston Assembly | Blue/Black |
| 33400061 | GBL-1088-A | 1.1 gpf/4.2 Lpf Closet Piston Assembly | Burgundy/ Black |
| 3340055 | GBL-1039-A | 0.5 gpf/1.9 Lpf Urinal Piston Assembly | Red |
| 3340056 | GBL-1040-A | 0.25 gpf/1.0 Lpf Urinal Piston Assembly | Burgundy |
| 33400003 | _ | 0.125 gpf/0.48 Lpf Urinal Piston Assembly [†] | Red/Pink |

NOTE: Item No. 1 includes Item No. 5 (Conical Spring).

ITEM NO. 2 - ACTIVATION ASSEMBLY SELECTION GUIDE

| LEGACY CONNECTION** - PRIOR TO DECEMBER 2021 | | | | | |
|--|------------|---|-----------------------------|--|--|
| Code No. | Part No. | Description | Plug Color* | | |
| 3340057 | GBL-1041-A | 1.6 gpf/6.0 Lpf Closet Activation Assembly, Legacy connection | Green | | |
| 3340058 | GBL-1042-A | 1.28 gpf/4.8 Lpf Closet Activation Assembly, Legacy connection | Purple | | |
| 3340059 | GBL-1043-A | 0.5 gpf/1.9 Lpf Urinal Activation Assembly, Legacy connection | Red | | |
| 3340060 | GBL-1044-A | 0.25 gpf/1.0 Lpf Urinal Activation Assembly, Legacy connection | Burgundy | | |
| 33400006 | GBL-1070-A | 0.125 gpf/0.48 Lpf Urinal Activation Assembly, Legacy connection | N/A; Nickel plated brass | | |

PIGTAIL CONNECTION** - AFTER DECEMBER 2021

| Code No. | Part No. | Description | Plug Color* |
|----------|------------|--|-----------------------------|
| 33400051 | GBL-1077-A | 1.6 gpf/6.0 Lpf Closet Activation Assembly, Pigtail connection | Green |
| 33400052 | GBL-1078-A | 1.28 gpf/4.8 Lpf Closet Activation Assembly, Pigtail connection | Purple |
| 33400062 | GBL-1092-A | 1.1 gpf/4.2 Lpf Closet Activation Assembly | Grey |
| 33400053 | GBL-1079-A | 0.5 gpf/1.9 Lpf Urinal Activation Assembly, Pigtail connection | Red |
| 33400054 | GBL-1080-A | 0.25 gpf/1.0 Lpf Urinal Activation Assembly, Pigtail connection | Burgundy |
| 33400056 | GBL-1081-A | 0.125 gpf/0.48 Lpf Urinal Activation Assembly, Pigtail connection | N/A; Nickel plated brass |
| | | | |

^{*} Colors may differ. Consult factory to confirm you have the correct assembly.

ITEM NO. 2A - SOLENOID ASSEMBLY SELECTION GUIDE

| Code No. | Part No. | Description |
|----------------------------|----------|---|
| 33250013 EBV-415-A | | Solenoid Assembly with Legacy connection |
| 33400078 GBL-1096-A | | Solenoid Assembly with Pigtail connection |

ITEM NO. 10 - SENSOR ASSEMBLY SELECTION GUIDE

| Code No. | Part No. | Description |
|---------------------------|------------|---|
| 0340271 GBL-209-AC | | CX Sensor Assembly for Closet with Legacy connection |
| 0340272 | GBL-210-AU | CX Sensor Assembly for Urinal with Legacy connection |
| 33400069 GBL-219-A | | CX Sensor Assembly for Closet with Pigtail connection |
| 33400071 | GBL-220-A | CX Sensor Assembly for Urinal with Pigtail connection |

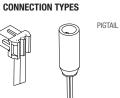
LEGACY

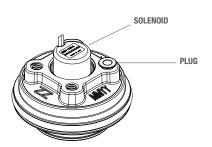
NOTE: After December 2021, the Activation, Solenoid, and Sensor Assembly connections were changed to a pigtail style connection.

ITEM NO. 1 - SENSOR PISTON IDENTIFICATION CHART

| TEM NO. 1 SENSON FISTON SHANN | | | | | | | |
|-------------------------------|-------------------------|--------------------------|-------------------------|-------------------|--------------------|---------------------|--|
| PISTON BODY FLOW CONTROL | x & | | × | × | ×& | × a | |
| Flush Volume | 1.6 gpf Water Closet | 1.28 gpf Water Closet | 1.1 gpf Water Closet | 0.5 gpf Urinal | 0.25 gpf Urinal | 0.125 gpf Urinal | |
| Piston Body | Green | Light Blue | Burgundy | Red | Burgundy | Red | |
| Flow Control | Green | Black Cage | Black Cage | Red | Burgundy | Pink | |
| Part Number | GBL-1037-A | GBL-1098-A | GBL-1088-A | GBL-1039-A | GBL-1040-A | _ | |
| Code Number | 3340053 | 33400079 | 33400061 | 3340055 | 3340056 | 33400003 | |







 $[\]mbox{\ensuremath{^{\star}}}$ Colors may differ. Consult factory to confirm you have the correct Piston Assembly.

^{† 0.125} gpf/0.48 Lpf Valve Components (Piston, Main Seat, and Activation Assembly) are NOT interchangeable with any other flush volume Valves.

^{**} Includes Solenoid Repair Kit #2A.



CX Sensor Flushometer Hardwired with Battery Backup

TROUBLESHOOTING GUIDE

1. Sensor LED Flashes Continuously Only When User Steps Within Range.

A. Unit is in start-up mode; no problem. This feature is active for the first ten (10) minutes of operation.

2. Red Light Blinks Four (4) Times When User Steps Within Range.

- A. "AA" Batteries depleted; replace batteries, lithium or alkaline. Ensure batteries are installed with proper polarity (+) and (-). **Do not mix** old and new batteries or different types.
- B. (Hardwired) Battery Box not connected; connect Battery Box to Sensor Assembly.

3. Valve Does Not Flush; Sensor Not Picking Up User.

- A. Verify a urinal Sensor is not used on a closet Valve. Model is marked on rear of Sensor.
- B. Range is too short; recalibrate range. Restart the Sensor by holding the Override Button in for 25 seconds, then release the Override Button and step away for one (1) minute; with power connected, this is considered a Soft Reset.
- C. For Hard Reset of Sensor, remove all power connections (battery and hardwire) for one (1) minute. Reconnect power and step away from front of Sensor for 3½ minutes. Then test Sensor activation by standing in front of Sensor for ten (10) seconds, then step away and wait for flush. Test push button.

4. Valve Does Not Flush; Sensor Picking Up Opposite Wall or Surface, or Only Flushes When Someone Walks By.

Red Light Flashes Continuously for First 10 Minutes Even with No One in Front of the Sensor.

- A. Verify a closet Sensor is not used on a urinal Valve. Model is marked on rear of Sensor.
- B. Range is too long; recalibrate range. Restart the Sensor by holding the Override Button in for 25 seconds, then release the Override Button and step away for one (1) minute; with power connected, this is considered a **Soft Reset**.
- C. If range needs to be manually shortened, reset the Sensor (follow Step 3B) and stand in front of the Sensor at desired range distance for one (1) minute.
- D. For Hard Reset of Sensor, remove all power connections (battery and hardwire) for one (1) minute. Reconnect power and step away from front of Sensor for 3½ minutes. Then test Sensor activation by standing in front of Sensor for ten (10) seconds, then step away and wait for flush. Test push button.

5. Valve Does Not Flush Even After Sensor Recalibration.

- A. Ensure water supply to Valve is turned on.
- B. Activation Assembly sleeve is in closed position. Turn counter-clockwise to open water flow. **Note**: there is approximately 1/8-turn (45°) of free spinning as the Activation Assembly engages the Shut Off Sleeve between opening and closing the Valve.
- C. Solenoid wire disconnected from Sensor. Ensure Solenoid wires are intact and Solenoid plug is connected properly.
- D. "AA" Batteries depleted; replace batteries, lithium or alkaline. Ensure batteries are installed with proper polarity (+) and (-). **Do not mix** old and new batteries or different types
- E. Sensor Assembly malfunctioned. Disconnect power for one (1) minute, reconnect power, and check for start-up operation (flashing red LED). See Step 4D.
- F. Check Solenoid for activation (clicking noise when pressing Sensor Override Button). If no clicks are heard, then contact Technical Support.

6. Valve Does Not Shut Off.

- A. Ensure Solenoid is connected to Sensor.
- B. Supply line water pressure has dropped and is not sufficient to close the Valve. Close Activation Assembly until pressure is restored.
- C. Piston Bypass is clogged, Piston is damaged, or large debris stuck behind Piston. Turn off water at Shut Off Sleeve, release pressure, remove Safety Collar and Activation Assembly. Remove Piston and check inside Valve for large debris. Replace Piston if damaged or cleaning does not correct the problem.

7. Too Much Water to Fixture.

- A. Excessive flow pressure. Readjust Activation Assembly by turning clockwise to decrease flow pressure.
- B. Long Flush. Worn Piston; replace with new proper gpf/Lpf Piston.
- C. Wrong model installed; i.e., 1.6 gpf model installed on 0.5 gpf/1.9 Lpf or 0.25 gpf/1.0 Lpf urinal fixture. Replace with proper model per guide.

8. Not Enough Water to Fixture.

- A. Insufficient flow pressure. Readjust Activation Assembly by turning counter-clockwise to increase flow pressure.
- B. Water supply pressure is inadequate (low). Increase the water supply pressure. Contact the fixture manufacturer for minimum water supply requirements of the fixture.
- C. Wrong model installed; i.e., 0.5 gpf/1.9 Lpf urinal installed on a 1.6 gpf/6.0 Lpf closet fixture. Replace with proper model.
- D. Check lip seal for wear. Replace Piston if lip seal is worn or twisted.

9. Chirping Noise is Heard at the Start or End of Flush.

A. Caused by air purging from the system inside the Valve Assembly. Noise will subside with several flushes or within a day.

CARE AND CLEANING

DO NOT USE abrasive or chemical cleaners (including chlorine bleach) to clean Flushometers that may dull the luster and attack the chrome or special decorative finishes. Use mild soap and water, then wipe dry with a clean soft cloth or towel. If using a cleaner in a spray bottle, **DO NOT spray directly onto the Flushometer**, instead spray cleaner into a clean cloth and then wipe down the Flushometer.

While cleaning surrounding bathroom tile, protect the Flushometer from any splattering of cleaner. Acids and abrasive cleaning fluids will discolor or remove chrome plating.

IMPORTANT NOTE FOR 1.1 GPF FLUSHOMETERS & REPLACEMENT KITS

Sloan 1.1 gpf/4.2 Lpf ultra-high efficiency flushometers meets all applicable standards and requirements. However, with low flush volumes it is imperative that they only be used in conjunction with toilet fixtures and drain line systems designed to operate with adequate flow rates and volumes in order to effectively eliminate waste and move it out of the building. It is the responsibility of the user to ensure both of these conditions are met. Not doing so may void your warranty.

Sloan 1.1 gpf diaphragm and piston kits are designed as a replacement part for Sloan 1.1 gpf/4.2 Lpf flushometers only. They are not intended to be used as a means to reduce water consumption in flushometers with higher flush volumes such as 1.28 gpf/4.8 Lpf or 1.6 gpf/6.0 Lpf or higher. Using this kit in any manner other than with a Sloan 1.1 gpf flushometer may void your warranty.