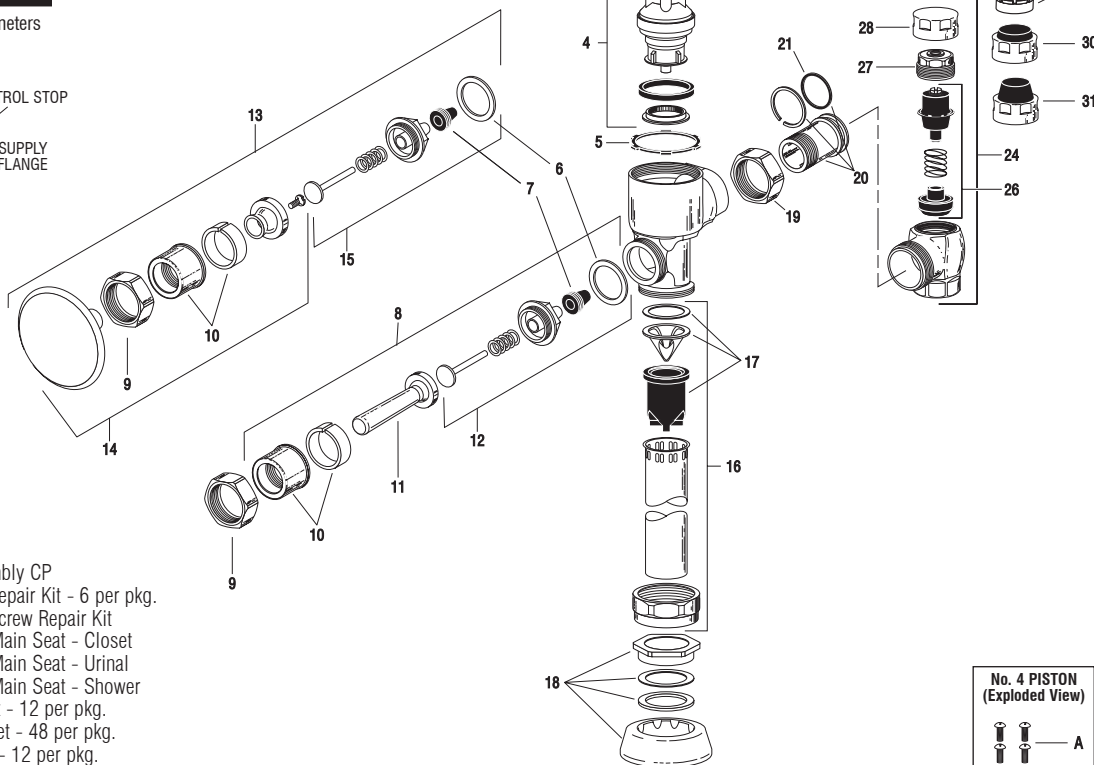
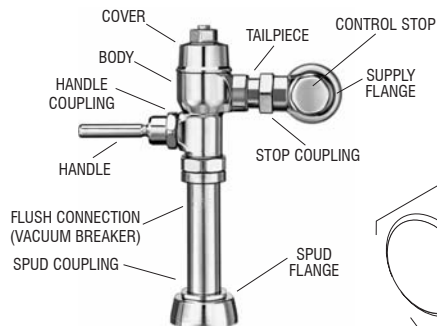


NAVAL® Flushometer Maintenance Guide

Also for use with CROWN® and STAR® Flushometers



PARTS LIST

- | | | | |
|-----|---------|-----------|--|
| 1. | 0314193 | CN-74-A | Cover Assembly CP |
| 2. | 5314010 | CN-1007-A | Cap Screw Repair Kit - 6 per pkg. |
| 3. | 3314015 | CN-1008-A | Regulating Screw Repair Kit |
| 4. | 0314016 | CN-1002-A | Piston with Main Seat - Closet |
| | 0314017 | CN-1003-A | Piston with Main Seat - Urinal |
| | 0314191 | CN-1009-A | Piston with Main Seat - Shower |
| 5. | 5314243 | CN-76 | Cover Gasket - 12 per pkg. |
| 6. | 5301139 | A-31 | Handle Gasket - 48 per pkg. |
| 7. | 5302297 | B-39 | Handle Seal - 12 per pkg. |
| 8. | 0302390 | B-73-A | Triple Seal Handicap Handle Assembly (ADA Compliant) |
| 9. | 0301082 | A-6 | Handle Coupling CP |
| 10. | 0302109 | B-7-A | Socket Assembly CP |
| 11. | 0302389 | B-74-A | Handicap Handle Grip CP (ADA Compliant) |
| 12. | 3302306 | B-51-A | Triple Seal Handle Repair Kit - 1 per pkg. |
| 13. | 0303351 | C-42-A | 3" Push Button Assembly CP |
| 14. | 3303347 | C-1000-A | 3" Push Button Replacement Kit |
| 15. | 3303396 | C-64-A | 3" Push Button Repair Kit |
| 16. | 5323005 | V-500-A | ¾" x 9" Vacuum Breaker |
| | 5323006 | V-500-A | 1¼" x 9" Vacuum Breaker |
| | 5323007 | V-500-A | 1½" x 9" Vacuum Breaker |
| 17. | 3323192 | V-551-A | Vacuum Breaker Repair Kit |
| 18. | 0306125 | F-5-A | ¾" Spud Coupling CP |
| | 0306140 | F-5-A | 1¼" Spud Coupling CP |
| | 0306146 | F-5-A | 1½" Spud Coupling CP |
| 19. | 0308676 | H-550 | Stop Coupling CP |
| 20. | 0314289 | NH-551-A | Adjustable Tailpiece 2-1/16" CP |
| 21. | 5308696 | H-553 | O-ring - 24 per pkg. |
| 22. | 0308063 | H-6 | Ground Joint Stop Coupling CP |
| 23. | 0314028 | NH-5 | Ground Joint Tailpiece 1-5/8" |
| 24. | 0388022 | H-710-A | 1" Adjustable Tailpiece SD Bak-Chek Control Stop CP |
| | 0388025 | H-710-A | ¾" Adjustable Tailpiece SD Bak-Chek Control Stop CP |
| | 0388024 | H-710-AG | 1" Ground Joint Screwdriver Bak-Chek Control Stop CP |
| | 0388026 | H-710-AG | ¾" Ground Joint Screwdriver Bak-Chek Control Stop CP |
| 26. | 3308853 | H-541-A | Control Stop Repair Kit † |
| | 3308856 | H-543-A | Control Stop Repair Kit ‡ |
| 27. | 0308612 | H-622 | Bonnet CP † |
| | 0308843 | H-577 | Bonnet CP ‡ |
| 28. | 0308840 | H-573 | Control Stop Cap CP † |
| | 0308848 | H-582 | Control Stop Cap CP ‡ |
| 29. | 3308791 | H-1010-A | Vandal Resistant Stop Cap Assembly † |
| | 3308790 | H-1009-A | Vandal Resistant Stop Cap Assembly ‡ |
| 30. | 3308866 | H-574 | Control Stop Cap with Bumper † |
| 31. | 3308867 | H-576 | Control Stop Cap with Extended Bumper † |

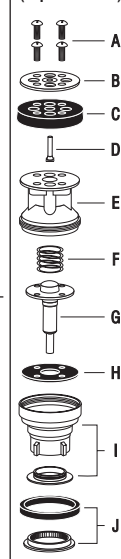
† For use with H-700-A 1" & ¾" and H-600-A 1" Screwdriver Bak-Chek® Control Stops.

‡ For use with H-600-A ¾" Screwdriver Bak-Chek® Control Stops.

NAVAL PISTON COMPONENTS

- | | | | |
|---|---------|-----------|---------------------------------|
| A | 0314200 | CN-17 | Top Plate Screws - 24 per pkg. |
| B | 0314082 | CN-15 | Top Plate |
| | 0314179 | CN-15-A | Top Plate - Shower Valve only |
| C | 5314188 | CN-68-A | Single Lip Cup - 12 per pkg. |
| D | 0314204 | CN-57 | Xpelor |
| E | 0314228 | CN-160 | Piston Body |
| F | 5328019 | SH-406 | Spring - 12 per pkg. |
| G | 0314078 | CN-18-A | Relief Valve |
| H | 5314226 | CN-120 | Relief Valve Seat - 12 per pkg. |
| I | 0314240 | CN-123-AC | Guide Assembly - Closet |
| | 0314242 | CN-123-AU | Guide Assembly - Urinal |
| | 0314189 | CN-66-A | Guide Assembly - Shower |
| J | 0314234 | CN-21-A | Main Seat |
| | 0314223 | CN-121-A | Main Seat - Shower Valve only |

No. 4 PISTON (Exploded View)



NOTE: Naval Pistons can be used to replace Pistons in older Crown and Star Flushometers

REPAIR KITS

5314050	CN-1010-A	CROWN/NAVAL VALVE WASHER SET - 6 per pkg. includes: 5, 6, 7, C, H, J, Cap Screw Gasket & Regulating Screw Packing
5314094	CN-1004-A	PISTON REBUILD KIT-CLOSET & URINAL - 6 per pkg. includes: 5, A, B, C, D, H, J, Cap Screw Gasket & Regulating Screw Packing
5314184	CN-1006-A	PISTON REBUILD KIT-SHOWER - 6 per pkg. includes: 5, A, B, C, D, H, J, Cap Screw Gasket & Regulating Screw Packing

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

SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131

Phone: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • <http://www.sloanvalve.com>

Troubleshooting and Maintaining the Sloan Naval® Flushometer

The Repair Kits and Parts listed are designed to service most variations of Sloan Piston Type (Naval, Crown, Crown/Naval and Star) Exposed and Concealed Flushometers. Each item has been identified by a Part Number and a corresponding Code Number. To expedite your replacement requirements, order by Code Number.

NOTE: In all Piston variations the SH-406 Spring has replaced the "U" Bar. In all Piston variations the CN-68-A Single Lip Cup has replaced the S-14-A Double Lip Cup. When rebuilding a Piston, install the CN-68-A Single Lip Cup with the cup facing down.

Consult your Sloan Representative or the factory for assistance in crossing over older part and kit numbers to current Crown/Naval numbers.

1. **PROBLEM:** *Valve does not function.*

CAUSE: (a.) Control Stop or Main Valve Closed.
(b.) Handle Assembly is worn.

SOLUTION: (a.) Open Control Stop or Main Valve.
(b.) Install Handle Repair Kit (B-51-A) or replace handle.

2. **PROBLEM:** *Insufficient volume of water to adequately siphon fixture.*

CAUSE: (a.) Control Stop not open enough.
(b.) Urinal or Shower Piston installed in a Closet Valve or older Blow Out Urinal.
(c.) Regulating Screw (on top of valve) not at proper setting.
(d.) Piston worn out.
(e.) Inadequate volume or pressure at supply.

SOLUTION: (a.) Adjust Control Stop for desired delivery of water.
(b.) Replace Piston with proper Closet Piston (CN-100-A).
(c.) Turn Regulating Screw counterclockwise to increase flush.
Adjustment Range:
Urinal - 1/2 to 3 gallons per flush (1.9 to 11.4 Lpf)
Closet - 1-1/2 to 7 gallons per flush (5.7 to 26.5 Lpf)
(d.) Repair or replace Piston.
(e.) If no gauges are available to properly measure supply pressure or volume of water at the Valve, then completely remove the entire Piston from the Valve, reassemble cover and open Control Stop to allow water to pass through empty Valve. If the supply is adequate to siphon the fixture, remove the Flow Ring from the bottom of the Piston to provide additional flow. If the supply is not adequate to siphon the fixture, steps should be taken to increase the pressure and/or supply.

3. **PROBLEM:** *Length of flush too short (Short Flushing) or Valve closes off immediately.*

CAUSE: (a.) Regulating Screw not at a proper setting.
(b.) Water passing by damaged or worn Piston Cup.
(c.) Loose Piston Assembly or loose Top Plate Screw.
(d.) Damaged or worn Piston Top Plate or Expelor.
(e.) Urinal or Shower Piston installed in a Closet Valve or older Blow Out Urinal.

SOLUTION: (a.) Turn Regulating Screw counterclockwise to lengthen flush.
(b.) Repair or replace Piston.
(c.) Tighten Top Plate Screws. Screw Piston Body and Guide together (hand tighten ONLY - rubber Relief Valve Seat will distort if screwed too tight).
(d.) Repair or replace Piston.
(e.) Replace Piston with Closet Piston (CN-1002-A).

4. **PROBLEM:** *Length of flush too long (Long Flushing) or fails to close off.*

CAUSE: (a.) Regulating Screw not at proper setting.
(b.) Relief Valve in Piston is not seating properly due to wear or debris.
(c.) Bypass holes in Piston or Top Plate clogged or fouled with debris.
(d.) Closet Piston installed in Urinal Valve.
(e.) Line water pressure has dropped and is not sufficient to force Relief Valve to seat.

SOLUTION: (a.) Turn Regulating Screw clockwise to shorten flush.
(b.) Disassemble Piston Assembly and wash under running water. Repair or replace Piston if necessary.
(c.) Disassemble Piston Assembly and wash under running water. Repair or replace Piston if necessary.
(d.) Replace Piston with Urinal Piston (CN-1003-A).
(e.) Shut off Control Stop until pressure has been restored, then reopen Stop.

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

CAUSE: (a.) Supply volume is more than necessary.
(b.) Lime or mineral accumulation on fixture vortex or spreader holes.

SOLUTION: (a.) Adjust Control Stop to meet flow rate required for proper cleansing of fixture.
(b.) Remove lime or mineral build-up in fixture.

6. **PROBLEM:** *Flush is not considered "Quiet" or makes noise at close off.*

CAUSE: (a.) Control Stop not properly adjusted.
(b.) Worn, damaged or loose Main Seat.
(c.) Worn Piston.

SOLUTION: (a.) Adjust Control Stop to meet flow rate required for proper cleansing of the fixture.
(b.) Replace Main Seat.
(c.) Repair or replace Piston.

7. **PROBLEM:** *Leaking at Handle Assembly.*

CAUSE: (a.) The B-39 Handle Seal may be deteriorated.
(b.) Handle Gasket has been omitted.
(c.) Valve Handle Bushing is worn.

SOLUTION: (a.) Install new B-39 Handle Seal.
NOTE: The B-39 Seal will easily slide right onto the Bushing if it is wet.
(b.) Install A-31 Handle Gasket or Handle Repair Kit (B-51-A).
(c.) Install Handle Repair Kit (B-51-A).

CARE AND CLEANING INSTRUCTIONS

DO NOT use abrasive or chemical cleaners to clean Flushometers that may dull the luster and attack the chrome or special decorative finishes. Use ONLY soap and water, then wipe dry with clean cloth or towel.

While cleaning the bathroom tile, protect the flushometer from any splattering of cleaner. Acids and cleaning fluids can discolor or remove chrome plating.

If further assistance is required, please contact the Sloan Valve Company Installation Engineering Department at 1-888-SLOAN-14.

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