

# Cleaning & Sanitisation

Scheduled cleaning and sanitisation is recommended to ensure the integrity of your drinking water. This scheduling will vary depending on the conditions and environment in which the cooler is in use. Follow the steps outlined below under **Cleaning Instructions** for sanitisation methods of the water contact points.

For cleaning exterior surfaces use only mild dishwashing liquid detergent. **DO NOT USE** bleach or abrasive cleaners. On Summit models, use Crystal Brite or any other specialty stainless steel cleaner only.

## Cleaning Instructions

### Method 1:

1. Unplug the cooler.
2. Remove the water bottle(fig.2-1) and drain excess water through the faucets.(fig.2-2) On Hot & Cold models turn hot tank switch off and allow 2 hours for the hot water to cool down. Remove drain plug at the rear of the cooler and drain water into a container(0.4 of a gallon or 1.8L)(fig.2-3).
3. Remove the locking pin located at rear of crystal guard(fig.3-1). Place fingertips of both hands on crystal guard and turn it counter clockwise until it is free from the cooler opening and remove from cooler(fig.3-2).

**Note:** For models with Dryguard™ non spill system see removal instructions on page 11.

4. Remove baffle cup by pulling straight up and set aside(fig.4-1).
5. Add one and a half tablespoons of vinegar to 1 gallon (4.5 L) of clean water and pour into reservoir. Wipe the internal reservoir components, baffle cup and faucets with a clean cloth(fig.5-1) (fig.5-2). Let solution stand for five minutes(fig.5-3).



figure 2-1



figure 2-2



figure 2-3



figure 3-1



figure 3-2



figure 4-1



figure 5-1



figure 5-2



figure 5-3

6. Rinse reservoir, baffle and both faucets thoroughly with clean water several times.
7. Replace baffle cup and reassemble cooler.
8. Place new bottle on appropriately and draw 1 cup of water from each faucet and discard.
9. Plug cooler back into outlet and resume use.

### Method 2:

For optimal sanitisation, all water contact points should be removed from the cooler. The cold water reservoir, baffle system, elbows and the faucets can be removed and sanitised either in a dishwasher or wash basin. Follow the steps below:

1. Unplug the cooler.
2. Remove the water bottle and drain excess water through the faucets. On Hot & Cold models turn hot tank switch off and allow 2 hours for the hot water to cool down. Remove drain plug at the rear of the cooler and drain water into a container (0.4 of a gallon or 1.8L).
3. Remove the locking pin located at rear of crystal guard. Place fingertips of both hands on crystal guard and turn it counter clockwise until it is free from the cooler opening and remove from cooler.

**Note:** For models with Dryguard™ non spill system see removal instructions on page 11.

4. Remove the faucets from reservoir elbows by turning them counter clockwise(fig.4-1).
5. Remove the insulation jacket covering the reservoir, straight up through the cooler opening (fig.5-1).
6. Remove baffle cup(fig.6-1) and unscrew baffle stem and wing nut(fig.6-2)(fig.6-3).
7. Approach the cooler from the rear. Open and unhook the latch provided on the evaporator band (fig.7-1)(fig.7-2).
8. Use both hands to loosen the reservoir from the evaporator band and lift it straight through the cooler opening(fig.8-1).
9. Remove the faucet elbows from the bottom insulation.



figure 4-1



figure 5-1



figure 6-1



figure 6-2



figure 6-3



figure 7-1



figure 7-2



figure 8-1

10. Place all internal contact points in dishwasher or in wash basin. Use normal dish washing detergent or vinegar based solution as outlined above(fig.10-1)(fig.10-2)(fig.10-3).

**Note:** Silicone washers should be removed from the elbows if using a dishwasher.

11. To reassemble, reverse this procedure (steps 3 through 9).

12. Place new bottle on appropriately and draw 1 cup of water from each faucet and discard(fig.12-1).

13. Plug cooler back into outlet and resume use.



figure 10-1



figure 10-2



figure 10-3



figure 12-1

## Removal and Installation

### . Crystal Guard Removal & Installation Procedure

#### REMOVAL

1. Remove the locking pin located at rear of Crystal Guard (fig.1-1).

2. Place finger tips of both hands on the Crystal Guard(fig.2-1) and turn it counter clockwise until it is free from the cooler(fig.2-2) opening and remove from the cooler (fig.2-3).

3. To reinstall reverse these steps.

**Note:** Remember to replace locking pin to secure Crystal Guard to cabinet.



figure 1-1



figure 2-1



figure 2-2



figure 2-3

#### INSTALLATION

*If you take apart the Crystal Guard for sanitation or because a part of it needs replacing, reassemble as below.*

4. Ensure that the Crystal Pin has the O-Ring in place at its base firmly insert the Crystal Pin inside the

Crystal Guard(fig.4-1). Make sure that the Crystal Pin's four locking tabs have completely protruded through the locking tabs entries(fig.4-2).

**Note:** Ensure that the Crystal Pin has the O-Ring in place.

5. Using the Crystal Guard removal tool (SMT-C000110) to insert clean pin in guard(fig.5-1). Twist the Crystal Pin clockwise until the four locking tabs are approximately half way between the four holes(fig. 5-2).

6. Insert the floater into the cylindrical toothed part on the backside of the Crystal Guard(fig.6-1).

**Note:** Make sure that once installed, the floater can move freely up and down inside the cylinder.

7. Insert the air filter cap over the floater and on the cylindrical toothed area of the Crystal Guard until it bottoms out(fig.7-1)(fig.7-2).

8. Insert the blue gasket into the gasket groove area of the Crystal Guard until it bottoms out (usually this gasket is applied to the guard by the factory as a sub assembly)(fig.8-1). Make sure that the gasket is depressed so that it is below the level of the gasket groove to allow ease of assembly(fig.8-2).

**Note:** The reservoir also can be used as a tool to press the gasket into the groove (fig.8-3).

9. Re-install the Crystal Guard onto cooler. The Crystal Guard system was designed to seal air and therefore the guard will fit very tightly when installed with the blue gasket(fig.9-1).

10. Poke the arrow pin used to lock the guard down thru its drilled hole to secure the lid on the cooler (fig.10-1).



figure 4-1



figure 4-2



figure 5-1



figure 5-2



figure 6-1



figure 7-1



figure 7-2



figure 8-1



figure 8-2



figure 8-3



figure 9-1



figure 10-1

## . E & S Series Reservoir Removal Procedure

1. Remove the water bottle(fig.1-1) and drain water from the reservoir(fig.1-2) and hot tank, remembering to cool and drain hot tank. Allow 2 hours for hot water to cool down inside the hot tank before removing the drain plug at the rear of the cooler to drain into a bucket.

2. Use the fingertips of both hands to press on the Guard and turn counter clockwise till it is free from the cooler opening(fig.2-1).

**Note:** The DryGuard™ lid is standard on the Sierra cooler. See the DryGuard™ section for installation and removal instructions.

3. Use fingers of both hands to lift up and remove the insulation jacket covering the reservoir, from the cooler opening(fig.3-1).

4. Remove the baffle cup by lifting straight out(fig.4-1). Loosen & remove the baffle stem(fig.4-2) and wing nut(fig.4-3) by turning counterclockwise.

5. Approach the cooler from the rear and open the latch provided on the evaporator band(fig.5-1)(fig.5-2).

6. Use both hands to loosen the reservoir from the evaporator band and lift it straight through the cooler opening(fig.6-1).



figure 1-1



figure 1-2



figure 2-1



figure 3-1



figure 4-1



figure 4-2



figure 4-3



figure 5-1



figure 5-2



figure 6-1

## • DryGuard™ Installation & Removal Procedure

### REMOVAL

1. Remove the bottle (fig.1-1) and Crystal Guard (fig.1-2) from the cooler.
2. Approaching the cooler from the side, place one palm onto the top of the cooler on the side furthest from you, and using your thumb, press downwards on the reservoir Insulation (fig.2-1).
3. Using your other hand, grip the edge of the Inner DryGuard™ Cone and pull it up slowly to remove (fig.3-1).

**Note:** DryGuard™ is designed to fit very tightly into reservoir.



figure 1-1



figure 1-2



figure 2-1



figure 3-1

### INSTALLATION

4. Place the Inner DryGuard™ assembly onto the center of the cold water reservoir; make sure the filter cap is pointed towards the rear of the cooler (fig.4-1).
5. Using the palms of both hands, push the DryGuard™ straight down into the reservoir (fig.5-1) (fig.5-2).
6. Install the Outer DryGuard™ onto the cooler (fig.6-1) and lock into place by turning clockwise (fig.6-2).



figure 4-1



figure 5-1



figure 5-2



figure 6-1



figure 6-2

## . Refrigeration Repair System(RRS) Removal Procedure

1. Unplug cooler from power source.
2. Empty and remove water bottle(fig.2-1) and drain cooler reservoir through the faucets until empty (fig.2-2).If cooler is a hot and cold, the hot tank must be drained from the drain plug located on the back of unit on the lower right side(fig.2-3). Also, shut hot tank switch off.

### **CAUTION**

**The water in the hot tank is very hot; after unplugging cooler, allow 2 hours for water to cool down before removing the drain cap to drain the system!**

3. Remove top lid of cooler by turning counter clockwise or to the left(fig.3-1). For Crystal Guard and AquaFlo models, remove the crystal guard pin stopper at rear of outer edge of guard or ring(fig.3-2).
4. Turn cooler around so you are facing the back of the unit, and remove the top of the two piece blue, or white, insulation by lifting it straight up through the cooler top opening(fig.4-1). Bottom insulation piece remains on cooler.
5. If cooler is equipped with a white aluminum evaporator (cooling band), loosen(fig.5-1) and unhook (fig.5-2) the latch and catch from the band and pull the band back away from reservoir towards the back of cooler cabinet. If cooler is equipped with a copper tubing evaporator, there is no latch system to unhook.
6. Remove faucets by turning counter clockwise(fig.6-1), remove baffle cup(fig.6-2) and unscrew baffle stem(fig.6-3) and wing nut(fig.6-4) inside reservoir. Mark a vertical line on the outside of the reservoir across evaporator(fig.6-5), so when re-installing the reservoir will be lined up as it is presently.



figure 2-1



figure 2-2



figure 2-3



figure 3-1



figure 3-2



figure 4-1



figure 5-1



figure 5-2



figure 6-1



figure 6-2

7. Hold the evaporator down and press the reservoir up and out of the evaporator cooling coil(fig.7-1). At this point it is advisable to put the cooler on a bench or table to make it easier to access components.
8. Remove the 4 screws that secure the metal top and bottom plate, 2 on top(fig.8-1) and 2 on the bottom (the outside screws)(fig.8-2). Leave the 4 screws that hold the black grill to the top & bottom plate secure.
9. The RRS system is now ready to be slid out of the plastic cabinet.
10. Hold the condenser on the right hand side and slowly lift and pull to free the RRS system from the cooler body. Slowly work the unit from top to bottom until it starts to slide out. Once it starts to come out, be careful of the small capillary tube (copper coil) located on the left side of the compressor as it is very fragile(fig.10-1), guide it by the cooler body with your hand. Then slide the unit as far as possible to the left and the support stick on the right side will come by the body(fig.10-2). Continue until the RRS is outside the cooler body and free standing on its own(fig.10-3).



figure 6-3



figure 6-4



figure 6-5



figure 7-1



figure 8-1



figure 8-2



figure 10-1



figure 10-2



figure 10-3

## . Replacing Hot Tank Auto Cutout & Manual Reset Procedure

1. Remove Refrigeration System (Refer to RRS Removal Procedure)
2. Place the RRS system on a bench or table for easier access to components(fig.2-1).
3. Unplug wire connector from the manual reset and auto cutout(fig.3-1) on the hot tank-also the terminal connector that joins the two together(fig.3-2) .

4. Slide both the reset and auto cutout upward and out of the stainless bracket on the back of the hot tank(fig.4-1). Before installing the new cutout and reset, use the heat transfer compound (white paste) that is remaining on the old parts, and wipe it onto the new ones(fig.4-2).
5. Slide the auto cutout down into the hot tank bracket first(fig.5-1), making sure it is in straight and that the stainless bracket is holding it on both sides evenly, and that it goes right to the bottom of bracket, follow with the reset(fig.5-2). The reset must be right down flat against the cutout to ensure good contact between the two, install terminal connector to join them(fig.5-3).
6. Re-install the wire from the hot tank on/off switch to the top of the reset and the wire from the heater to the auto cutout(fig.6-1).

**Note:** Push reset button in before re-assembling the unit(fig.6-2).

**You can now reinstall the system into the cabinet.**



figure 2-1



figure 3-1



figure 3-2



figure 4-1



figure 4-2



figure 5-1



figure 5-2



figure 5-3



figure 6-1



figure 6-2

## . Hot Tank & Heater Assembly Replacement Procedure

### Removal

1. Remove Refrigeration System (Refer to RRS Removal Procedure)
2. Stand the RRS system on a bench or table for easier access to components.
3. Remove drain assembly from condenser (black grill) at back of unit(fig.3-1).
4. Unplug wire connector from manual reset on hot tank(fig.4-1).

5. Unplug wire connector from heater that goes down to compressor(fig.5-1).
6. Remove screw and ground wire from hot tank bracket(fig.6-1).
7. Hold the hot tank assembly with one hand while removing the 2 screws that hold the hot tank support bracket on the back of the condenser(fig.7-1). Lift the bottom reservoir insulation slightly and slide tank down and out.



figure 3-1



figure 4-1



figure 5-1



figure 6-1



figure 7-1

## Installation

8. Install the new tank assembly in the reverse order as the above instructions. The tank height is determined by the gasket on the hot tank inlet, it should be even with the insulation indent where the reservoir will rest(fig.8-1). The support bracket screws should be fastened in the same location on the condenser, as before disassembly. Do not over tighten these screws to the condenser, as you could break the condenser cooling fins.



figure 8-1

## . Replacing Compressor Relay & Overload Procedure

1. Remove Refrigeration System (Refer to RRS Removal Procedure)
2. Stand RRS system on bench or table for easier access to components.
3. Turn unit so you are facing the front, and remove black plastic cover on the front of compressor. For

Tecumseh compressors, place a screw driver vertically between compressor and cover and use blade of screw driver to pop it off(fig.3-1). For LG compressors, remove the cover screw on the bottom right side, and pull it out and up(fig.3-2). (For both styles, notice how the cover fits onto the compressor, so when you are re-installing it, you can put it on the same way)

4. Remove the wire (2 wires if unit is hot & cold) from black & white overload (located directly above brown start relay on Tecumseh style compressors(fig.4-1) and directly below the black start relay on the LG compressor styles)(fig.4-3). Remove the black wire from top right connector of start relay(fig. 4-2)(fig.4-4).

5. Remove the start relay first by pulling it straight away from compressor (it is pushed on securely so you will have to pull firmly to remove it)(fig.5-1)(fig.5-3). Then remove the overload the same way(fig. 5-2)(fig.5-4).

6. Re-install new overload first, and then the start relay. Push black wire onto the top right connector on relay and the remaining wire(s) onto the connector on the overload(fig.6-1).

7. Re-install the black plastic cover to the same position as when you took it off. Run wires up through the bottom opening or slot, so they are not caught between cover and compressor(fig.7-1)(fig.7-2). When in place it should not pull off easily.



figure 3-1



figure 3-2



figure 4-1



figure 4-2



figure 4-3



figure 4-4



figure 5-1



figure 5-2



figure 5-3



figure 5-4



figure 6-1



figure 7-1



figure 7-2

## . Hot Tank Heater Replacement Procedure

1. Remove Refrigeration System (Refer to RRS Removal Procedure).
2. Stand RRS system on bench or table for easier access to components(fig.2-1).
3. Unplug wire connector from heater band that goes to the manual reset, which is mounted along with the auto cutout, in the bracket directly above the heater tightening screw(fig.3-1).
4. Unplug wire connector from heater band that goes down to the compressor(fig.4-1).
5. Loosen and remove tightening screw that secures heater band to the hot tank(fig.5-1) and slide heater down(fig.5-2) and over support bracket and drain tube.\*\* Save the heater band film that is between the heater and tank and re-use with the new heater.
6. Install new heater in the reverse order

**Note:** Push the manual reset button in before re-assembling unit.



figure 2-1



figure 3-1



figure 4-1



figure 5-1



figure 5-2