



Stage	Step #	Instruction	Additional note
Shut down Pre-Check & Visual	1	Turn off Hot Water Heater	
Shut down Pre-Check & Visual	2	Turn off Circulator Pump	
Shut down Pre-Check & Visual	3	Turn off Main Pump	
Shut down Pre-Check & Visual	4	Ensure Valve #1 is Open	Main Water Tank Valve
Shut down Pre-Check & Visual	5	Ensure Valve #2 is Closed	Tank Drain Valve
Shut down Pre-Check & Visual	6	Ensure Valve #3 is Closed	System Drain Valve
Shut down Pre-Check & Visual	7	Ensure Valve #4 is Open	Pump Inlet Isolation Valve
Shut down Pre-Check & Visual	8	Ensure Valve #5 Open	Pump Outlet Isolation Valve
Shut down Pre-Check & Visual	9	Ensure Valve #6 Open	System Isolation Valve
Shut down Pre-Check & Visual	10	Ensure Valve #7 is Closed	Pressure Tank #1 Isolation Valve
Shut down Pre-Check & Visual	11	Ensure Valve #8 is Closed	Pressure Tank #1 Drain Valve
Shut down Pre-Check & Visual	12	Ensure Valve #9 is Closed	Pressure Tank #2 Isolation Valve
Shut down Pre-Check & Visual	13	Ensure Valve #10 is Closed	Pressure Tank #2 Drain Valve
Shut down Pre-Check & Visual	14	Ensure Valve #11 is Closed	Pump Pressure Switch Drain Valve
Shut down Pre-Check & Visual	15	Ensure Valve #12 is Closed	Urinal Bank #1 & Janitor Closet Supply Isolation Valve
Shut down Pre-Check & Visual	16	Ensure Valve #13 is Closed	Urinal Bank #2 Supply Isolation Valve
Shut down Pre-Check & Visual	17	Ensure Valve #14 is Closed	Toilet Bank Isolation Valve
Shut down Pre-Check & Visual	18	Ensure Valve #15 is Closed	Hot Water Tank Drain Valve
Shut down Pre-Check & Visual	19	Ensure Valve #16 is Open	Hot Water Tank Cold Water Inlet Isolation Valve
Shut down Pre-Check & Visual	20	Ensure Valve #17 is Open	Hot Water Tank Hot Water Outlet Isolation Valve
Shut down Pre-Check & Visual	21	Ensure Valve #18 is Closed	Mixing Valve Hot Water Supply Isolation Valve
Shut down Pre-Check & Visual	22	Ensure Valve #19 is Closed	Water Inlet Isolation Valve
Shut down Pre-Check & Visual	23	Ensure Valve #20 is Closed	Mixing Valve Hot Water By-Pass Valve
Shut down Pre-Check & Visual	24	Ensure Valve #21 is Closed	Mixing Valve Tempered Water By-Pass Valve
Shut down Pre-Check & Visual	25	Ensure Valve #22 is Closed	Urinal Bank #2 Drain Valve

Stage	Step #	Instruction	Additional note
Hot Water Tank & Pressure Tank Water Drain	1	Open Cam Lock #2	NOTE: Steps 1-4 are for Warm Weather Operation only. If purging fresh water tank in Cold weather, see below.
Hot Water Tank & Pressure Tank Water Drain	2	Connect Drain Hose to Cam Lock #2	Direct drain hose to suitable location
Hot Water Tank & Pressure Tank Water Drain	3	Open Valve #2	Drain water to suitable location
Hot Water Tank & Pressure Tank Water Drain	4	Close Valve#2	Close drain valve once flow of water stops
Hot Water Tank & Pressure Tank Water Drain	5	Connect Drain Hose to Valve #8	Direct drain hose to suitable bucket or container
Hot Water Tank & Pressure Tank Water Drain	6	Open Valve #8	Drain Pressure Tank #1 water to suitable location
Hot Water Tank & Pressure Tank Water Drain	7	Close Drain Valve #8	Close drain valve once flow of water stops
Hot Water Tank & Pressure Tank Water Drain	8	Connect Drain Hose to Valve #10	Direct drain hose to suitable bucket or container
Hot Water Tank & Pressure Tank Water Drain	9	Open Valve #10	Drain Pressure Tank #1 water to container
Hot Water Tank & Pressure Tank Water Drain	10	Close Drain Valve #10	Close drain valve once flow of water stops
Hot Water Tank & Pressure Tank Water Drain	11	Open Valve #7	
Hot Water Tank & Pressure Tank Water Drain	12	Open Valve #9	
Hot Water Tank & Pressure Tank Water Drain	13	Connect Drain Hose to Valve #15	Direct drain hose to suitable bucket, container or drain
Hot Water Tank & Pressure Tank Water Drain	14	Open Janitor's Sink Hot Water Faucet	
Hot Water Tank & Pressure Tank Water Drain	15	Open Drain Valve #15	
Hot Water Tank & Pressure Tank Water Drain	16	Close Drain Valve #15	Close drain valve once flow of water stops
Hot Water Tank & Pressure Tank Water Drain	17	Close Janitor's Sink Hot Water Faucet	
Hot Water Tank & Pressure Tank Water Drain	18	Close Valve #16	
Hot Water Tank & Pressure Tank Water Drain	19	Close Valve #17	
Parital Fill Water Storage Tank with Anti-freeze	1	Connect water fill equipment to Camlock #1	
Parital Fill Water Storage Tank with Anti-freeze	2	Open Valve #19	Fill Water Storage Tank with 40 Gallons of Anti-freeze. Need to confirm volume of anti-freeze
Parital Fill Water Storage Tank with Anti-freeze	3	Close Valve #19	
Prime Pump & Charge Pressure Tanks	1	Open Pump Purge Plug	This allows pump to prime
Prime Pump & Charge Pressure Tanks	2	Open Valve #1	Confirm anti coming out of purge plug
Prime Pump & Charge Pressure Tanks	3	Close Pump Purge Plug	
Prime Pump & Charge Pressure Tanks	4	Start pump	Ensure pump stops when pressure gauge reads 70psi

Stage	Step #	Instruction	Additional note
Purge Water from System	1	Open Valve #12	
Purge Water from System	2	Open Janitor's Sink Cold Water Faucet	Run water until anti-freeze comes out of faucet
Purge Water from System	3	Close Janitor's Sink Cold Water Faucet	
Purge Water from System	4	Open Valve #17	
Purge Water from System	5	Open Valve #16	
Purge Water from System	6	Open Janitor's Sink Hot Water Faucet	Run water until anti-freeze comes out of hot water faucet and hot water tank is full
Purge Water from System	7	Close Janitor's Sink Hot Water Faucet	
Purge Water from System	8	Flush each bank #1 urinal until anti-freeze is coming out of flush valve	Confirm function of each urinal
Purge Water from System	9	Open Valve #13	
Purge Water from System	10	Flush each bank #2 urinal until anti-freeze is coming out of flush valve	Confirm function of each urinal
Purge Water from System	11	Open Valve #14	
Purge Water from System	12	Flush each toilet until bowl is full of anti-freeze	Confirm function of each toilet
Purge Water from System	13	Open Valve #18	
Purge Water from System	14	Open Valve #20	
Purge Water from System	15	Run the faucet on 1st Men's Lavatory from right hand side multiple times	Ensure water has been replaced with anti-freeze from valve #20 to 1st elbow
Purge Water from System	16	Close Valve #20	
Purge Water from System	17	Open Valve #21	
Purge Water from System	18	Run all faucets on for men's lavatories	Confirm function, run each faucet until line full of anti-freeze
Purge Water from System	19	Run women's lavatorie faucet	Confirm function, run faucet until line full of anti-freeze
Purge Water from System	20	Turn on circulator pump	Cycle circulator pump until anti-freeze has filled recirculation line back to hot water tank
Purge Water from System	21	Turn off circulator pump	
Close Water Storage Tank	2	Close Valve #19	
Close Water Storage Tank	3	Disconnect anti-freeze fill equipment from Camlock #1	
Close Water Storage Tank	4	Replace Camlock #1 Cover	
Close Water Storage Tank	5	Close water fill access hatch	
Purge Water from Fresh Water Tank	1	Turn off Hot Water Heater	Cold weather operation. If purging water in Warm Weather, see above.
Purge Water from Fresh Water Tank	2	Turn on Janitors Sink Cold Water Faucet	Drain 90% of fresh water tank into black water tank.
Purge Water from Fresh Water Tank	3	Turn off Janitors Sink Faucet	
Purge Water from Fresh Water Tank	4	Turn off circulator Pump	
Purge Water from Fresh Water Tank	5	Use small transfer pump to remove remaining Fresh Water	Use manhole access to get to remaining water. Pump into Janitors mop sink
Purge Water from Fresh Water Tank	6	Add Glycol to any remaining water in Fresh Water Tank to prevent freezing.	