# AQUASPEC® FAUCETS

# MODEL - G66678, G66679, G66680 "IN" INSTITUTIONAL METERING HANDLE

### TECHNICAL INFORMATION

MAXIMUM PRESSURE: 125 PSI MAXIMUM TEMPERATURE: 180°F



IMPORTANT THE WATER SUPPLY LINES MUST BE THOROUGHLY FLUSHED BEFORE INSTALLATION TO PREVENT FOREIGN MATTER AND DEBRIS FROM CLOGGING AND/OR DAMAGING INTERNAL COMPONENTS AND THEREBY PREVENTING THE FAUCET FROM FUNCTIONING PROPERLY

**IMPORTANT** THE FILTER ASSEMBLY INCLUDED WITH THIS FAUCET MUST BE INSTALLED AS INSTRUCTED TO FURTHER PREVENT FOREIGN MATTER AND DEBRIS FROM DAMAGING THE FAUCET AND TO ENSURE PROPER FUNCTIONING.

### \* INSTALLATION INSTRUCTIONS

- 1. REMOVE COLORED INDEX BUTTON (#1C) FROM HANDLE (#1A)
- 2. LOOSEN SET SCREW (#1B) IN HANDLE WITH 3/32" ALLEN WRENCH
- PULL UP ON HANDLE TO REMOVE FROM STEM (#2C) OF HANDLE NUT ASSEMBLY (#2)
- 4. REMOVE HANDLE NUT ASSEMBLY (#2) USING 1-1/8" HEX 6-POINT SOCKET
- 5. ASSEMBLING HANDLE WITH OLD STYLE METERING CARTRIDGE(#6) WITH STAINLESS STEEL SLEEVE.
  - 5.1 PLACE CAP SEALING WASHER ASSEMBLY(#5) ONTO FAUCET BODY WITH O-RING FACING DOWN.
  - 5.2 FOR Z86700-IN INSTALLATION REFERENCE PAGE 3 OF 4, REMOVE ESCUTCHEON (#7) AND RETAINING RING (#8A). INSTALL ESCUTCHEON (#11) AND SLEEVE (#10).
  - 5.3 INSTALL "IN" HANDLE(#4) ONTO FAUCET BODY. TIGHTEN WITH ADJUSTABLE WRENCH TO CREATE SEAL WITH FAUCET BODY. DO NOT OVERTIGHTEN.
- 6. ASSEMBLING HANDLE WITH NEW STYLE METERING CARTRIDGE(#3) WITH BLUE POLYMER SLEEVE.
  - 6.1 DISCARD CAP SEALING WASHER ASSEMBLY(#5)
  - 6.2 FOR Z86700-IN INSTALLATION REFERENCE PAGE 3 OF 4, REMOVE ESCUTCHEON (#7) AND RETAINING RING (#8A). INSTALL ESCUTCHEON (#11) AND SLEEVE (#10).
  - 6.3ENSURE O-RING(#3A) AND WASHER(#3B) ARE POSITIONED ON BLUE POLYMER SLEEVE AS SHOWN.
  - 6.4 INSTALL "IN" HANDLE (#4) ONTO FAUCET BODY. TIGHTEN WITH ADJUSTABLE WRENCH TO CREATE SEAL WITH FAUCET BODY. DO NOT OVERTIGHTEN.
- 7. CYCLE TIME ADJUSTMENT
  TURN ADJ. RING(#4D) UP (CCW) FOR SHORTER CYCLE
  TURN ADJ. RING(#4D) DOWN (CW) FOR LONGER CYCLE

### ADJUSTING THE CYCLE TIME ON ZURN METERING FAUCET

- 1. METERING FAUCETS ARE FACTORY PRESET FOR A 10 SEC. CYCLE AT 80 PSI.
- 2. ACTUATE FAUCET 3 TO 5 TIMES TO REMOVE ANY TRAPPED AIR IN THE SUPPLY LINE OR FAUCET
- 3. INCREASE CYCLE TIME BY ROTATING COLORED (RED, BLUE, BLACK) TIMING RING(#4D) CLOCKWISE. DECREASE CYCLE TIME BY ROTATING COLORED(RED, BLUE, BLACK) TIMING RING(#4D) COUNTERCLOCKWISE.

Installation Instructions are revised frequently. Please access website for the latest revision.

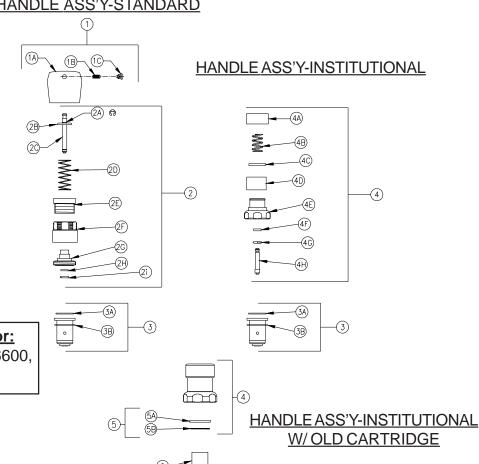
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### REPLACEMENT PARTS

HOT(RED) INSTITUTIONAL HANDLE G66678 METERING CARTRIDGE ASSEMBLY G61754 COLD(BLUE) INSTITUTIONAL HANDLE G66679 TEMPERED(BLACK) INSTITUTIONAL HANDLE G66680 CAP SEALING WASHER ASS'Y G65503 ESCUTCHEON (REQUIRED FOR Z86700) 61406001 SLEEVE (REQUIRED FOR Z86700) 92503002

### HANDLE ASS'Y-STANDARD



**Replacement Instructions for:** Z86100, Z86300, Z86500, Z86600, Z83600 AND Z80300

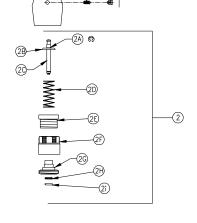
Item	Part Number	Description	Qty.	Item	Part Number	er Description	Qty.
1 1A	G60522 60601003	Metering Handle Assembly Cold Metering Handle	1 1	3 3A	G61754 58155020	Metering Cartridge Ass'y O-Ring	1
1B 1C	62705001 G60558	Set Screw Metering Index Buttons-H,C,T	1 1	3B 4	81241001 G66678	Washer "IN" Handle Assembly (Hot)	1
	60460001 60460002	Hot Index Cold Index	1 1	4A 4B	92132001 61059001	Push Button Handle Spring	1
2	60460003 G60561	Tempered Index Handle Nut Assembly	1 1	4C 4D	92146001 92134001	Index Retaining Ring Push Button Sleeve (Timing Ring)	1
2A 2B	60465001 60450001	"E" Ring Spring Seat	1 1	4E 4F 4G	92127001 62499107 60458001	Push Button Body O-Ring Retainer O Ring	1
2C 2D	60451001 60447001	Stem Spring	1	4G 4H 5	92131001 G65503	Retainer, O-Ring Push Button Handle Stem Cap Sealing Washer Assembly	1
2E 2F	60446001 60452001	Adjustment Nut Cap	1	5A 5B	65431002 65432001	Plastic Washer Plastic Washer	1
2G 2H 2i	60456001 62499107 60458001	Stem Housing O-Ring O-Ring Retainer	1 1 1	6	G61754	Metering Cartridge Ass'y (Old Style	e) 1

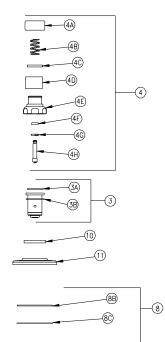
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## HANDLE ASS'Y-STANDARD

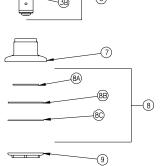
## Replacement Instructions for: Z86700

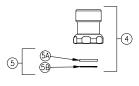
### HANDLE ASS'Y-INSTITUTIONAL





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### HANDLE ASS'Y-INSTITUTIONALW/ OLD CARTRIDGE



Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
1	G60522	Metering Handle Assembly	1	4	G66678	"IN" Handle Assembly (Hot)	1
1A	60601003	Cold Metering Handle	1	4A	92132001	Push Button Handle	1
1B	62705001	Set Screw	1	4B	61059001	Spring	1
1C	G60558	Metering Index Buttons-H,C,T	1	4C	92146001	Index Retaining Ring	1
	60460001	Hot Index	1	4D	92134001	Push Button Sleeve (Timing Ring)	1
	60460002	Cold Index	1	4E	92127001	Push Button Body	1
	60460003	Tempered Index	1	4F	62499107	O-Ring	1
2	G60561	Handle Nut Assembly	2	4G	60458001	Retainer, O-Ring	1
2A	60465001	E-Ring	1	4H	92131001	Push Button Handle Stem	1
2B	60450001	Spring Seat	1	5	G65503	Cap Sealing Washer Assembly	1
2C	60451003	Stem	1	5A	65431002	Plastic Washer	1
2D	60447001	Spring	1	5B	65432001	Plastic Washer	1
2E	60446001	Adjustment Nut	1	6	G61754	Metering Cartridge (Old Style)	1
2F	60452001	Cap	1	7	60816001	Escutcheon	2
2G	60456001	Stem Housing	1	8	G61859	Mounting Hardware	1
2H	62499107	O-Ring	1	8A	60383002	Retaining Ring	2
2i	60458001	O-Ring Retainer	11	8B	60382001	Washer	2
3	G61754	Metering Cartridge Ass'y	2	8C	60444001	Washer	2
3A	58155020	O-Ring	1	9	60445001	Nut	2
3B	81241001	Washer	1	10	92503002	Sleeve	2
30	012-1001	VVGSTICI	'	11	61406001	Escutcheon	2

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### **Metering Faucet Trouble Shooting Guide**

Cause	Solution			
Supply stops not open. Aerator contaminated.	Open supply stops. Remove aerator to clean and/or replace.			
Filter assembly contaminated.	Shut off water supply. Remove filter assembly to clean and/or replace. Filter may be located externally on supply stops, or internally within faucet body under metering cartridge. Reference parts list included with fauet for filter style.			
Timing nut requires adjustment.	Rotate timing ring down (CW) to lengthen handle stroke and increase cycle time.			
Damaged Schrader valve stem in center of metering cartridge.	Replace metering cartridge G61754 per Installation and Maintenance guide.			
Metering cartridge is overly contaminated or damaged.	Replace metering cartridge G61754 per Installation and Maintenance guide.			
Timing nut requires adjustment.	Rotate timing ring up (CCW) to shorten handle stroke and decrease cycle time.			
Aerator is not installed or incorrect aerator installed.	Install 1.0 GPM or 0.5 GPM aerartor. Cycle time may be too long with aerator's > 1.0 GPM			
Metering cartridge is overly contaminated or damaged.	Replace metering cartridge G61754 per Installation and Maintenance guide.			
Aerator is not installed or incorrect aerator installed.	Install 1.0 GPM or 0.5 GPM aerator. Facuet may not shut off with aerator's > 1.0 GPM.			
Handle nut is not adequately tightened	Tighten handle nut using adjustable wrench to create seal and seat metering cartridge. Do not over tighten.			
Timing nut requires adjustment.	Rotate timing ring up (CCW) to shorten handle stroke and decrease cycle time.			
Metering cartridge is overly contaminated or damaged.	Replace metering cartridge G61754 per Installation and Maintenance guide.			
Water hammer due to pressure and piping configuration	Ensure filter assembly with flow control orifice is installed. Shut off water supply. Remove filter assembly to clean and/ or replace. Filter may be located externally on supply stops, or internally within faucet body under metering cartridge. Reference parts list included with faucet for filter style.			
Excessively high water pressure (> 80 psi).	Gradually back off flow rate on supply stops to reduce pressure at metering cartridge until noise has been eliminated.			
	Supply stops not open.  Aerator contaminated.  Filter assembly contaminated.  Timing nut requires adjustment.  Damaged Schrader valve stem in center of metering cartridge.  Metering cartridge is overly contaminated or damaged.  Timing nut requires adjustment.  Aerator is not installed or incorrect aerator installed.  Metering cartridge is overly contaminated or damaged.  Aerator is not installed or incorrect aerator installed.  Handle nut is not adequately tightened  Timing nut requires adjustment.  Metering cartridge is overly contaminated or damaged.  Water hammer due to pressure and piping configuration  Excessively high water			

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