

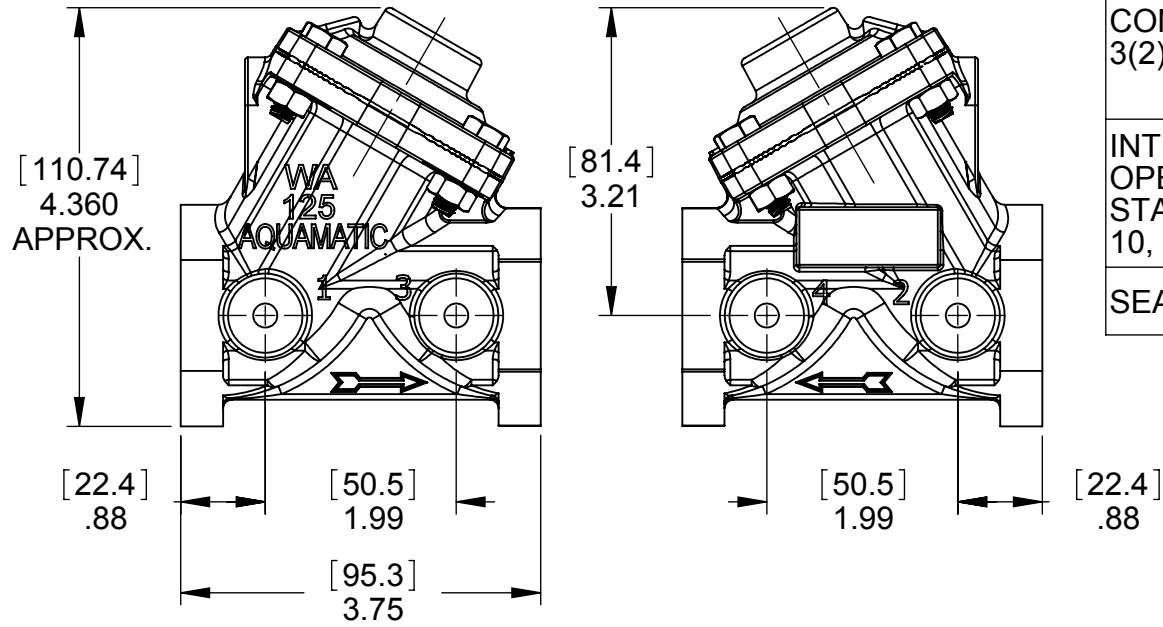
5

4

3

2

1



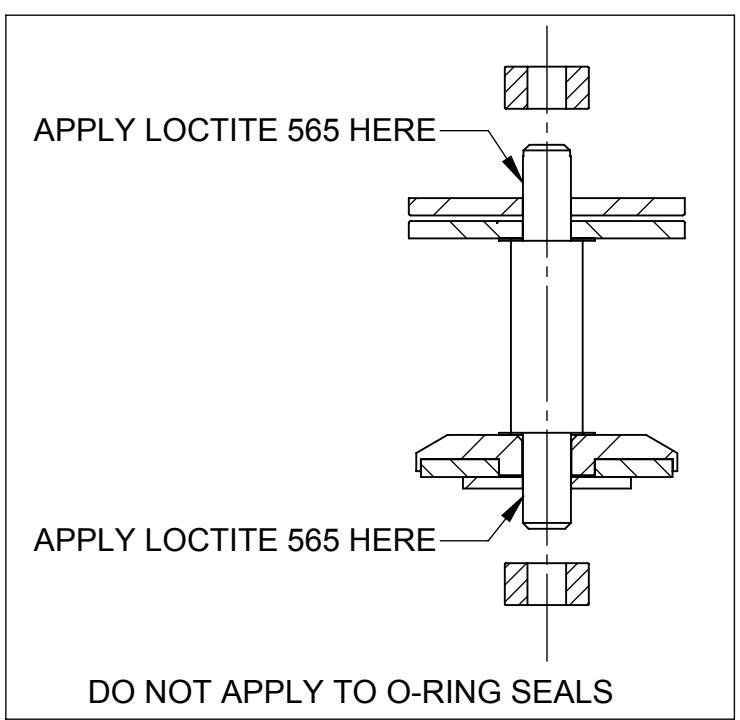
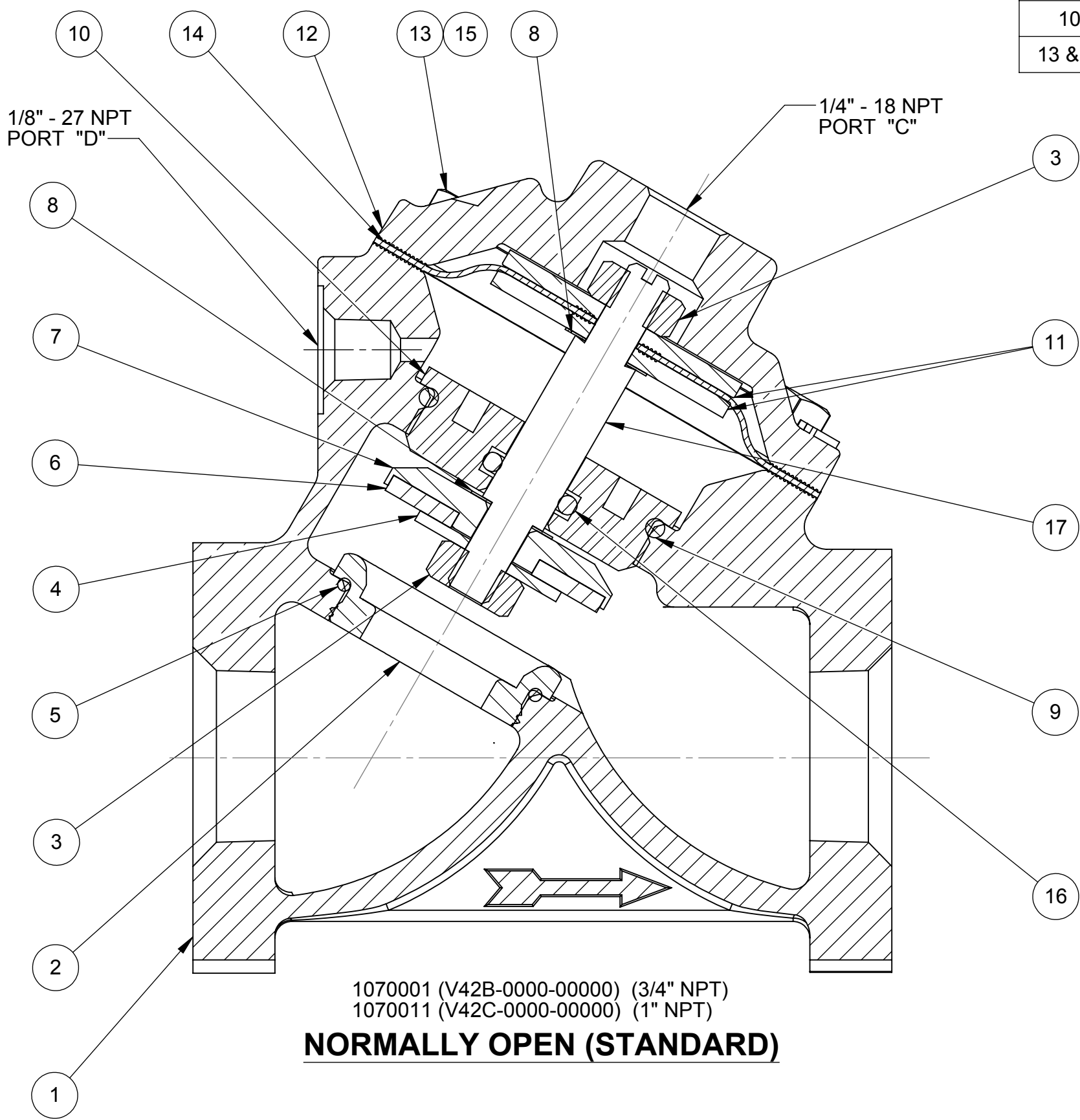
REPAIR PARTS KITS			
DESCRIPTION	PART NO.		
DIAPHRAGM & SEALS KIT CONSIST OF ITEM NO'S 3(2), 5, 6, 8 (2), 9, 14, 16	1070068 (421-RA)	1070081 (421-RAE)	1070093 (421-RAV)
	BUNA N INCLUDES DIAPHRAGM 1074119 (421-FB)	E.P.D.M. INCLUDES DIAPHRAGM 1074119 (421-FB)	FKM INCLUDES DIAPHRAGM 1074120 (421-FV)
INT. PARTS KIT (NORM. OPEN) CONSIST OF STANDARD ITEM NO'S 4, 7, 10, 11(2), 17	1070118 (421-RF)		
SEAT (ITEM NO. 2)	1074158 (421-MO)		

ASSEMBLY TOOLS	
DESCRIPTION	PART NO.
FOR INSTALLATION AND REMOVAL OF SEAT (ITEM #2) (TOOL NOT SHOWN)	1074161 (421-MT)
FOR INSTALLATION AND REMOVAL OF SHAFT GUIDE (ITEM #10) (TOOL NOT SHOWN)	1074124 (421-GT)

TORQUE TABLE		
ITEM #	DESCRIPTION	TORQUED TO (+/- 10%)
2	SEAT	120 IN/LBS
3	UPPER NUT	90 IN/LBS
3	LOWER NUT	90 IN/LBS
10	GUIDE, SHAFT	120 IN/LBS
13 & 15	NUT, & CAP SCREW	140 IN/LBS

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
	30204	L	REDAWN IN SOLIDWORKS. 1078608 WAS 1074175; RENAMED DRAWING TO 1077613	30AUG10	MHM
	32614	M	UPDATED FOR NEW CAP DESIGN	10-03-11	TMS
	102895	N	1-1074149 WAS-1074147, 2-1074128 WAS-1074126, 3-1074122 WAS- 1074123, 4-1074117 WAS-1074118, 5-43032 WAS-43727	18DEC13	TJM
	104393	P	1-ITEM#11 WAS: 1074118	19MAR15	TJM
	104665	R	1-ADD'D: TORQUE TABLES, 2-UPDATED TITLE BLOCK	29MAY15	TJM

NO.	DESCRIPTION	STD	PART NO.	QTY.	
1	BODY	CAST IRON	3/4" NPT	*	1
			1" NPT	*	
	CAST BRASS	3/4" NPT		1074077 (421-AB3)	
		1" NPT		1074080 (421-AB4)	
2	SEAT - BRASS (REQ'S ASSY TOOL)	*	1074158 (421-M0)	1	
3	HEX NUT (1/4-28)	*	1263852	2	
4	DISC PLATE - SS	*	1074149	1	
5	O-RING	BUNA N		*	1
		E.P.D.M.			
		FKM		*	
6	DISC	BUNA		*	1
		E.P.D.M.			
		FKM			
		HYCAR			
7	DISC HOLDER - SS	*	1074128	1	
8	GASKET - COPPER	*	1073948 (200-GG)	2	
9	O-RING	BUNA N		*	1
		E.P.D.M.			
		FKM		*	
10	SHAFT GUIDE - SS (REQ'S ASSY TOOL)	*	1074123	1	
11	DIAPHRAGM PLATE - SS	*	43942	2	
12	CAP	CAST IRON		*	1
		CAST BRASS			
13	HEX SCREW	PLATED STEEL		*	4
14	DIAPHRAGM	BUNA N		*	1
		FKM			
15	HEX NUT	PLATED STEEL		*	4
16	O-RING	BUNA N		*	1
		E.P.D.M.			
		FKM			
17	SHAFT (NORMALLY OPEN)	*	1074150 (421-L)	1	



NOTES:
 1. AMERICAN NATIONAL STANDARD TAPER PIPE THREADS (NPT) PER ANSI B2.1-1968
 2. VALVES AVAILABLE WITH B.S.P.T. END CONNECTIONS.

SEE REVERSE SIDE FOR CONFIGURATION OPTIONS

1070001 (V42B-0000-00000) (3/4" NPT)
 1070011 (V42C-0000-00000) (1" NPT)
NORMALLY OPEN (STANDARD)

COMPONENTS / ASSEMBLIES TO BE COMPLIANT AND COMPATIBLE WITH EUROPEAN UNION DIRECTIVE 2011/65/EEC (RoHS2) & REGULATION (EC)1907/2006 (REACH) REQUIREMENTS

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DO NOT SCALE DRAWING. DIMS. ARE IN INCHES [mm]
 INTERPRET DIMS AND TOLERANCES PER ASME Y14.5M-2009
 UNLESS OTHERWISE SPECIFIED:
 ALL FINISHED MACHINED SURFACES 125 ✓ OR BETTER.
 TOLERANCES:
 ANGLES: ± 1°
 1 PLACE .X: ± .015 [0.38]
 2 PLACE .XX: ± .01 [0.3]
 3 PLACE .XXX: ± .005 [0.13]

THIRD ANGLE PROJECTION	APPROVALS	DATE
	DRAWN	
	APPROVED	
	CHECKED	

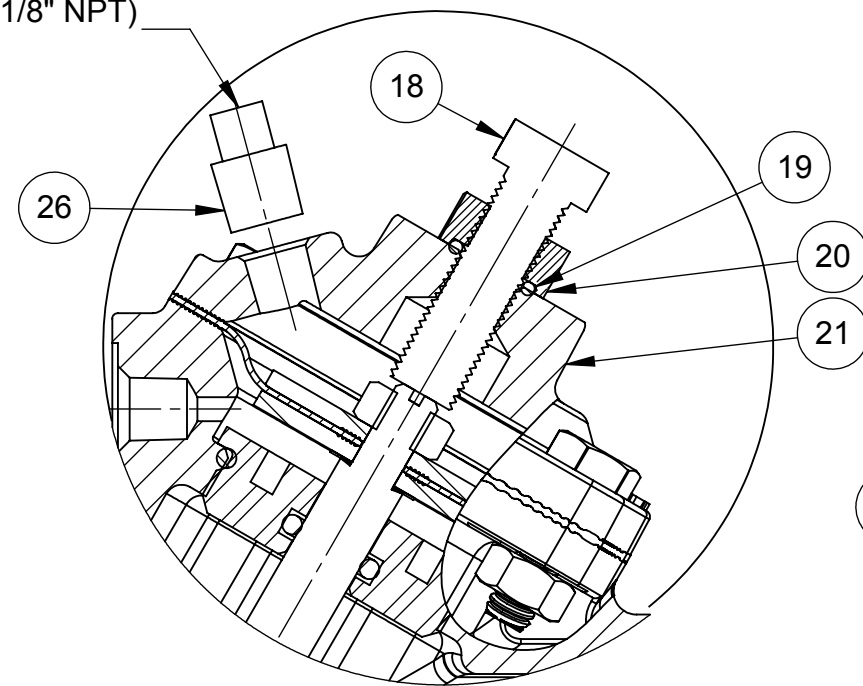
AQ Matic Valve & Controls Company Inc.

TITLE: CATALOG SHEET, 421
 DIAPHRAGM VALVE STANDARD MODEL

SIZE: **B** DWG NO.: **BR1077613** REV: **S**

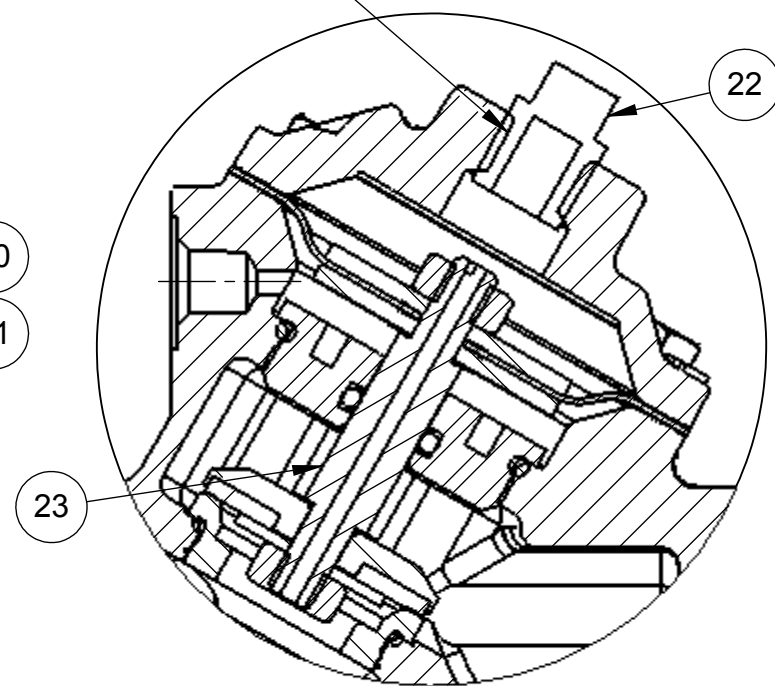
SCALE: 1:1 SHEET 1 OF 2

USED WITH NORMALLY CLOSED VALVES ONLY (1/8" NPT)



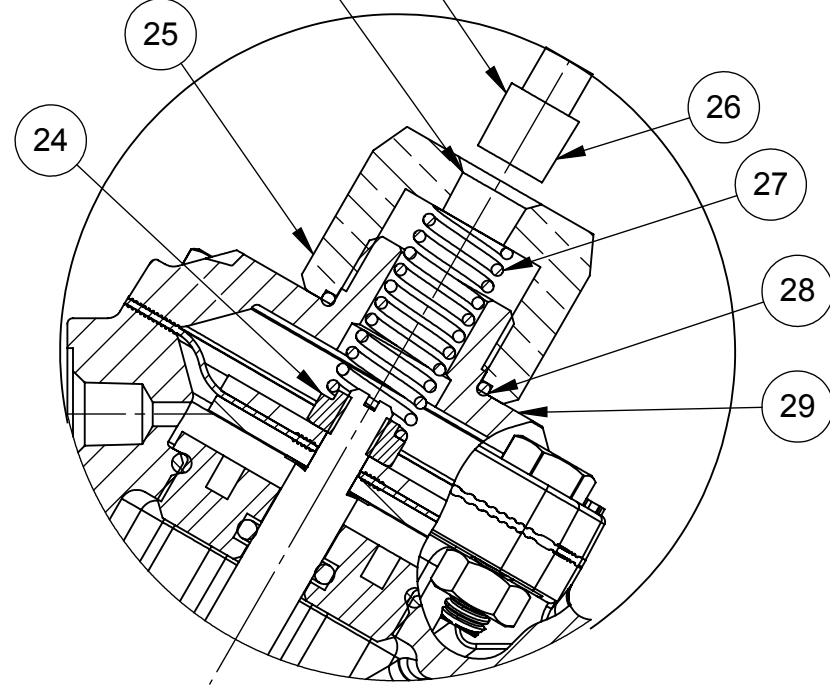
1072563 (V42B-0010-00000) (3/4" NPT)
1070015 (V42C-0010-00000) (1" NPT)
LIMIT STOP

(1/4" NPT)



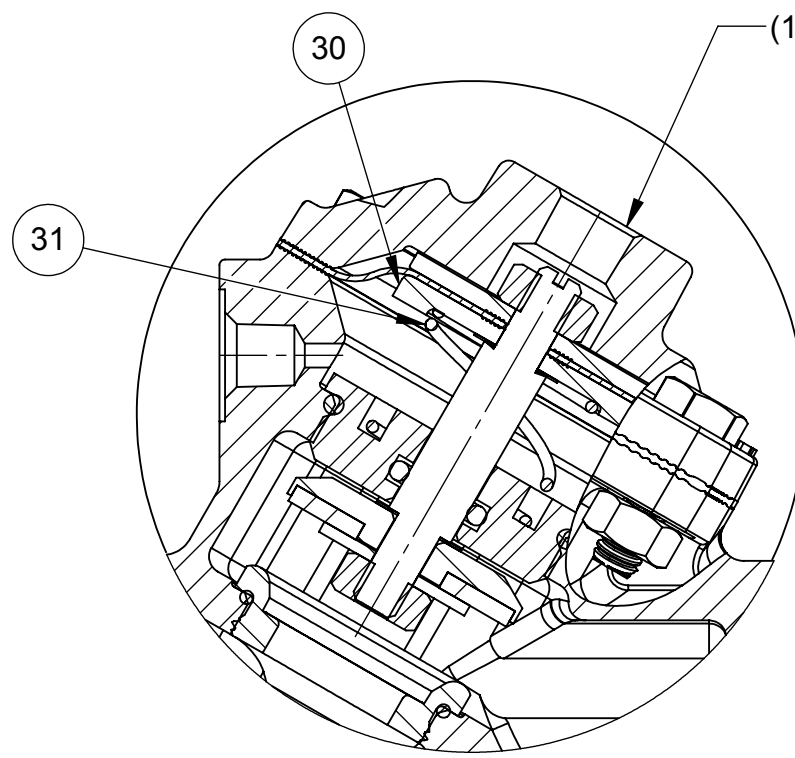
1070002 (V42B-0030-00000) (3/4" NPT)
1070012 (V42C-0030-00000) (1" NPT)
NORMALLY CLOSED

(1/8" NPT) USED WITH NORMALLY CLOSED VALVES ONLY



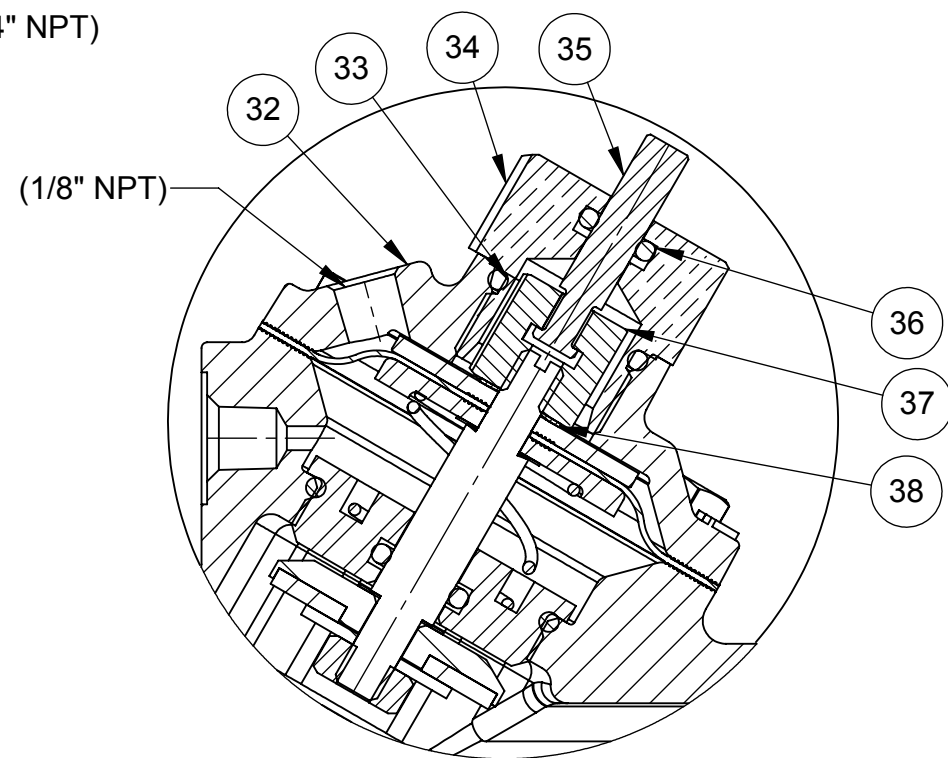
1070003 (V42B-0002-00000) (3/4" NPT)
1070013 (V42C-0002-00000) (1" NPT)
SPRING ASSIST CLOSED

(1/4" NPT)



1070004 (V42B-0001-00000) (3/4" NPT)
1070014 (V42C-0001-00000) (1" NPT)
SPRING ASSIST OPEN

(1/8" NPT)



1077144 (V42B-0021-00000) (3/4" NPT)
1072648 (V42C-0021-00000) (1" NPT)
POSITION INDICATOR

REPAIR PARTS KITS

DESCRIPTION	PART NO.
INT. PARTS KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 18, 19, 20	1074154 (421-LS)
INT. PARTS KIT (NORM. CLOSED) CONSISTS OF STANDARD ITEM NO'S 4, 7, 10, 11(2), 23	1070129 (421-RG)
INT. PARTS KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 24, 27, 28	1074176 (421-SC)
INT. PARTS KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 4, 8, 31	1074178 (421-SO)
INT. PARTS KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 33 THRU 38	1074162 (421-PI)

TORQUE TABLE

ITEM #	DESCRIPTION	TORQUED TO (+/- 10%)
20	NUT, LIMIT STOP	90 IN/LBS
24	CENTERING NUT	90 IN/LBS
25	NUT, SPRG RETAINER	120 IN/LBS
34	PI ROD GUIDE	120 IN/LBS
37	NUT, TOP, 428, PI	90 IN/LBS

CONVERSION KITS

DESCRIPTION	PART NO.
CONVERSION KIT (LIMIT STOP) CONSISTS OF STANDARD ITEM NO'S 18 THRU 21	1074155 (421-LSC)
CONVERSION KIT (SPRING ASSIST CLOSED) CONSISTS OF STANDARD ITEM NO'S 24 THRU 29	1074177 (421-SCC)
CONVERSION KIT (SPRING ASSIST OPEN) CONSISTS OF STANDARD ITEM NO'S 4, 8, 10, 31	1074179 (421-SOC)
CONVERSION KIT (POSITION INDICATOR) CONSISTS OF STANDARD ITEM NO'S 32 THRU 38	1074163 (421-PIC)

REVISIONS					
ZONE	ECN	REV.	DESCRIPTION	DATE	APP'D
	1001	S	AQ Matic update & Verified Part Numbers	17JAN17	MGS

NO	DESCRIPTION	STD	PART NO.	QTY.
LIMIT STOP MODEL				
18	SCREW	*	1072361 (SCS-0030)	1
19	O-RING	BUNA	1071668 (ORB-012)	1
20	HEX NUT	*	1077534 (400-H)	1
21	CAP	CAST IRON	1074101 (421-CCC)	1
		CAST BRASS	1074104 (421-CCCB)	
NORMALLY CLOSED MODEL				
22	PIPE PLUG (1/4" NPT)	PLATED STEEL	1071918 (PLZ-0008)	1
		BRASS	1071904 (PLB-0009)	
23	SHAFT (NORMALLY CLOSED)	*	1074153 (421-LL)	1
SPRING ASSIST CLOSED MODEL				
24	CENTERING NUT	*	1074185 (421-X)	1
25	RETAINER NUT - BRASS	*	1074183 (421-TT)	1
26	PIPE PLUG (1/8" NPT)	PLATED STEEL	1071917 (PLZ-0005)	1
		BRASS	1071903 (PLB-0007)	
27	SPRING	*	1078602	1
28	O-RING	*	1071674 (ORB-020)	1
29	CAP	CAST IRON	1074099 (421-CC)	1
		CAST BRASS	1074100 (421-CCB)	
SPRING ASSIST OPEN MODEL				
30	DIAPHRAGM PLATE, 421, SAO	*	43727	1
31	SPRING	*	1078608	1
POSITION INDICATOR MODEL				
32	CAP	CAST IRON	1074107 (421-CF)	1
		CAST BRASS	1074110 (421-CFB)	
33	O-RING	*	1071692 (ORB-116)	1
34	SHAFT GUIDE BUSHING	*	1074121 (421-GF)	1
35	INDICATOR SHAFT	*	1074164 (421-PM)	1
36	O-RING	*	1071688 (ORB-108TC)	1
37	TOP NUT	*	1074182 (421-TB)	1
38	LOCKWASHER	*	1073589 (WAS-0006)	1

- NOTES:
1. SPRING ASSIST CLOSED MODEL CANNOT BE COMBINED WITH LIMIT STOP MODEL.
2. VALVES AVAILABLE WITH B.S.P.T END CONNECTIONS.

SEE REVERSE SIDE FOR STANDARD NORMALLY OPEN MODEL

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2 PLACE .XX: ± .01 [0.3]
3 PLACE .XXX: ± .005 [0.13]

THIRD ANGLE PROJECTION	APPROVALS	DATE	<p>AQ Matic Valve & Controls Company Inc.</p>
DRAWN	TITLED		
APPROVED	CATALOG SHEET, 421 DIAPHRAGM VALVE STANDARD MODEL		
CHECKED	SIZE B	DWG NO. BR1077613	

SCALE 1:1 SHEET 2 OF 2