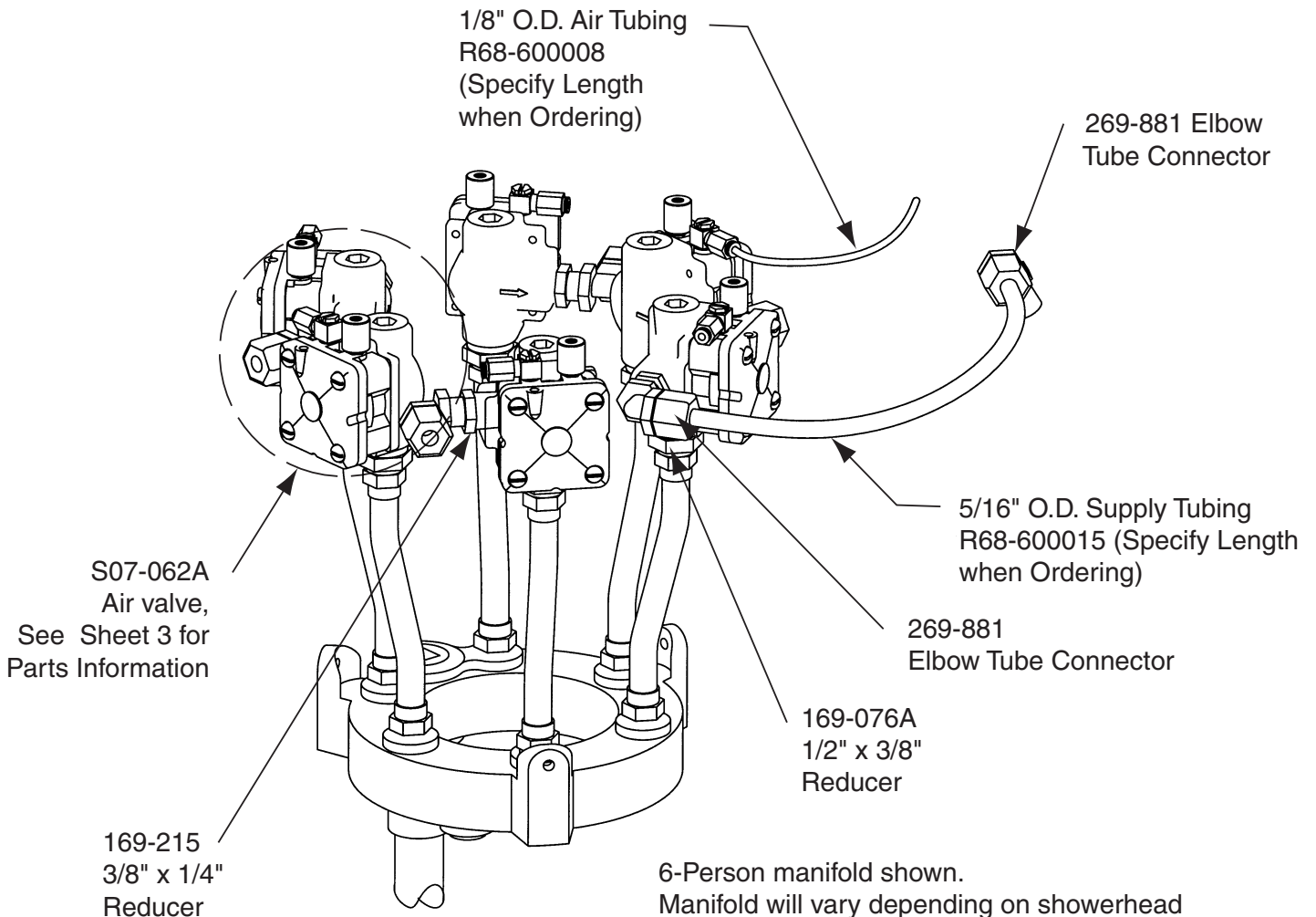


### Metering Air Valve

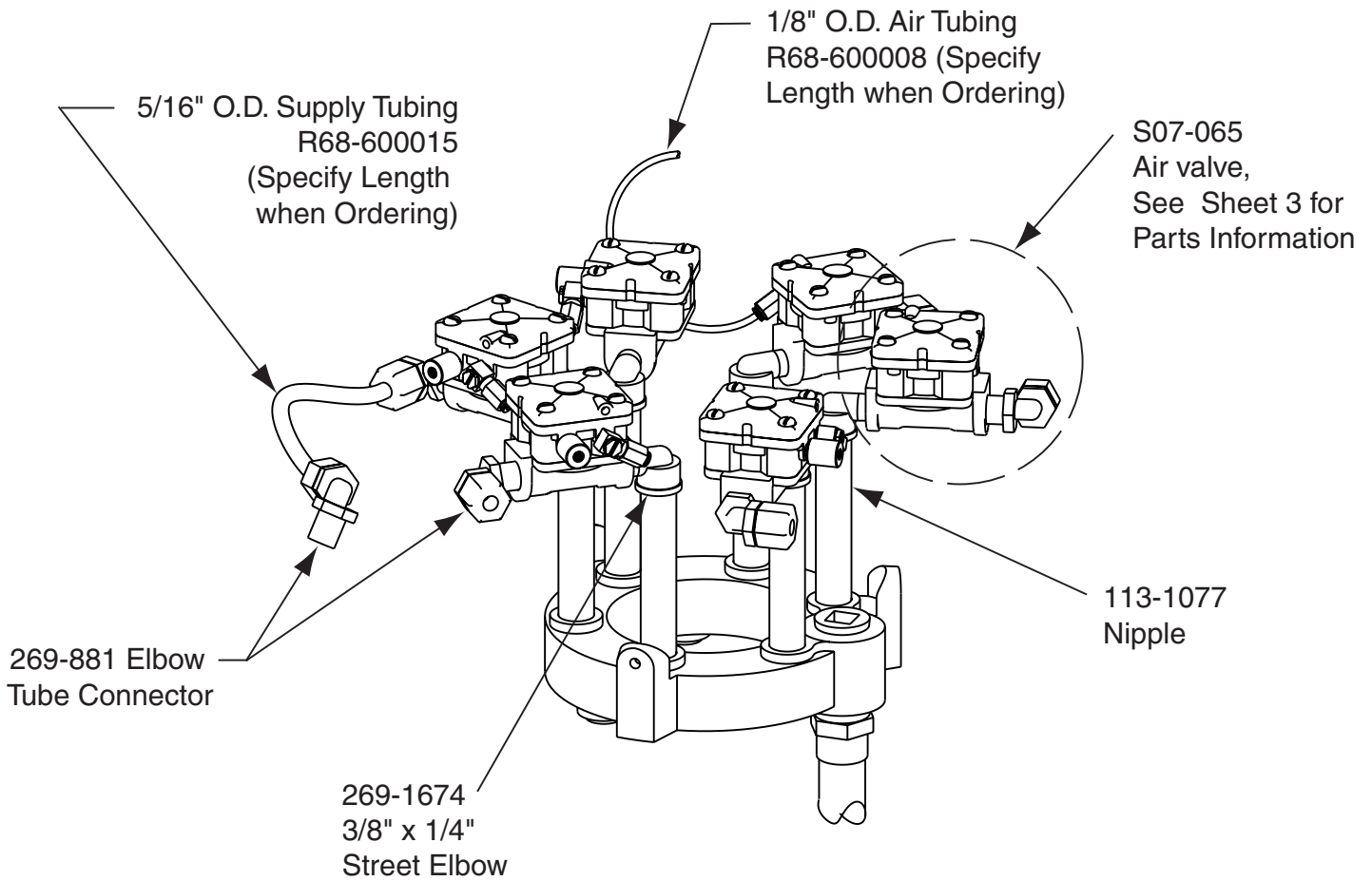
### For Column Showers (1998-2000) Version



6-Person manifold shown.  
Manifold will vary depending on showerhead  
configuration. Parts identified are typical for  
2-6 person columns with metering air valve.  
Contact Bradley Representative for part  
numbers not listed.

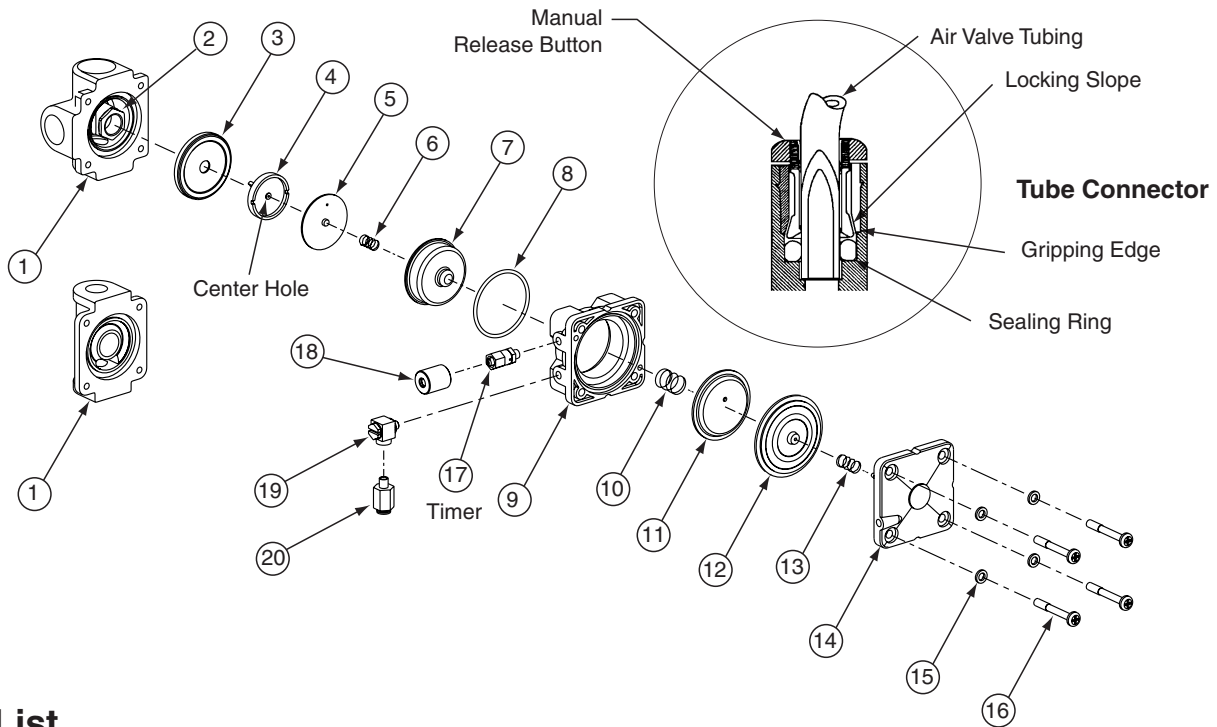
### Metering Air Valve

#### For Column Showers (2000 — Present) Version



6-Person manifold shown.  
Manifold will vary depending on showerhead  
configuration. Parts identified are typical for  
2-6 person columns with metering air valve.  
Contact Bradley Representative for part  
numbers not listed.

### Metering Air Valve



### Parts List

Item	Part No.	Description	Assembly	Valve Kit S65-110	Repair Kit S73-054C
			Qty		
1	118-183	Lower Valve Body (1998-2000)	1		
1	118-226	Lower Valve Body (2000 to Present)	1		
2	117-036	Valve Seat	1		
3	269-665	Rubber Diaphragm	1	1	1
4	269-664	Plastic Disk	1	1	1
5	179-082	Stainless Steel Disk	1	1	1
6	135-053	Spring	1	1	1
7	269-662	Divider Plate	1		1
8	125-001DT	O-Ring	1		1
9	118-247	Air Valve Body	1		1
10	135-052	Spring for Magnet	1		1
11	269-660	Magnet Assembly	1		1
12	269-659	Air Diaphragm	1		1
13	135-051	Diaphragm Spring	1		1
14	269-657	Valve Cover	1		1
15	142-002CR	Lockwasher	4		
16	160-313	Screw	4		
17	S27-254	Timer Assembly	1		1
18	269-656	Cover — Timer Assembly	1		1
19	269-1186	Fitting — Adj. "L"	1		
20	169-890	Tube Connector	1		
	215-913	Air Valve Instruction Sheet		1	

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## Metering Air Valve Troubleshooting Instructions

### How They Work

1. A pulse of air is created at the air diaphragm by pressing the pushbutton.
2. The pulse of air travels through the 1/8" air tubing into the lower port on the valve, up through the magnet (housed within Item 9) and diaphragm, and exits through the top cover of the valve.
3. Releasing the pushbutton draws all the air out of the valve creating a vacuum inside the valve.
4. The top diaphragm acts as a check and does not let any air enter the valve through the top cover.
5. The vacuum created allows the magnet to drop down in the valve, attracting the armature plate.
6. The rising armature plate allows the water pressure to push the seat diaphragm off the valve seat.
7. Water flows through the seat and out to the sprayhead.
8. Air is pulled into the valve through the timer by the vacuum on the inside of the valve.
9. The incoming air breaks the vacuum on the inside of the valve (Item 9).
10. The amount of air entering the valve through the timer determines the metering cycle.
11. When the vacuum is eliminated, the magnet spring pushes the magnet back to its original position.
12. The armature plate drops down to its original position, pushing the seat diaphragm back down on the seat closing the valve.
13. A small amount of water passes through the diaphragm to equalize the pressure on either side of the diaphragm.

### Adjust Air Valve Meter Time

*NOTE: The air valve timer is located next to the tube connector on the air valve body. The timer is capped with a filter to prevent dirt build-up on the timer. The air valve timing can be adjusting from 5–60 seconds.*

1. Remove filter cap and use a screwdriver to tighten or loosen the timer. Turning the timer clockwise increases the time; turning the timer counterclockwise decreases the time.
2. Continue to adjust until the timer is set at desired length.
3. Replace filter cap over the timer.

### Tube Connection Leaks

1. Push in the white manual release button while pulling the tube out to disconnect the tube at the tube fitting. No tools are needed.
2. To correct a leak, press tubing firmly into the tube fitting and make sure it is seated.
3. If leak persists, remove tubing from the fitting, and trim the tubing end square with a razor-sharp knife. If leak continues, replace the fitting or contact your Bradley representative for assistance.

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**Metering Air Valve Troubleshooting Instructions Continued...*****Metering Air Valve Troubleshooting******Problem: Water is dripping from the streamformers***

*Cause: Debris on valve seat or orifices*

***Step 1: Clean and inspect valve seat***

1. Remove screws and disassemble metering valve.
2. Clean valve seat and inspect for deep gouges or scratches. Replace if necessary.
3. Remove all debris that may be clogging center hole of the plastic diaphragm assembly and off-center hole in the rubber diaphragm.

***Problem: Valve will not shut off***

*Cause: Timing mechanism is clogged*

***Step 1: Clean timing mechanism***

1. Blow water and debris from perforated metal sleeve of timing mechanism if compressed air is available.
2. Turn the adjusting screw in all the way but do not force screw.
3. Turn adjusting screw out to desired cycle time.

***Problem: Valve will not turn on***

*Cause: Water is not being supplied to unit*

***Step 1: Open all stops on the valve assembly******Problem: Timing cannot be adjusted for more than five seconds***

*Cause: There is an air leak*

***Step 1: Check assembly***

1. Check all tubing and fittings for proper assembly.
2. Tighten all screws which hold valve together.

***Problem: Pushbutton does not work properly***

*Cause: Air volume may not be sufficient to operate valve*

***Step 1: Check all fittings for air leaks******Problem: Valve cycles properly, but water does not form streams and drips from streamformer***

*Cause: Flow control is clogged or is not seated properly*

***Step 1: Inspect and clean air flow control assembly***

1. Remove 1/4" tubing and 1/4" tube connector fitting from metering air valve (Figure 13c).
2. Inspect flow control and remove debris that may be clogging assembly.
3. Replace fitting using Teflon™ tape on pipe threads.
4. Replace 1/4" tubing as follows: cut 1/4" from the end of the tube to make sure the end is square, then insert into tube connector fitting.