

Hot Water Shower Recirculation System



DYI by Ross Chessman

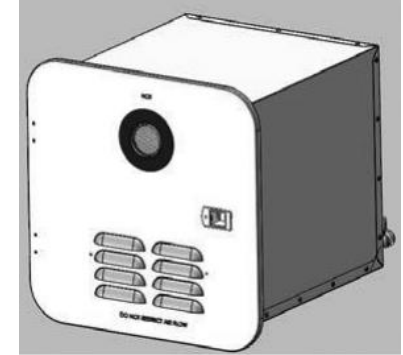
Shower Hot Water Recirculation

- Current Set Up
 - 2022 Flying Cloud 25 Foot FB
 - Water Heater – Girard GSWH-2
 - Tankless continuous water heater



Shower Hot Water Recirculation

- How the Girard Water Heater Works
 - Senses water pressure
 - Senses gas pressure
 - Senses Water flow
 - Senses inlet and outlet water temperature
 - Senses air pressure (fan)
 - If all systems are go then water heater fires up



Technical Manual

Model: GSWH-2



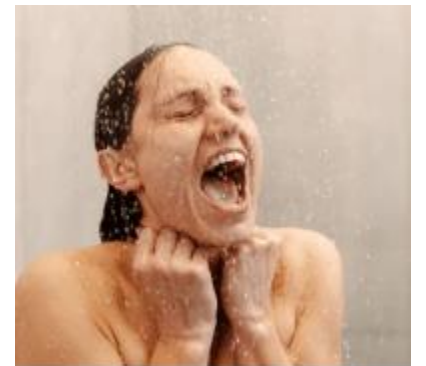
Features:

- Demand Tankless Water Heater
- LP Gas / Induced Draft
- Constant Outlet Temperature
- Linear Gas Control Valve
- Electronic Gas Modulation
- Microprocessor Controls

Shower Hot Water Recirculation

- The Challenge with Boon Docking or Dry Camping
 - Step 1 - Turn on hot water
 - Step 2 – Wait for water heater to fire up
 - Step 3 – Wait for hot water to reach shower head
 - Step 4 – Enter shower and get wet or rinse off
 - Step 5 – Turn off water(Water Heater Shuts Down) - soap up
 - Step 6 – Repeat steps 1 thru 5

Results – Fresh water down the drain and not fun



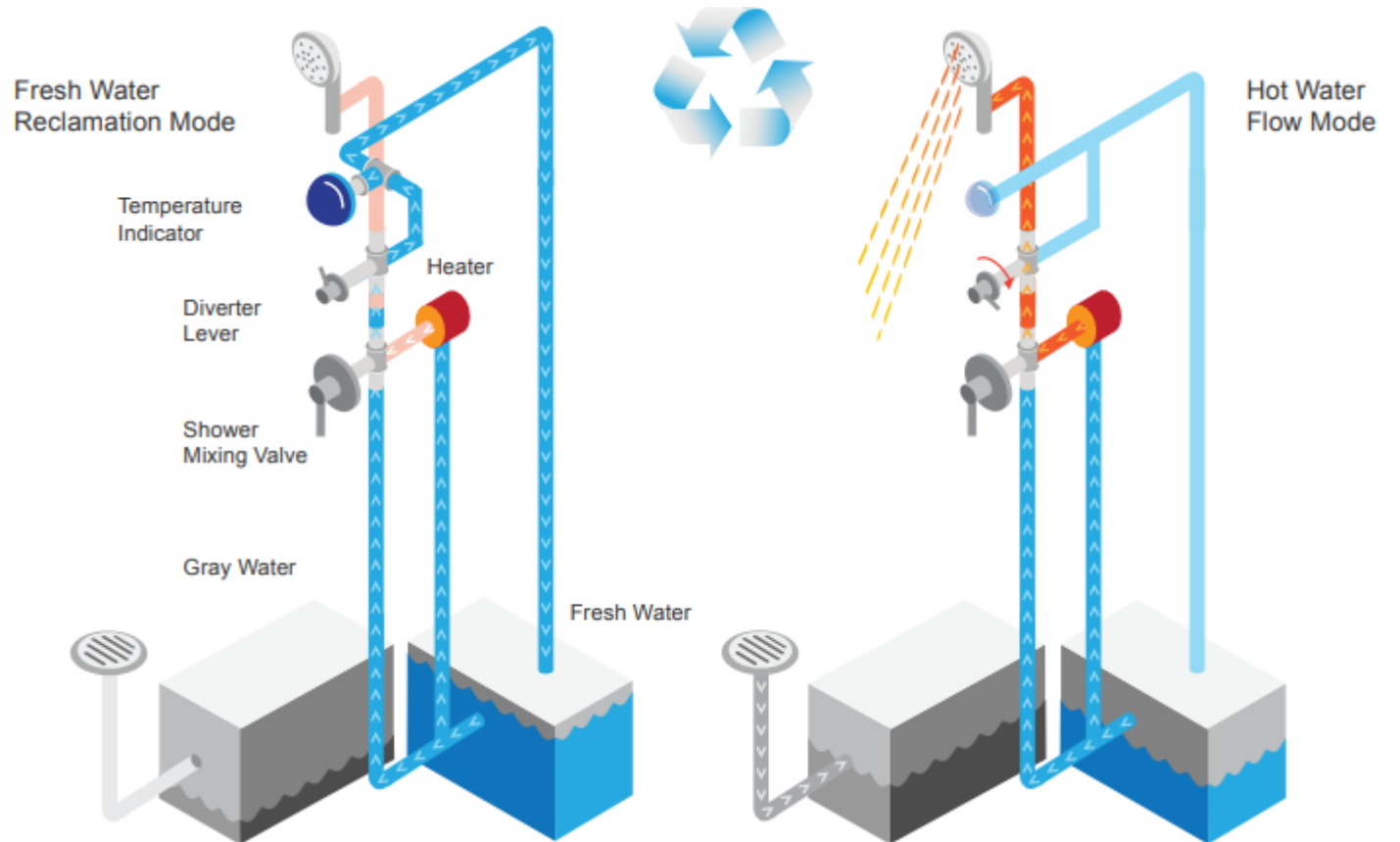
Shower Hot Water Recirculation

- Solution is Add a Hot Water Recirculation Loop

- Aqua View Inc.



- Fresh water reclamation Systems
 - “Showermiser”
 - “Sinkmiser” (model SK002)
 - Credit to Airforums.com



Shower Hot Water Recirculation

- Aqua View
Sinkmiser SK002

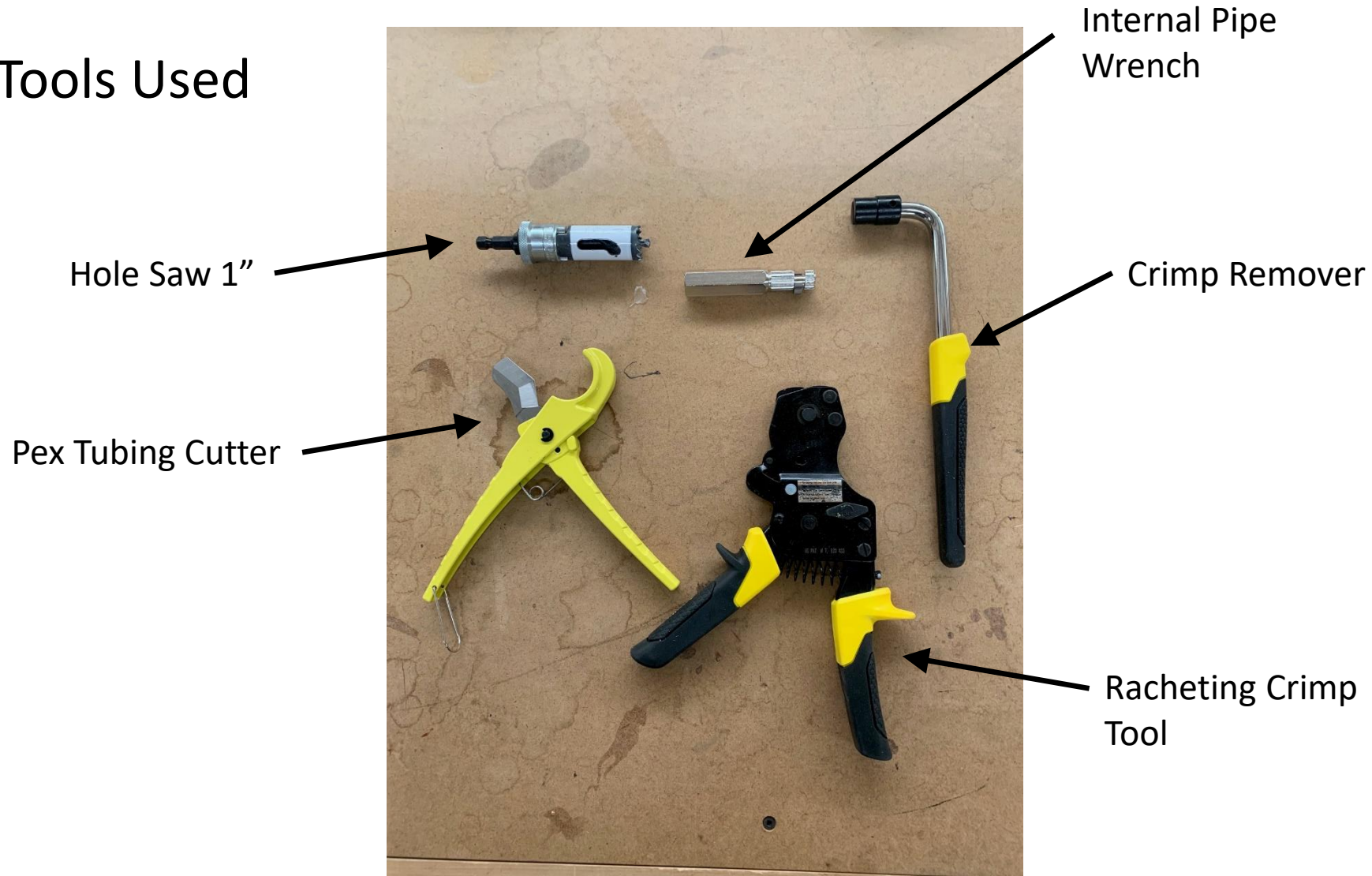
Plastic Temperature
Button



Recirculation
Valve

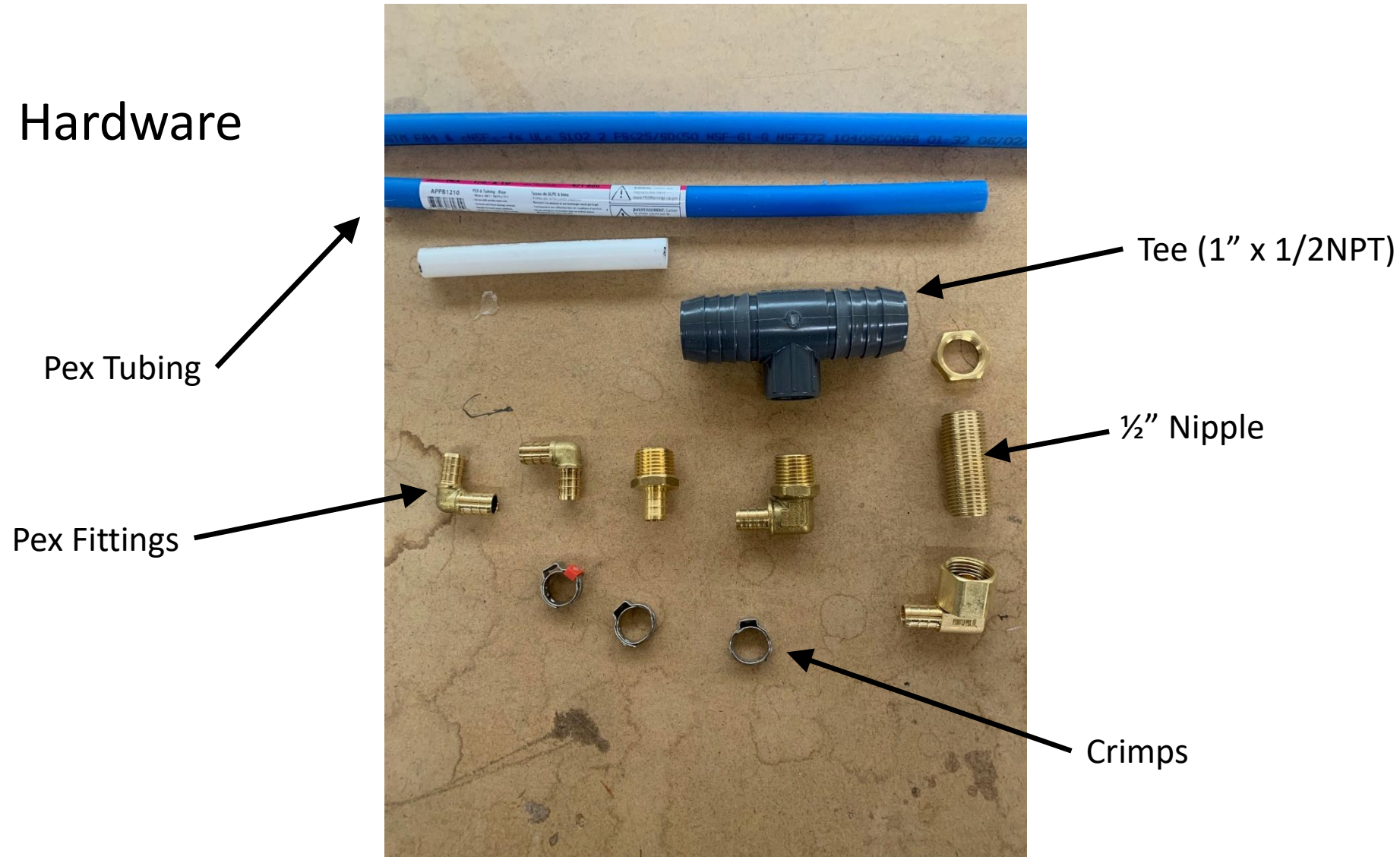
Shower Hot Water Recirculation

- Tools Used



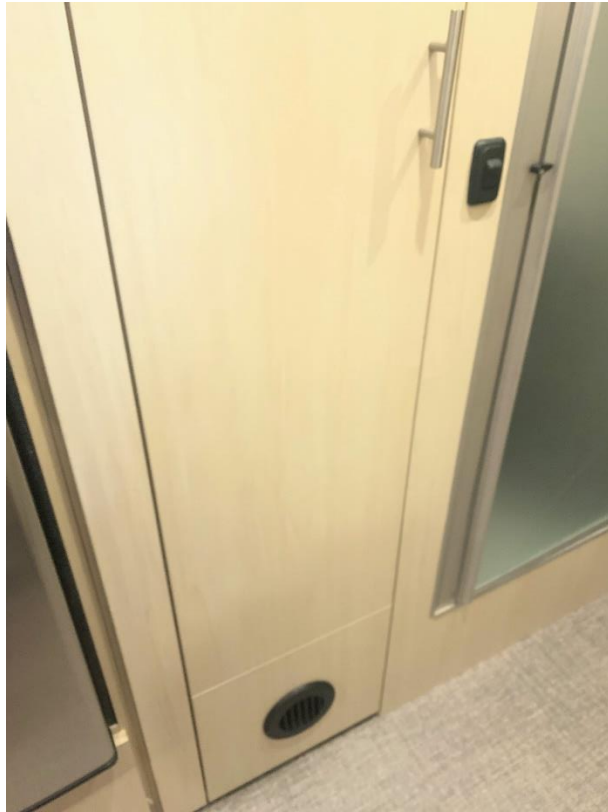
Shower Hot Water Recirculation

- Hardware



Shower Hot Water Recirculation

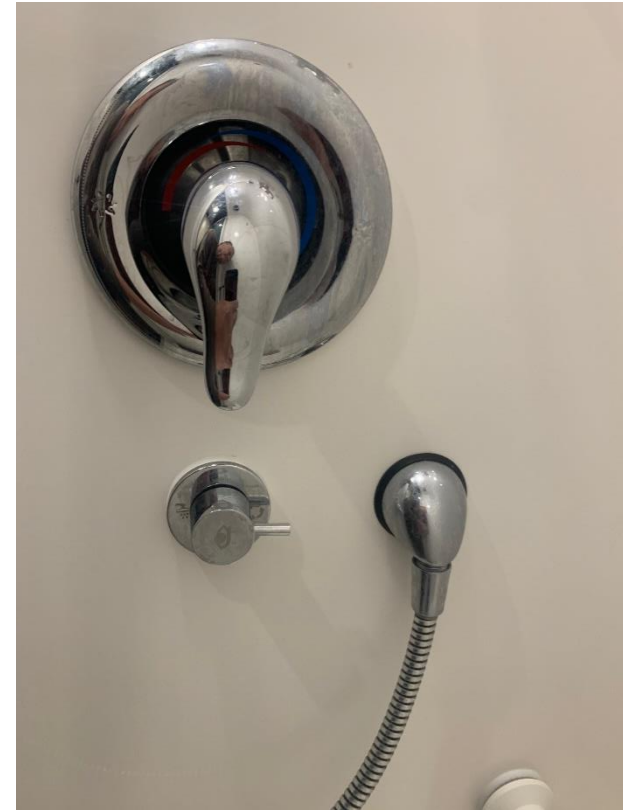
- Closet and Shower



Outside Closet



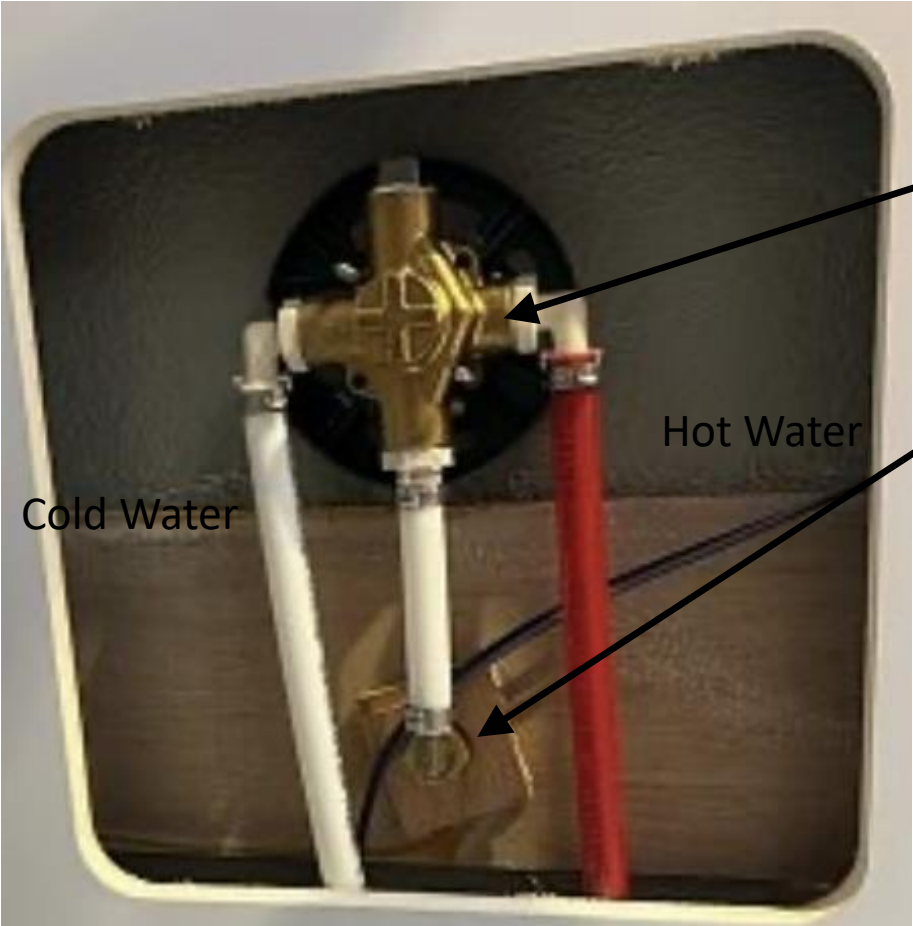
Inside Closet



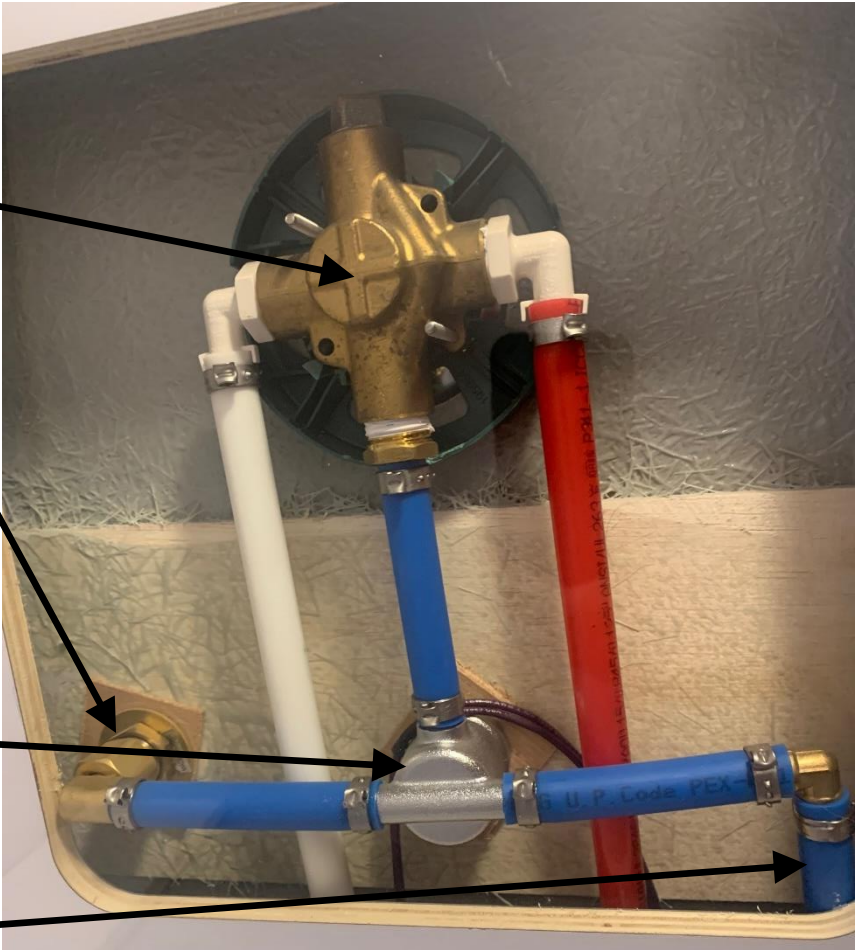
Inside Shower

Shower Hot Water Recirculation

Before



After



Mixing Valve

Shower Head Hose

Recirculation Valve

Return to Fresh Tank

Cold Water

Hot Water

Shower Hot Water Recirculation

Return line running to the fresh water fill hose.



Closet Floor
Removed



Shower Hot Water Recirculation

- Parts List

	PART DESCRIPTION	SUPPLIER	P/N	QTY
1	VALVE, DIVERTING	SINKMISER	SKC002	1
2	FITTING, INLINE BARB W/FEMALE THREADS	MCMASTER CARR	48315K118	1
3	MIP, BRASS NIPPLE EXTENSION, 1/2IN. X 2.0IN.	HARDWARE		1
4	PEX, 90 DEGREE ELBOW, BRASS 1/2IN.	HARDWARE		2
5	PEX, INLINE BRASS PEX-B BARB X 1/2IN x 1/2IN, MALE PIPE THREAD	HARDWARE		1
6	PEX, 90 DEGREE ELBOW, BRASS PEX-B BARB X 1/2IN X 1/2IN, MALE PIPE THREAD	HARDWARE		1
7	PIPE, 1/2IN. PEX, BLUE 10'	HARDWARE		1
8	CLAMP, HOSE, SS X ?	HARDWARE		2
9	1/2 IN. PEX CINCH RINGS	HARDWARE		~6

Shower Hot Water Recirculation

The End