

# Cartridge Maintenance/Repair Guide



## Introduction

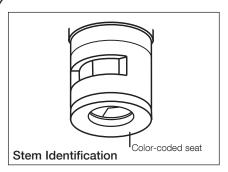


Thank you for choosing Chicago Faucets! All Chicago Faucet products are carefully assembled and tested to insure the highest quality in the plumbing industry. We are proud to offer you a product that will provide years of dependable, reliable service.

The Maintenance and Repair Guide is intended to provide you, as a customer, with a step-by-step procedure for replacing or renewing our most popular cartridges. These procedures are limited to minor problems that are the result of normal wear and not intended to cover repairs that are the result of damage caused by abuse or vandalism.

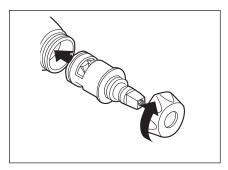
Ceramic Cartridge Replacement	3
Renewing Quaturn™ and Slow Compression Operating Cartridges	4
Renewing KLO-SELF Cartridges	5
Timing Adjustment of MVP™ Metering Valves	6
Renewing MVP Metering Valves	7
NAIAD™ Push Button Adjustment	8
Renewing NAIAD Cartridges	9
NAIAD Oscillating Cartridge Adjustment	10
Repair NAIAD Oscillating and Dashpot Cartridges	11
Replacement Cartridge Model Numbers	12
Replacement Cartridges for ECAST® Products	13
Repair Kits	14 - 15





Ensure cartridges are in the closed position before installing into valve body.

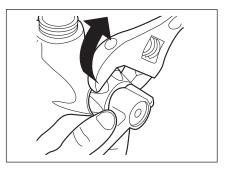
Cartridges feature color-coded seats. Blue seat on cold cartridge, red seat on hot cartridge.



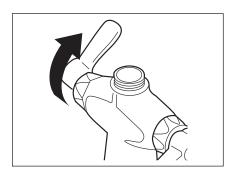
**Step 1** Push each cartridge into valve body until it seats. Add cap nuts and hand tighten. Add handles.



**Step 2** Rotate RIGHT handle (and cartridge) counter clockwise to the desired closed position.



**Step 3** Using handle to maintain stem position, fully tighten right cap nut to 20 to 27 ft. lb. torque.

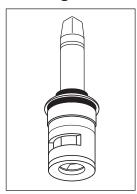


**Step 4** Move LEFT handle (without moving cartridge) to the open position and fully tighten right cap nut to 20 to 27 ft. lb. torque. Return handle to closed position.

#### **Ceramic Operating Cartridges**



Short Stem No. 1-100XKJKNF Left Hand Cartridge No. 1-099XKJKNF Right Hand Cartridge

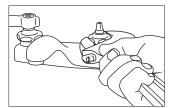


Long Stem
No. 377-XKLHJKNF
Left Hand Cartridge
No. 377-XKRHJKNF
Right Hand Cartridge

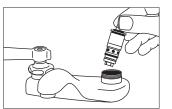
**Note:** No replacement parts for ceramic cartridges, sold only as complete assembly.

## Renewing "XT" Quaturn™ or Slow Compression Cartridges

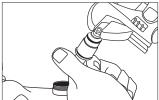




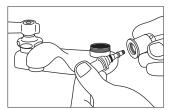
STEP 1 - Turn off water at stop or main valve. Remove handle assembly and with flat face wrench, remove cap nut (A).



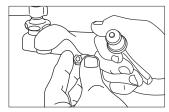
STEP 2 - Remove cartridge from faucet. Flush out any rust or chips that may be in body. DO NOT use file or abrasives to clean out body.



STEP 3 - Unscrew stem nut (K) at the bottom of the cartridge with a flat wrench using a handle as lever to assist removal.



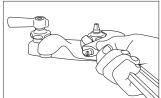
STEP 4 - Turn sleeve (D) off stem (C) by holding handle and turn sleeve by hand. As sleeve is removed from stem, seat (F) O-Ring (G) seat washer (H) retainer (I) and washer (J) will be forced off the stem.



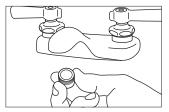
STEP 5 - Reassemble sleeve (D) on lightly lubricated stem (C). With new parts add seat (F) O-Ring (G) seat washer (H) retainer (I) and washer (J) on stem (C) and screw nut tightly on stem.



STEP 6 - Reposition washer and O-Ring (B) on stem (C) add to sleeve (D). Replace cartridge in faucet.



STEP 7 - Replace Cap Nut (A) and partially tighten. Replace handle and rotate cartridge in the direction of closing until the cartridge is in the desired position for convenient operation. Remove handle. Lock cartridge in place by securely tightening Cap Nut (A) to 20 - 27 ft. lbs torque.



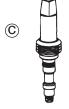
STEP 8 - Turn water on at main valve or stop. Remove aerator. Turn faucet on to "full" allowing sediment to flush from lines and replace aerator cartridge.







PARTS LIST - Those parts listed in the "Description" column below that are marked with an asterisk (\*) are parts that are recommended for replacement when renewing these operating cartridges. Other parts not marked may require replacement depending on the amount of wear they have received and their condition when examined.







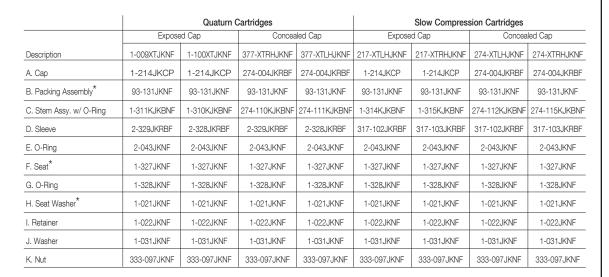




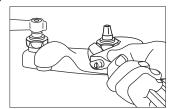




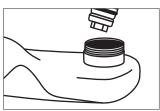




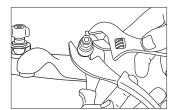




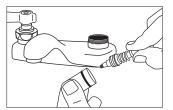
STEP 1 - Turn off water at stop or main valve. Remove handle, loosen cap nut (A) with flat faced wrench and remove upper parts of cartridge consisting of stem (C), bonnet (B) and spring (D).



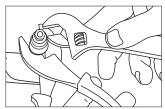
**STEP 2** - With pliers, grab the cartridge stem and pull up, removing it from the body.



STEP 3 - Holding the flat portion of plunger (E) remove stem nut (P). After stem nut is removed, remove washer (O), retainer (N) seat washer (M) and Monel seat (L) by tapping bottom of plunger until parts are loosened. Now, remove O-Rings (H), leather packing (I), gland (G) and spring (F) from sleeve (K).



STEP 4 - To reassemble, clean any lime or foreign matter that may have built-up on parts. Lubricate plunger surface (E) and place spring (F) and gland (G) on plunger. Replace the (2) O-Rings (H) making sure that the leather packing is placed between them. Slide O-Rings and leather packing on the plunger. Lubricate O-Rings and leather packing with a light grease before the plunger is inserted into the sleeve (K).

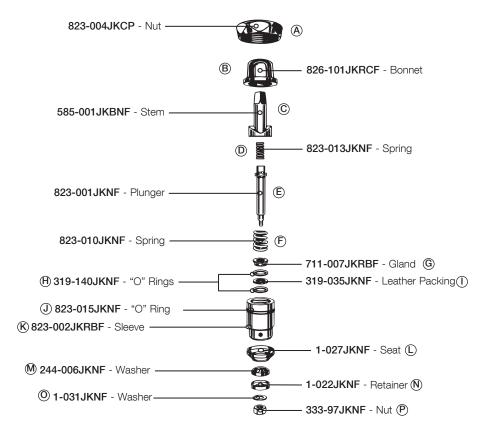


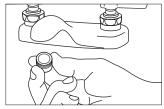
STEP 5 - Replace Monel seat (L), seat washer (M), retainer (N), cup washer (O), and tighten nut (P) securely.





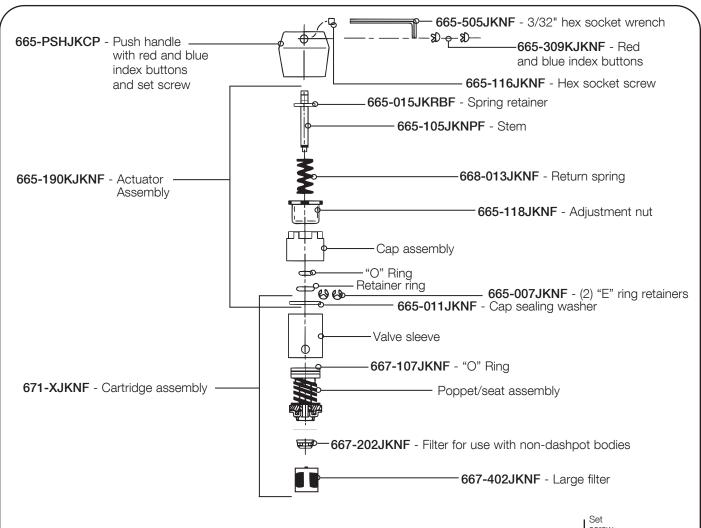
STEP 6 - Replace O-Ring (J) with new O-Ring, inserting into groove on the sleeve (K). Lubricate outside of O-Ring, stem (C) and inside of bonnet (B). Lubricate spring (D) and insert into stem. Assemble upper parts of cartridge (B,C,D) and tighten nut (A) to faucet body sufficiently (25 - 32 ft. lbs.) to insure that metal to metal contact of lower seat (L) in faucet body. Bonnet and sleeve must also make metal to metal contact. Replace handle.





STEP 7 - Turn water on at stop or main valve. Remove aerator. Turn faucet on to "full" allowing sediment to flush from lines and replace aerator cartridge.

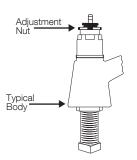


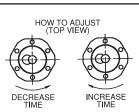




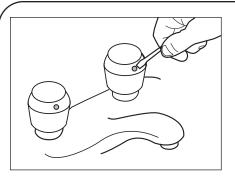
#### Timing Adjustment on an MVP Metering Cartridge

- (1) With handle in place, purge cartridge of air by pushing completely down 4-8 times rapidly, then check timing cycle.
- (2) Remove handle with a 3/32 allen wrench.
- 3 Use a standard pair of pliers (other tools may damage the adjustment nut) to change height of adjustment nut by 1/4 turn only. Turn adjustment nut clockwise to increase time.
- (4) Replace handle and time flow. NOTE: TIMING MUST BE CHECKED WITH HANDLE IN PLACE
- (5) If more adjustment is needed, follow steps 3 and 4 until timing is right.
- 6 Attach handle and tighten screw. Press index button into handle opening.

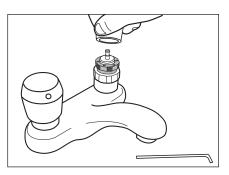




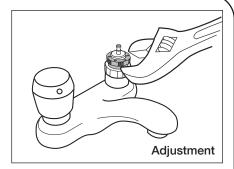




**Step 1** Remove color coded index button from handle with small, flathead screwdriver.



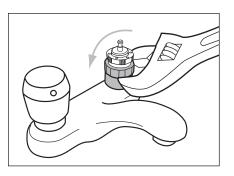
**Step 2** Insert 3/32" allen wrench in handle hole, loosen allen screw and remove handle.



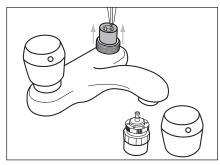
Step 3 To adjust the flow cycle of the MVP valve, turn the adjustment nut clockwise to increase the duration of the flow cycle and counter clockwise to decrease the flow cycle.

\*After adjustment nut has been repositioned, replace handle, push down and test flow cycle.\*\*

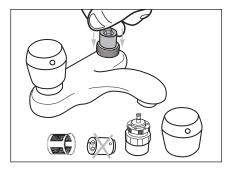
See page 6 for additional timing adjustment.



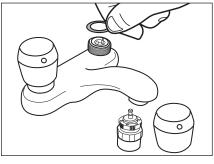
Step 4 If MVP cartridge is to be replaced, TURN OFF WATER SUPPLY BEFORE PROCEEDING. Using a wrench, remove actuator assembly.



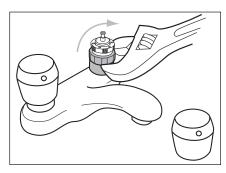
Step 5 Grasp cartridge valve top with needle-nose pliers, remove MVP cartridge from valve body. Be careful not to bend pin. Remove filter screen from inside of body with finger tip.



**Step 6** Place new filter, screen and MVP cartridge in valve body.



Step 7 and 8 Replace cap sealing washer and actuator assembly. (Adjust flow cycle as described in #3.) Do not over tighten cap.

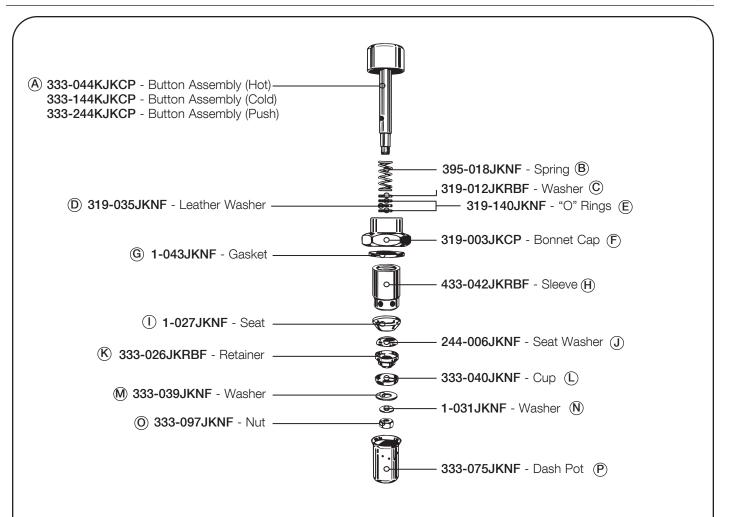


**Step 9** Replace handle, tighten handle nut with allen wrench and replace index button.

- \* While the adjustment nut can be hand adjusted, you may have to start the adjustment by using a wrench or pliers. It is important to grip the adjustment nut loosely so as not to deform or damage the nut.
- \*\* To properly test the flow cycle, the valve handle must be in place and actuated.

## NAIAD™ 333-X and 333-XSLO Push Button Cartridge





No. 333-X NAIAD is used for all No. 333 Basin faucets and all push button stops and contains a fast closing dashpot. Note: 333-XSLO is the same as No. 333-X, but with an additional external timing feature located on the button and a 333-073KJKNF adjustable slow closing dashpot.

No. 625-X NAIAD operating cartridge is used for all pedal valves. Except for the 625 and 628 on which the 628X one hole sleeve operating cartridge is used.

An adjustable slow closing model is available for both the 625-X and 628-X, which includes the 333-073KJKNF dashpot and is designated by 625-XSLO and 628-XSLO.

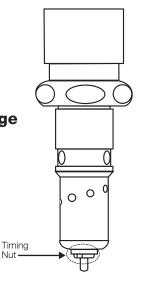
#### Timing Adjustment on a NAIAD Push Button Slo-Closing Cartridge

Timing can be changed by adjusting the nut located at the lower end of the dashpot.

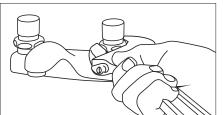
Shorter running time = LOOSEN (counter clockwise)

Longer running time = TIGHTEN (clockwise)

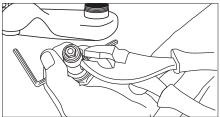
Note: Do not over tighten adjustment nut as it may cause continual run-on of faucet.



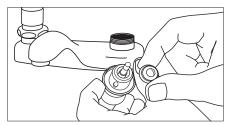




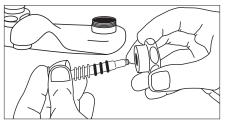
STEP 1 - Turn off water at stop or main valve. Loosen bonnet cap (F) with flat faced wrench and remove operating cartridge from valve body. Remove the dashpot (P) from the body.



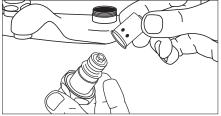
STEP 2 - To disassemble cartridge, insert pin through hole in sleeve (H) and stem (A) to keep stem from turning while nut (O) is removed. (Same procedure is followed when assembling operating cartridge.)



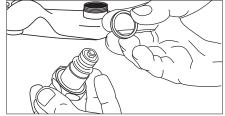
STEP 3 - Remove washer (N), washer (M), cup (L), retainer (K), washer (J) and seat (I) from stem. If leakage is occurring through spout outlet, replace seat (I) and seat washer (J). Replace cup (L), washer (M) and washer (N) as necessary.



STEP 4 - If water leakage is occurring around the button assembly, remove button and stem assembly (A) from sleeve (H) and bonnet cap (F). Clean stem thoroughly and lubricate top half with grease. Remove O-Rings (E) and washer (C and D) from cap (F). Replace the packing arrangement on stem assembly (A) by sliding washer (C) on stem and then leather washer (D) between the two O-Rings (E) onto the stem. Next slide cap (F) onto stem (A) and firmly slide cap up the stem to allow spring (B) to seat O-Rings and washers in cap (F).



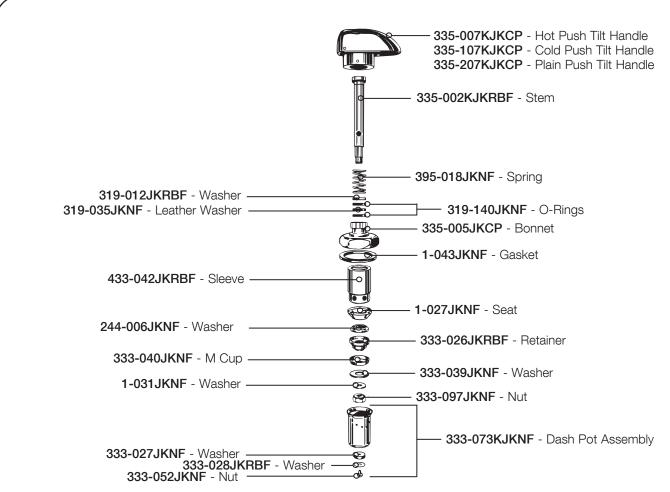
STEP 5 - Reassemble lower portion of cartridge by sliding sleeve (H), seat (I), washer (J), retainer (K), cup (L), washers (M and N) and nut (O) in the same manner as described in Step 2. Lightly grease exterior of cup (L). Tighten nut (O) securely on stem using pin through sleeve (H) and button assembly (A) to contain assembly while tightening. Remove pin when complete. Reposition dash pot (P) on cartridge.



STEP 6 - Replace gasket (G) before placing cartridge in valve body. Be sure gasket (G) is around sleeve (H) before tightening cap (F) to valve body. Turn water on at stop or main valve. Remove aerator. Turn faucet on to "full" allowing sediment to flush from lines and operating cartridge. Replace aerator.

**STEP 7** - See page 8 for dashpot timing of Slo-Closing cartridges.





NOTE: See page 9 for disassembly and reassembly of cartridge when renewing components.

#### **Repair Parts Kits**

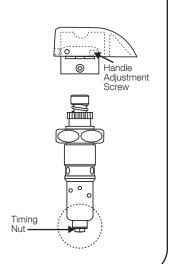
	Part No.	Description
ı	333-073KJKNF	Dash Pot Assembly (Adjustable)

#### Timing Adjustment on a NAIAD Tip-Tap Slo-Closing Cartridge

We have two adjustments featured on the Tip-Tap Cartridge. For dashpot adjustments follow step 1.

For handle adjustment follow steps 2-3.

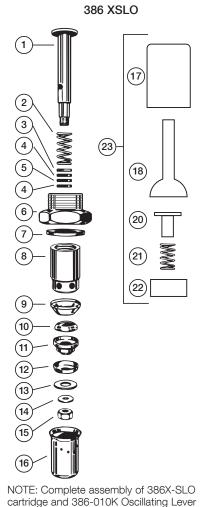
- 1 By tightening or loosening the 333-052 nut on the lower end of the dashpot, timing adjustment is made. (Tightening increases running time. It is suggested that the thickness of the felt washer be approximately 1/16" to 3/32" thick after tightening. This will deliver approximately 6-10 seconds timing. Loosening decreases running time.)
- (2) Raise up front of tilt-handle to expose screw B. (use #6 allen key)
- (3) Set screw B adjusted all the way in gives maximum running time. Adjust set screw B out counter-clockwise for less running time.

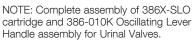


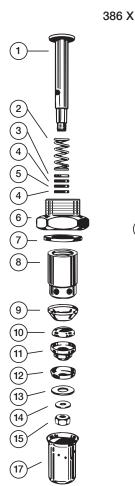
#### How to Repair a NAIAD™ Cartridge with Dashpot and Oscillating Handle

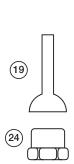
Part

- 1. To uncover operating cartridges on 386-XSLO urinal valves with non-sag handles, unscrew bonnet (17) and remove entire assembly (23), on self-closing stops as shown on diagram below. For 386-X, remove bonnet (24) and handle (19).
- 2. Shut-off water at main or supply valve if installed.
- 3. Either cartridge can now be removed from body by loosening cap (6) with a flat wrench and lifting entire cartridge from body including the dashpot.
- 4. If leakage is occurring through spout outlet, insert 1/8" diameter pin or pin wrench through hole in stem and with crescent wrench remove stem nut (15) and all parts up to and including (9) seat. Inspect seat washer (10) and replace if necessary, next inspect seat (9) for nicks or water cutting and replace if necessary. If cup washer (12) has been sticking in dashpot, replace also.
- 5. If cartridge has been leaking between oscillating lever and upper cap, remove stem assembly (1) and spring (2) from sleeve (8) and cap (6) by taking out washer (3) from cap, take out packing arrangement which consists of (2) O-Rings (4) with leather washer (5) between O-Rings. Grease stem lightly around packing area and put new O-Rings and packing on stem using same arrangement as indicated, also lubricate O. D. of packing.
- 6. Place stem with spring, washer and packing properly assembled back into cap and sleeve. Now assemble lower cartridge parts in proper relation and insert pin or pin wrench in stem hole again and tighten nut (15). Grease cup (12) with light grease and place cartridge in dashpot.
- 7. We recommend removing and replacing (7) gasket before cartridge is placed in valve body. Place cartridge in body and lock cartridge by tightening cap (6) securely, add oscillating lever bonnet sub-assembly to cartridge.









Nem	Part	Description
No.	No.	Description
1	386-008KJKRBF	Button and Stem Assembly
2	395-018JKNF	Spring
3	319-012JKRBF	Brass Washer
4	319-140JKNF	O-Ring
5	319-035JKNF	Leather Washer
6	618-001JKCP	Cap Nut
7	1-043JKNF	Gasket
8	433-042JKRBF	Sleeve
9	1-027JKNF	Monel Seat
10	244-006JKNF	Rubber Seat Washer
11	333-026JKRBF	Retainer
12	333-040JKNF	Rubber Washer
13	333-039JKNF	Washer
14	1-031JKNF	Stem Washer
15	333-097JKNF	Stem Nut
16	333-073KJKNF	Slow Dashpot Assembly
17	333-075KJKNF	Slow Dashpot Assembly
18	386-010JKCP	Bonnet
19	386-009JKCP	Ball Handle
20	386-011JKCP	Plunger
21	386-013JKNF	Spring
22	386-014JKRBF	Sleeve
23	386-010KJKCP	Handle Assembly
24	386-005JKCP	Bonnet

NOTE: Complete assembly of 386X unit and Oscillating Lever and Bonnet for Self-Closing Stops.



#### **Quaturn**<sup>™</sup> Compression Cartridge

- Opens and closes in just a 1/4 turn
- Unique design closes with water pressure
- Standard in all centerset and widespread faucets for sink and lavatory
- ADA Compliant when used with lever or wing handles
- Renewable parts available

Product No.	Description
1-099-245JKNF	Exposed Cap, Short Stem, Right Hand Control-A-Flo
1-100-245JKNF	Exposed Cap, Short Stem, Left Hand Control-A-Flo
1-099XTJKNF	Exposed Cap, Short Stem, Right Hand
1-100XTJKNF	Exposed Cap Short Stem, Left Hand
377-X245LHJKNF	Concealed Cap, Long Stem, Left Hand Control-A-Flo
377-X245RHJKNF	Concealed Cap, Long Stem, Right Hand Control-A-Flo
377-XTLHJKNF	Cap Concealed with Escutcheon, Left Hand
377-XTRHJKNF	Cap Concealed with Escutcheon, Right Hand

## Ceramic Cartridge

- Positive 1/4 turn, eliminating handle travel
- Available as a substitute for the Quaturn compression cartridge
- ADA Compliant when used with lever or wing handles

Product No.	Description
1-099XKJKNF	Exposed Cap Short Stem, Right Hand
1-100XKJKNF	Exposed Cap Short Stem, Left Hand
377-XKLHJKNF	Cap Concealed Long Stem, Left Hand
377-XKRHJKNF	Cap Concealed Long Stem, Right Hand
420-XJKNF	For 420-CP and 420-ABCP Faucets
2300-XJKNF	For Marathon Single Control Kitchen and Lavatory Faucets

## Slow Compression Cartridge

- For finer adjustment of water volume
- Most common in laboratory fittings
- Requires approximately one full turn to open and close completely
- ADA Compliant when used with lever or wing handles

ı	Product No.	Description
Ī	217-XTLHJKNF	Exposed Cap, Left Hand, Short Stem
	217-XTRHJKNF	Exposed Cap, Right Hand, Short Stem
	274-XTLHJKNF	Concealed Cap, Left Hand, Long Stem
	274-XTRHJKNF	Concealed Cap, Right Hand, Long Stem
	376-CXJKNF	Slow Compression Cartridge with Integral Check Valve
	937-XSTNF	Steam Cartridge
	962-XJKNF	Needle Point Cartridge for Lab Use
	966-XJKNF	Micro Needle Point/Brass Seat Cartridge for Lab Use
	966-XSSJKNF	Micro Needle Point/Stainless Steel Seat Cartridge for Lab Use

#### Metering Self-Closing, Adjustable Cartridge

- Close either upon release or within a 2-15 second cycle time
- Helps reduce water usage in high traffic locations

Product No.	Description
NAIAD™ Cartridges	
333-XPSHJKNF	Exposed Cap, Push Button, Immediate Closure
333-XCOLDJKNF	Exposed Cap, Cold Button, Immediate Closure
333-XHOTJKNF	Exposed Cap, Hot Button, Immediate Closure
333-XSLOCOLDJKNF	Exposed Cap, Cold Button, Adjustable Cycle Time
333-XSLOPSHJKNF	Exposed Cap, Push Button, Adjustable Cycle Time
333-XSLOHOTJKNF	Exposed Cap, Hot Button, Adjustable Cycle Time
335-XJKNF	Exposed Cap "Tip-Tap" Cartridge, Adjustable Cycle Time
409-XJKNF	Exposed Cap "Tip-Tap" Cartridge, Adjustable Cycle Time
Pedal Box Cartridge	s
625-XJKNF	Pedal Box Cartridge, No Index, High Flow Characteristics
628-XJKNF	Pedal Box Cartridge, No Index, Low Flow Characteristics
MVP™ Adjustable Tir	ming Cartridges
665-190KJKNF	MVP Actuator Assembly
667-080KJKNF	MVP Actuator Assembly and MVP Valve with Filter Screen
671-XJKNF	MVP Valve with Filter Screen
Miscellaneous Cartri	idges
386-LDPXJKNF	Glass Filler Cartridge, Less Dashpot
386-XSLOJKNF	Urinal Valve Cartridge
386-XSLOCJKNF	Urinal Valve Cartridge With Handle and Button Assembly
745-XJKNF	Knee Valve Cartridge

## KLO-SELF Self-Closing Vandal Resistant Cartridge

■ Self-closing, closes upon release of the handle by the user

Product No.	Description
825-XJKNF	For Concealed Cap Installations, Instant Closing
826-XJKNF	For Exposed Cap Installations, Instant Closing

KLO-SELF cartridges are interchangeable with right or left hand installation.



#### ECAST

# Replacement Cartridges for Existing ECAST Installations

Chicago Faucets has a line of cartridges that should be used to repair or update any existing ECAST product installation.

These cartridges are designed and manufactured to the exact specifications to maintain the certified status of your existing ECAST product installations.

Replacement Cartridges for Existing ECAST Products				
Cartridges				
1-099XKBL12JKABNF	217-XTRHJKABNF			
1-099XKJKABNF	377-XKLHBL12JKABNF			
1-099XTBL12JKABNF	377-XKLHJKABNF			
1-099XTJKABNF	377-XKRHBL12JKABNF			
1-100XKBL12JKABNF	377-XKRHJKABNF			
1-100XKJKABNF	377-XTLHBL12JKABNF			
1-100XTBL12JKABNF	377-XTLHJKABNF			
1-100XTJKABNF	377-XTRHBL12JKABNF			
217-XTLHBL12JKABNF	377-XTRHJKABNF			
217-XTLHJKABNF	628-XJKABNF			
217-XTRHBL12JKABNF				

All replacement cartridges for existing ECAST products feature distinctive markings to make them easier to identify on the job site.



 Replacement cartridges for existing ECAST installations feature two engraved rings around the top of the cartridge sleeve.



## Repair Kit for Quaturn<sup>™</sup> and Slow Compression Operating Cartridges



Jiffy Repair Kit 1277-D	One Minute Repair Kit 1273-NF	Junior Repair Kit 1276-NF	Description	Part No.
-	4	1	Complete Left hand (HOT) Cartridges	1-100XTJKNF
-	4	1	Complete Right Hand (COLD) Cartridges	1-099XTJKNF
-	1	-	Complete Left Hand Long Stem Cartridge	377-XTLHJKNF
-	1	_	Complete Right Hand Long Stem Cartridge	377-XTRHJKNF
-	3	1	Left Hand Stem (HOT)	1-310KJKBNF
-	3	1	Right Hand Stem (COLD)	1-311KJKBNF
-	1	-	Left Hand Long Stem	274-110KJKBNF
-	1	-	Right Hand Long Stem	274-111KJKBNF
-	2	-	Left Hand (HOT) Sleeves	2-328JKRBF
-	2	-	Right Hand (COLD) Sleeves	2-329JKRBF
-	50	25	Seats	1-327JKNF
4	100	50	Seat Washers	1-021JKNF
2	-	-	Brass Washers	93-031JKRBF
-	25	3	Washer Retainers	1-022JKNF
2	24	9	Brass Washer	93-131JKRBF
2	24	9	O-Rings	1-219JKNF
2	24	25	O-Rings	1-328JKNF
-	4	2	Chrome Plated Caps	1-214JKCP
-	6	-	Handle Screws	420-010JKRCF
4	12	6	Stem Nuts	333-097JKNF
-	12	6	Stem Nut Washers	1-031JKNF
2	24	6	Cap Thread Gaskets	2-043JKNF
2	-	-	Gasket	1-043JKNF
2	48	9	O-Ring	1-519JKNF

## Repair Kit for KLO-SELF Type Cartridges



Jiffy Repair Kit #847-D	One- Minute Repair Kit #883-NF	Junior Repair Kit #884-NF	Description	Part No.
_	12	2	Plungers	823-001JKNF
_	4	_	Sleeves	823-002JKRBF
_	6	2	Cap Nuts, Chrome Plated	823-004JKCP
_	6	2	Stems	585-001JKBNF
_	6	2	Bonnets	826-101JKRCF
_	12	2	Packing Glands	711-007JKRBF
4	16	4	O-Rings	319-140JKNF
2	8	2	Leather Packing	319-035JKNF
2	18	2	Springs	823-010JKNF
_	12	2	Springs	823-013JKNF
2	100	25	Soft Seat Washers	244-006JKNF
_	25	6	Handle Screws	420-010JKRCF
_	20	6	Cap Thread Gaskets	1-043JKNF
2	50	25	Seats	1-027JKNF
_	25	15	Washer Retainers	1-022JKNF
_	18	6	Stem Nuts	333-097JKNF
_	16	6	Stem Nut Washers	1-031JKNF
2	20	6	O-Rings	823-015JKNF

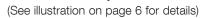


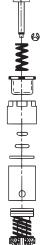
## Repair Kit for NAIAD™ Push Button & Oscillating Handle Operating Cartridges



Jiffy Repair Kit #849-D	One- Minute Repair Kit #820-NF	Junior Repair Kit #821-NF	Description	Part No.
_	4	2	Complete NAIAD Cartridges	333-XPSHJKNF
2	4	2	Springs	395-018JKNF
_	4	_	Slow Dash Pot Assembly	333-073KJKNF
2	20	10	Cup Washers	333-040JKNF
_	12	6	Guide Washers	333-039JKNF
_	12	4	Washer Retainers	333-026JKRBF
_	12	6	Brass Washers	319-012JKRBF
4	14	6	O-Rings	319-140JKNF
2	7	3	Leather Packing	319-035JKNF
2	50	25	Soft Seat Washers	244-006JKNF
_	2	1	Pin Wrenches	244-025JKNF
_	6	3	Stem Nuts	333-097JKNF
_	6	3	Stem Nut Washers	1-031JKNF
2	12	6	Seats	1-027JKNF
_	2	_	Sleeves	433-042JKRBF
2	20	6	Cap Thread Gaskets	1-043JKNF
_	4	2	Dashpot	333-075JKNF

## MVP™ Repair Kits





Part No.	Description
665-190KJKNF	Actuator Assembly
671-XJKNF	Metering Valve Unit
668-100KJKNF	(2) E Ring Retainer, Retainer Ring, Actuator O-Ring, Cartridge O-Ring, Cap Sealing Washer, Large Filter and Small Filter
667-080KJKNF	One Each of Kits 665-190KJKNF and 671-XJKNF



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