Ascent 100

Service Manual

Note:
Please read these instructions before operating the unit.
Unit appearance, specifications, etc. are subject to change
Without prior notice if necessary for improving unit performance.
The rated voltage of this unit is AC 120v/60 Hz only.

VF| 062922 | JDM

Before You Begin

Please read the information contained in this manual carefully before proceeding with installation. Failure to do so can cause damage and may void the manufacturer's warranty.

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CONDITIONS FOR USE

Caution

DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM WAS INSTALLED.

THIS DRINKING WATER SYSTEM IS FOR USE ON POTABLE WATER SUPPLIES ONLY.

Source Water Supply

Municipal/Private:	Potable Water
Supply System Pressure:	25~80 PSI (1.7-5.5 bar)
Minimum System Pressure (RO):	50 PSI (3.4 bar)
Temperature:	40°~100°F (4°~38°C)

Warning

A pressure regulator must be installed before the system water inlet if the water pressure or any possible pressure spikes could exceed 80 PSI (5.5 bar). Incoming pressure for RO filtration systems should be 60-70 PSI. Failure to comply will void all warranties and could impact product quality and reliability. The manufacturer accepts no liability for, and damage caused by excessive water pressure.

Environmental Conditions

System should be installed in areas that are protected from severe environmental conditions. System is not manufactured or approved for installation in areas that are exposed to direct sunlight, rain/snow and/or extreme temperature variation.

Compliance

Installation and service must be performed by qualified personnel to ensure compliance with all applicable local, state, federal and international codes.

Note:

Always check applicable plumbing codes before tapping into a water or drain line.

SYSTEM OVERVIEW

The Ascent 100 comes equipped with features one can expect from a state-of-the-art POU system from Culligan.

HIGHLIGHTS INCLUDE:

- Touch free PSD sensors for selecting water temperature and dispensing water
- Glass upper front panel for high-end contemporary design
- 12.25" dispense area
- Comfortable dispensing height with drip tray 32" from floor
- ADA wheelchair height compliant (when installed in accordance with ADA requirements)
- In-tank LED UV to help maintain the cleanliness of the reservoir
- Customizable filter alerts
- Leak detection and leak stop
- Color changing dispense area indicator light (Blue for cold, Red for hot)
- Cold water dispense pump provides flow of 4.0 lpm, more than twice the rate of a standard cooler
- Hot water dispense pump increases access to available hot water capacity
- Air filter to help keep airborne particles from the water in the reservoirs
- Optional drip tray to drain connection

THE ASCENT 100 IS AVAILABLE IN TWO FILTER CONFIGURATIONS:

1. ASCENT 100 RO: This ASCENT 100 RO model filters your water through a series of filters and an RO membrane to remove contaminants. These are:
    a. 10-micron Sediment filter (P/N BFC-SED)
    b. Pre-carbon GAC filter (P/N BFC-PRE)
    c. 80 gallon per day RO membrane (P/N BFC-RO80)
    d. Mineral filter to increase alkalinity and add electrolytes (P/N BFC-PH)
    e. GAC post filter with 1 micron mesh (P/N BFC-POST)

2. ASCENT 100 M: This ASCENT 100 Microfiltration model filters your water through the following filters:
    a. 10-micron Sediment filter (P/N BFC-SED)
    b. Pre-carbon GAC filter (P/N BFC-PRE)
    c. 1 micron carbon block with lead reduction rating (P/N BFC-LR)

RECEIVING YOUR EQUIPMENT

A common carrier will be delivering your ASCENT 100 product.

Upon Receipt you should check the following:

1. Are the systems still on the pallet?
2. Count the number of boxes you are signing for.
3. Is there any obvious damage to the product or the boxes?

If there are any discrepancies or obvious damage to the equipment or boxes, please note it on the "Bill of Lading" and/or refuse shipment.

SAFETY PRECAUTIONS

Warning
Do not install or use this drinking water system where the source water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the system.

Warning
A pressure regulator, such as a slow flow regulator, must be installed before the systems water inlet if the water pressure (including any possible spikes) could exceed 80 PSI (5.5 bar). Failure to comply will void all warranties. The manufacturer accepts no liability for damage caused by excessive water pressure.

Warning
These systems are manufactured with 134A refrigerant. Repairs to the refrigeration system must be performed by a certified refrigeration technician only.

Warning
To prevent damage fire or shock hazard, do not expose this system to rain or other extreme elements.

Power System
Available in operating voltages of 120 V 60 Hz

Caution
- To prevent electric shock and fire hazards, do not use with other than specified power source.
- Changes or modifications not approved by CULLIGAN INTERNATIONAL will void any product warranty.
- If system begins to leak, unplug, turn off water supply and call service center immediately.
- Before moving the system, disconnect power supply and wait for water to reach ambient temperature before draining.
  Hot water is extremely hot! Do Not dispense hot water directly to hands. Hot water may cause serious injury.
- If system will not be used for an extended period (5 days or longer), drain the system completely. Sanitize system prior to re-use. Should the system not perform as specified, unplug, turn off water supply and call the service center.
- Do not place any type of water container or heavy item on top of the system. **Water may leak into the electrical system causing a fire hazard. Heavy items may fall off causing injury.**

INSTALLATION PROCEDURES

WARNING: Maximum water pressure (including any potential pressure spikes) of the water supply line to the system must not exceed 80 PSI (5.5 bar) Failure to comply will void the warranty. The manufacturer accepts no liability for damage caused by excessive water pressure.

1. Always check local plumbing codes before tapping into water supply line and drain line. Tap into the supply line with an approved connector.

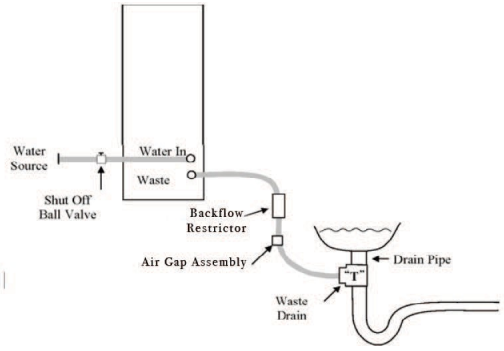
2. Once the unit and filtration system flushing procedures are complete, determine the best installation location. Consider user convenience, electrical access and water access. The unit performs optimally if within 20 feet of a cold-water supply line. Connect only to a cold water supply. Do not install Feed Water Assembly on the Hot Water Line. Do not place unit where it will be exposed to rain, freezing temperatures or direct sunlight.

3. The rear of the unit should be installed at least 2" (5 cm) from any vertical surface to ensure proper air circulation.

4. Use only ¼" OD copper or plastic tubing to connect your water supply and drain to the cooler water inlet and drain port. The inlet and drain ports are quick connect fittings. Units are shipped with plugs in each fitting. Remove the plugs prior to inserting water supply and drain lines. A water shut off valve is recommended between the inlet connection to the cooler and the water supply connection.

5. The ASCENT 100 RO system requires a waste or drain line for the RO membrane. The drain line should include an Air Gap and back flow restrictor. See diagram.

   NOTE: Check UPC & Local Plumbing Codes to confirm that all connections comply. drain should be within 50 feet for proper operation



6. Check the available power supply to assure proper electrical service. In the U.S., the voltage specification is 110/120 volt 60 hertz. Voltage outside of this specification will affect the system performance

7. Water filtration system must be flushed in accordance with the instructions. Once operating, verify proper water production.

8. Be sure to dispense water from the hot tank prior to turning on the hot tank switch on the rear of the unit. When ready, turn the Heating System switch on the back of the unit to the "ON" position.

9. Perform final inspection of all installed water lines to ensure a leak free installation.

10. Instruct user on proper system operation.

INSTALLATION PROCEDURES

To Dispense Cold Water:

Allow at least 30 minutes for adequate cooling, then wave hand over dispense sensor.

To Dispense Hot Water:

Allow at least 30 minutes for adequate heating, then wave hand over the hot select sensor and then over the dispense sensor.

NOTE:
Check UPC and Local Plumbing Codes to confirm that all connections comply.

FILTER FLUSHING PROCEDURES

Filter Flushing Procedures for ASCENT 100 Filter Configuration

All filters and RO membranes must be flushed sufficiently prior to installation.

NOTE:
The ball valve located on the filter box will turn off the water to the filters and RO membrane. Turn to closed position before removing filters. Remember to open the valve after replacing filters to turn the water back on.

Ascent 100-RO Filter Flushing:

1. Install the supply water line to "Water In" bulkhead and water drain line to "RO Drain" bulkhead in back of unit.
2. Do not plug the system into the AC socket. (No Power)
3. Remove lower front panel to access filters. Remove single screw behind drip tray, push down on the front panel and then gently pull the panel off.
4. Remove the sediment, carbon and post carbon filters and flush on a pre- flush station according to instructions on filter labels. The Culligan Ascent filter flushing head is part number D1043278.
5. Reinstall the sediment and carbon filters in their original places.
6. Disconnect the red restrictor line from the elbow at the base of the RO membrane. From this elbow, run a water line to drain.
7. Turn on the water to the filters, plug the system in and let the water run for 2 minutes.
8. Turn off the water to the filters, wait one minute and then replace the red restrictor line into the elbow at the base of the RO membrane.
9. Check the TDS
    a. Prior to turning off the water supply, ensure:
    b. For RO only systems, the TDS is 2% vs the tap water TDS (98% reduction).
    c. For Systems using the Mineral filter, the TDS will increase about 20 ppm higher than the output directly from the RO.
        i. If you have issues achieving these reading, make sure you have 25-80 PSI feeding the system, the drain is not restricted in any way including a reversed check valve, the inline flow restrictor is in place and working properly and the unit is properly flushed. Please contact technical support for further assistance.
10. Filter flushing is now complete.
11. Replace lower front panel

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FILTER FLUSHING PROCEDURES

Filter Flushing Procedures for ASCENT 100 Filter Configuration

Ascent 100-M Filter Flushing:

1. Install the supply water line to "Water In" bulkhead.
2. Do not plug the system into the AC socket. (No Power)
3. Remove lower front panel to access filters. Remove single screw behind drip tray, push down on the front panel and then gently pull the panel off.
4. Remove the sediment, carbon and post filters and flush in an external flush station according to instructions on filters the Culligan Ascent filter flushing head is part number D1043278.
5. Reinstall the filters in their original places.
6. Add a drain to the output of the last filter, turn the water on for 20-30 minutes.
7. Replace lower front panel.

FLUSHING THE ENTIRE SYSTEM

During the following steps you should be checking for any leaks, loose fittings, hot water, cold water and production rate. See next Section- Final inspection.

1. Turn the water to the system on, plug the system in and let the reservoir fill. RO systems will fill in one to two hours and micro-filtration systems will fill in 5 to 10 minutes.
2. Wave hand over "Dispense" to ensure water dispenses from cold, wave hand over "Hot Select" and ensure dispense light changes Red. Wave hand over dispense again while the dispense light is red and ensure hot water dispenses.
3. Drain cold water into container using the dispense nozzle. Activate touchless dispense sensor until water flow ceases. Water will stop dispensing after 45 seconds. Active dispense sensor again until cold tank is drained.
4. Located behind the front panel is a hot tank drain that will drain the hot and about half of the cold tank. Holding a bucket under the drain, remove drain cap and allow the system to drain until water flow stops. Replace drain cap.
5. Allow tanks to fill a second time. Turn on the hot tank switch and let the system heat for 60 minutes.
6. Turn off the hot switch and drain the hot tank from the hot tank drain.
7. Allow system to fill. Turn hot switch located on back of unit to "ON" position.
8. Allow unit to sit for 2-3 hours to fill and reach optimal operating temperature.

FINAL INSPECTION

Verify the following:

1. There are no leaks or loose components.
2. The hot water is over 160°F.
3. The cold water is below 50°F.
4. Confirm acceptable product water flow
5. Culligan ASCENT 100 RO system average tank fill is 2 hours.
6. Culligan ASCENT 100 M system average tank fill 10 min.
7. Ensure the system's exterior is clean and all components are in place.

Other Items:

1. Once a system has been flushed it should remain plugged in and water should at a minimum be dispensed occasionally.
    a. Avoid storing in your vehicle or warehouse with residual water in the tank, this will result in a bad taste after installation.
2. Always drain the system before moving it. It is not necessary to drain the Hot Tank completely through the Hot Tank drain if installing same day. Leaving water in the Hot Tank will allow turning on the Hot Tank immediately after installation of the system but if left overnight may result in a taste complaint that could even impact the cold tank.
3. Never lay the system on its side.

SYSTEM INSTRUCTIONS

Sanitizing the Cold Tank:
It is strongly encouraged that all systems are sanitized prior to placing in the field. Please follow these steps to properly perform this important step.

1. Remove two screws on rear of top lid and remove top lid

2. Remove the cold tank lid.

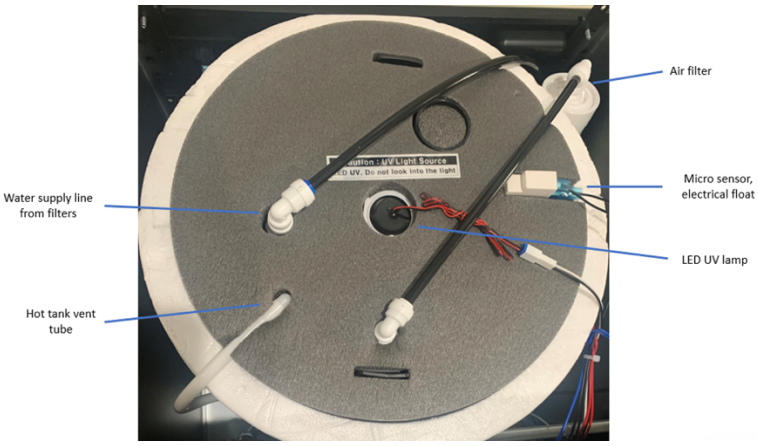
3. Using a mixture of 3% or 7% concentrate Hydrogen Peroxide, spray the inside of the tank, lid, floats, and all parts visible parts with a heavy mist of spray.

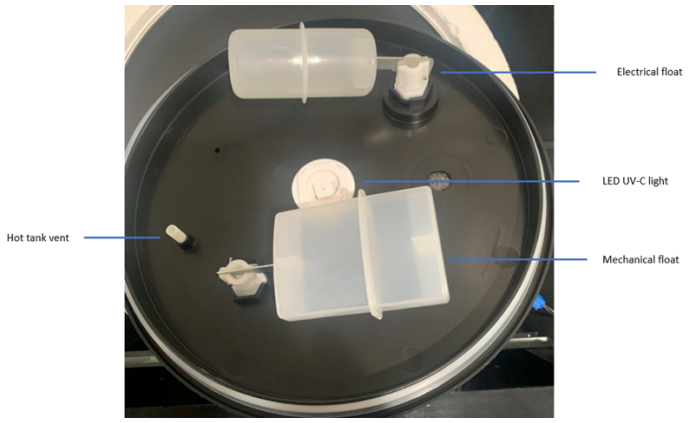
4. Using a clean towel or paper towel, wipe the Hydrogen Peroxide away from the surfaces.

5. Spray a light mist of spray again on all parts and put the lid back onto the unit.

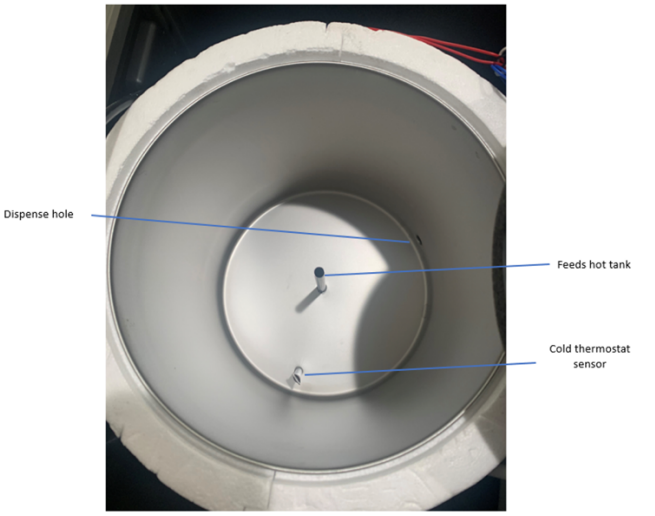
6. Allow one tank full of water to fill up and drain a single time.

    a. It is strongly encouraged to perform this step on each annual service call as well.





3-gallon cold tank



SYSTEM INSTRUCTIONS

This system allows for extensive customization and programing through administration mode.

The following are accessible through administration mode:

1. Dealer phone number
2. Filter type selection
    a. RO or Carbon block lead reduction
3. Temperature unit of measure
    a. Fahrenheit or Celsius
4. Unit of measure change
    a. Gallon or Liter
5. Filter measurement
    a. For each filter, current usage, Current time (weeks) that has elapsed, replacement cycle in time and unit of measure, filter usage reset
6. Cold water temperature
7. Hot water temperature
8. Bottles eliminated counter reset
9. UV light settings
    a. Standard, on 1 hour, off 2 hours
    b. Optional, on 2 hours, off 1 hour
    c. Optional, always on
10. UV usage timer
11. Dispense flow rate
    a. Default, ~4 L/Min
    b. Optional, ~3 L/Min
    c. Optional, ~2 L/Min
12. ECO mode setting
    a. When enabled, AI Eco Mode allows the system to monitor usage patterns and adjust heating and cooling settings accordingly.

Additional programmable items are available through a combination of sensor activations:

1. All filters reset
    a. Hold hand over hot select sensor for 5 seconds, wait for two beeps, hold hand over hot select and dispense sensors for 5 seconds.
2. Audible chimes disable/enable
    a. Wave hand over hot select for 1 second then wave hand over dispense sensor 5 times until buzzer plays.
3. Service mode
    a. Activating will disable dispense solenoid allowing to service unit without dispensing water. While in service mode the dispense light will blink between red and blue constantly.
    b. You can exit by unplugging and plugging unit back in, then waiting 15 minutes or you can exit the same way you activated the mode.
        i. Wave hand over dispense, then hot select, then dispense, then hot select, then wave hand over Hot Select and dispense simultaneously for 5 seconds
        ii. If done correctly, the cold and hot lights will flash

PROGRAMMING INSTRUCTIONS

There are 3 "buttons" that are used to enter administration mode and navigate through all programmable options:

1. "Hot select" acts as button 1
2. "Dispense" acts as button 2
3. The "C" in Culligan acts as button 3

Note: Buttons 1 and 2 are touch free while button 3 is a capacitive touch button

ENTERING ADMIN MODE:

1. Simultaneously press buttons 1 and 3 for 5 seconds.
2. When you see the entry screen, you will have 10 seconds to input the passcode to enter ADMIN MODE. Press in sequence: Button 3, 1, 2, 3.
3. You will then enter into the screen SOFTWARE VERSION DISPLAY.

WHILE IN ADMIN MODE:

The following will allow you to navigate through all options:

- Button 3: Scroll for top-level menu: this allows you to move through all menu pages to see top-level items.
- Button 1: Scroll through each specific menu item to see all options.
  - Note: at any time while in the sub menu, you may press Button 3 to move to the next top-level item.
- Button 2: Allows you to make changes when inside the sub-menu.

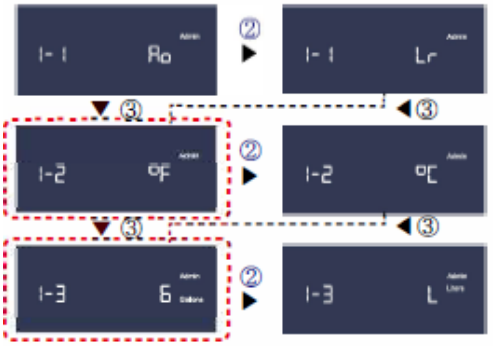
The following customizations are available through ADMIN MODE:

1. Factory Reset: While on the SOFTWARE VERSION DISPLAY screen, you may perform a factory reset by doing the following:
   a. Simultaneously hold Button 1 and Button 2 for 5 seconds until you hear a ding and see flashing lights.
   b. Then, press Button 3 once.
2. Dealer Phone Number:
   a. While in ADMIN MODE, press Button 3 to change to the "Your Culligan Dealer" screen.

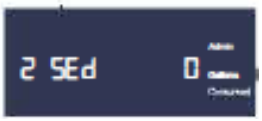
   b. You will notice the first digit is flashing. To change the digit press Button 2. To move to the next position, press Button 1. After finishing, press Button 3 to go to the next screen.

3. Filtration Type and Units of Measure:

   a. While in ADMIN MODE, press Button 3 until you arrive at the "1 SET" screen.
   b. In this screen you can change between RO and Carbon (LR) filtration, unit of measure between Fahrenheit and Celsius along with Gallons and Liters.
   c. While in the screen, press Button 1 to scroll through the 3 menu options and Button 2 to change the setting.



4. Filter Monitoring and Settings:

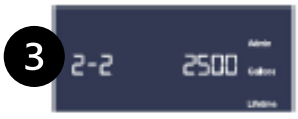


   a. In this menu, you will be able to fully monitor each filter allowing you to see consumption and time since the filter was installed and set the filter life indicator for each filter. The filter life indicator can be set by time and/or consumption and can also be turned off by setting each to "0".
   b. After entering into ADMIN MODE, press Button 3 until you arrive at the "2 Sed" screen.

   c. To scroll through the different menu screens for Sediment, press Button 1. To make a selection, press Button 3.
   d. When in the menu for each filter, if "Consumed" is illuminated on the screen that means the value being display is usage since the filter was installed. This will be visible to see for gallons/liters and weeks in two different screens.

   e. In screen display 1, the "0" represents 'gallons consumed'
   f. In the screen display 2, the "0" represents 'weeks passed'.

   g. If "Lifetime" is illuminated, then the value being displayed is the settable alert indicator.,,,……..,kkk,,,k,k,,,,,…
      i. In screen display 3, the system is currently set to count down from 2500 gallons and then trigger a filter change indicator. To change this value press Button 2. As you press Button 2, you will notice gallons will increase in intervals of 250.



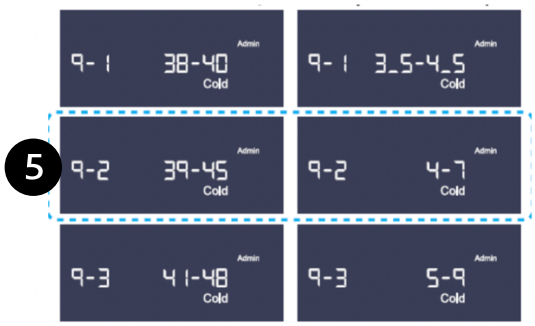
      ii. By pressing Button 1, the screen will change to filter life setting in weeks as seen in screen display 4. When in this mode, you can press Button 2 to change the measurement in intervals of 10 weeks.

h. To switch between filters, press Button 3. Follow the same process for all filters:
   i. Menu 3: Pre-Carbon
   ii. Menu 4: RO
   iii. Menu 5: PH
   iv. Menu 6: Post-Carbon
   v. Menu 7: LR (will only be selectable if LR filter type is selected)
   vi. Menu 8: Air filter (For this filter only time will be measurable)

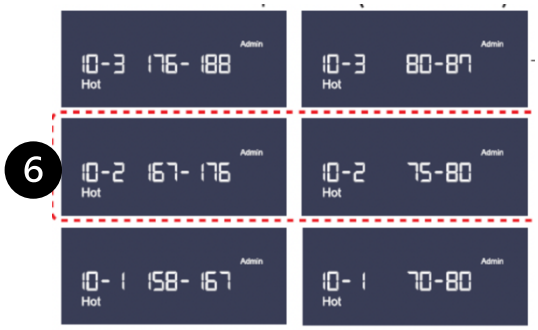
i. Filter default settings:

NO	FILTER	Gal				Weeks			
		Min	Max	Unit	Default	Min	Max	Unit	Default
2	SEDI	0/1000	4,500	250	2,500	0/40	80	10	50
3	CARBON	0/1000	4,500	250	2,500	0/40	80	10	50
4	RO	0/1500	6,000	250	4,500	0/50	210	10	110
5	PH	0/500	2,000	250	1,000	0/40	80	10	50
6	TCR	0/500	3,000	250	2,000	0/40	210	10	110
7	LR	0/1000	2,500	250	1,500	0/40	80	10	50
8	AIR					0/40	210	10	110

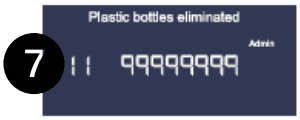
j. To control the Cold Water temperature (Menu 9):
   i. The cold-water temperature has 3 different temperature settings available. To access, press Button 3 until you arrive at menu 9 as seen in screen display 5.
      ii. To change the temperature range, press Button 2.



k. To control the Hot Water temperature (Menu 10):
   i. The hot water temperature has 3 different temperature settings available. To access, press Button 3 until you arrive at menu 10 as seen in screen display 6.
      ii. To change the temperature range, press Button 2.

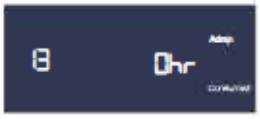


l. To reset 'Plastic Bottles Eliminated' count (Menu 11):
   i. To reset the counter for "plastic bottles eliminated," proceed to menu 11 by pressing Button 3 in the menu until you arrive at the screen in display 7.
   ii. To reset: While on menu 11, hold your hand over Button 2 for 5 seconds or until you hear the chimes.



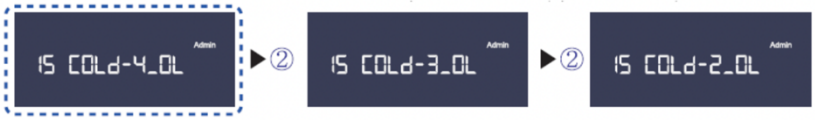
m. LED UV Operation Cycle (Menu 12):
   i. There are 3 available settings available for LED UV operation. Default will activate the LED UV for 1 hour at a time and then off for 2 hours until it turns back on again for 1 hour at a time. You can also set for 2 hours on and 1 hour off at a time and always on.
   ii. To do so navigate to the "LED UV Operation Cycle Setting" menu by pressing Button 3 while in the menu until you reach menu 12 as seen in screen display 8.
   iii. To change the settings, press Button 2 until the desired setting is presented on the screen.

n. LED UV Usage (Menu 13):
   i. To check the time elapsed on the LED UV, you can navigate to Menu 13 which will display the amount of time (in hours) that the light has been used. To erase the time, hold Button 2 for 5 seconds until you hear the chimes.



o. AI Eco Mode Setting (Menu 14):
   i. To activate or deactivate energy saving mode, navigate to Menu 14 by pressing Button 3 until you arrive at the display screen 9.
   ii. To turn it off, wave your hand over Button 2 which will result in screen display 10.

p. Dispense Flow Rate Navigation (Menu 15):
   i. To adjust the dispense flow rate, navigate to Menu 15 by pressing Button 3 until you arrive at the display below.
   ii. Unit will default to a cold dispense rate of 4 L/m, but can adjust to 3 L/m or 2 L/m.
   iii. To change the cold dispense flow rate, wave hand over Button 2 until desired flow rate is selected



PREVENTATIVE MAINTENANCE

1. Change filters according to the filter change schedule.
2. Reset the filter alert using the instructions above.
3. Descale the hot tank.
4. Drain the system and use Hydrogen Peroxide to sanitize the system.
5. Check all fittings for signs of scale or wear and replace as needed.
6. Check condition of the float mechanisms. Pay special attention to ensure no water has infiltrated the float balls.
7. Check solenoids for proper function. Dripping solenoids should be replaced.

Every 5 years, in addition to the above, perform the following:

1. Replace all internal fittings and tubing
2. Replace LED UV bulb assembly
3. Replace solenoid
4. Replace battery on main PCB (soldering required)

FILTER CHANGING PROCEDURE

1. Verify filter configuration required for servicing. Flush the appropriate filters prior to installation using a filter pre-flush station. Protect flushed filters from extreme cold temperatures and potential sources of contamination.

2. Dispose of replaced filters in accordance with local laws. after removing filtration media. Filter housings may be recycled

3. Periodic replacement of the air filter is required. This should be done a minimum of every two years.

SYSTEM INSPECTION

When changing filters or performing service, the following items should be completed:

1. Visual Inspection
2. Hose & fitting inspection
3. Electrical inspection
4. Pressure & flow test
5. Filter monitoring system reset
6. Gallon counter reset to zero. Refer to programming section.
7. Clean the exterior of system and condenser coils on rear of system.
8. Temperature check (Cold water should be below 50°F, Hot water should be above 160°F)
9. TDS check
10. Hot tank switch On
11. Site clean up

SPECIFICATIONS

Voltage: 1 15 VAC + 10% /1 P H / 60

Hertz Size: 50-1/2" (128cm)H. 14" (35cm)W. 17" (44cm)D

Shipping Weight (Approx.) – With Hot: 93 lbs (43 kg)

Water Capacity: 3 gallons

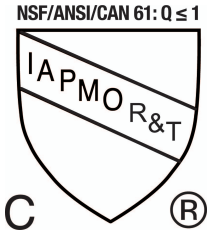
HP Compressor (Full Load): 1.1 Amps

Compressor with Hot (Full Load): 5.5 Amps

Specifications subject to change without notice.
These systems have been manufactured with R134a refrigerant.

WARNING
A pressure regulator, such as a slow flow regulator, must be installed in front of the system's water inlet if the water pressure (including any possible pressure Spikes) could exceed 80 PSI (5.5 bar) Failure to comply will void warranty. CULLIGAN accepts no liability for damage caused by excessive water pressure. Do not use this drinking water system where the source water is microbiologically unsafe or with water of unknown quality without adequate disinfecting before or after the system.

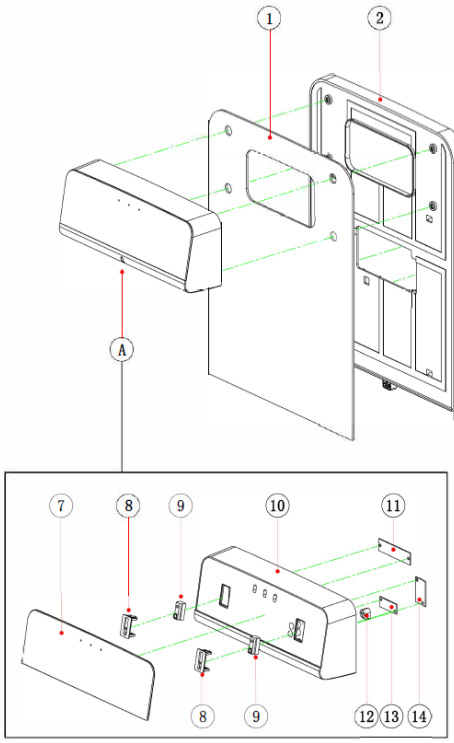
Certification Conformance



The Culligan Ascent 100 system is certified by IAPMO R&T against NSF/ANSI/CAN 61: Q ≤ 1, NSF-372 and CSA B483.1 for material safety, structural integrity, and lead free requirements. The Ascent 100-M system also is certified to NSF/ANSI-53 for the reduction of lead and cyst, and NSF/ANSI-42 for the reduction of chlorine, and Taste and Odor.

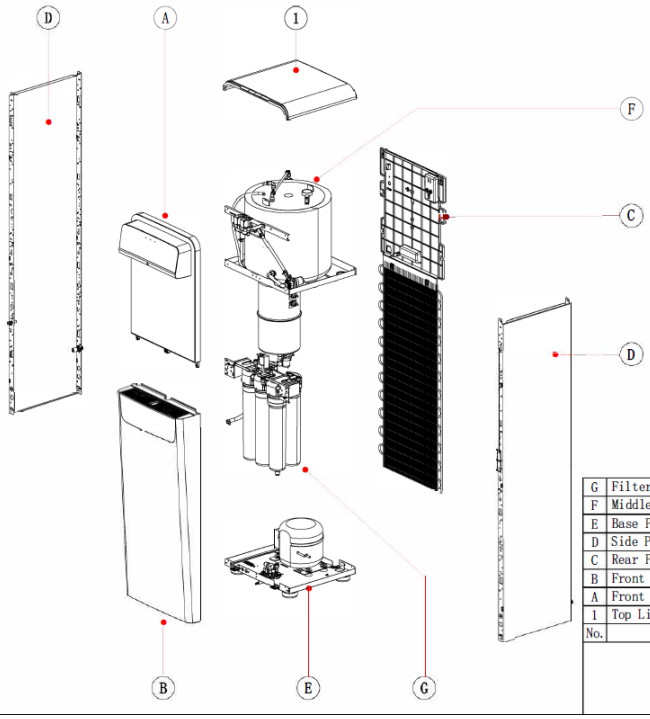
Certified to UL Standard 399, Drinking Water Coolers and CSA C22.2 No. 120-13 (R2018), 4th Edition, CSA Standard for Refrigeration Equipment.

EXPLODED VIEW DIAGRAMS



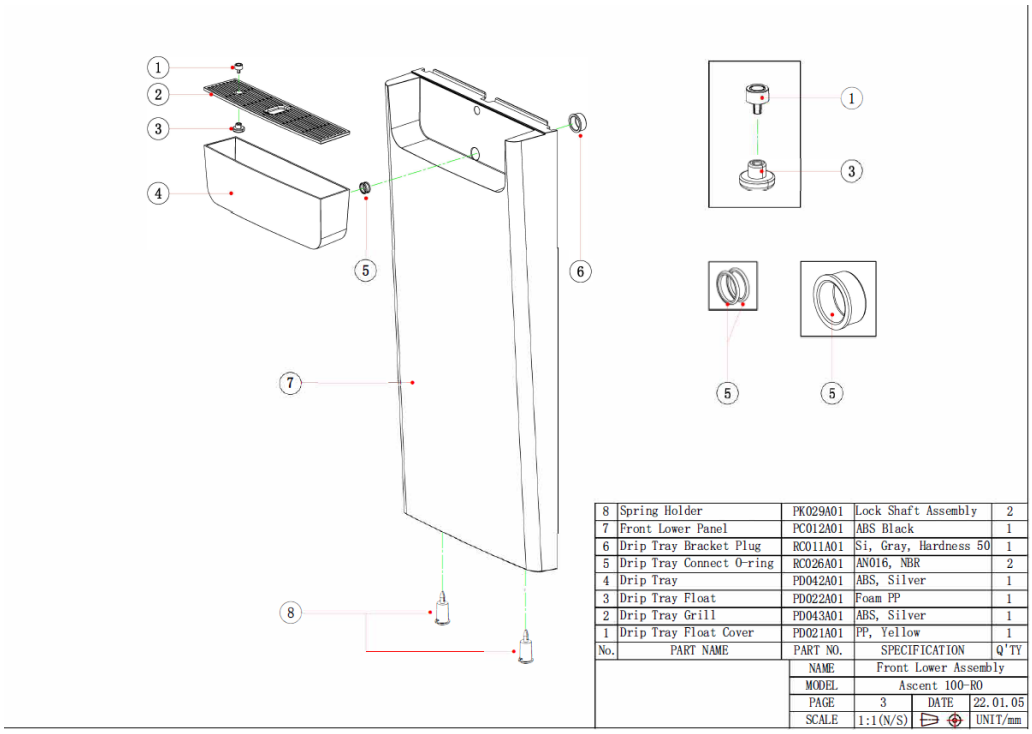
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
14	PSD LED PCB	EB061A01	24Vdc, 2-Blue / 2-Red	1
13	Dispense LED PCB	EB056A01	24Vdc, Blue / Red	1
12	Dispense LED Cover	PK102A01	Diffusion PP	1
11	Display LED PCB	EB060A01	5Vdc, White/White/White	1
10	Upper Front Deco	PK121A01	ABS, Black	1
9	PSD Sensor	EB040A01	KODENSHI ORA 1501	2
8	PSD Sensor Bracket	PK101A01	ABS, Dark Blue	2
7	Face Plate	PH037A01	PC, t 2.0, Hair Line	1
A	Front Deco Assembly	-	-	1
6	Touch PCB	EB072A01	-	1
5	Hidden LED PCB	EB071A01	-	1
4	Hidden LED PCB Cover	PK118A01	ABS, Black	1
3	PC Film	PH038A01	t 0.125, Diffusion Film	1
2	Upper Front Panel	PB031A01	ABS, Black	1
1	Glass Panel	PH036A01	t 3.2 / 2388U	1

NAME	Front Upper Assembly		
MODEL	Ascent 100-RO		
PAGE	2	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



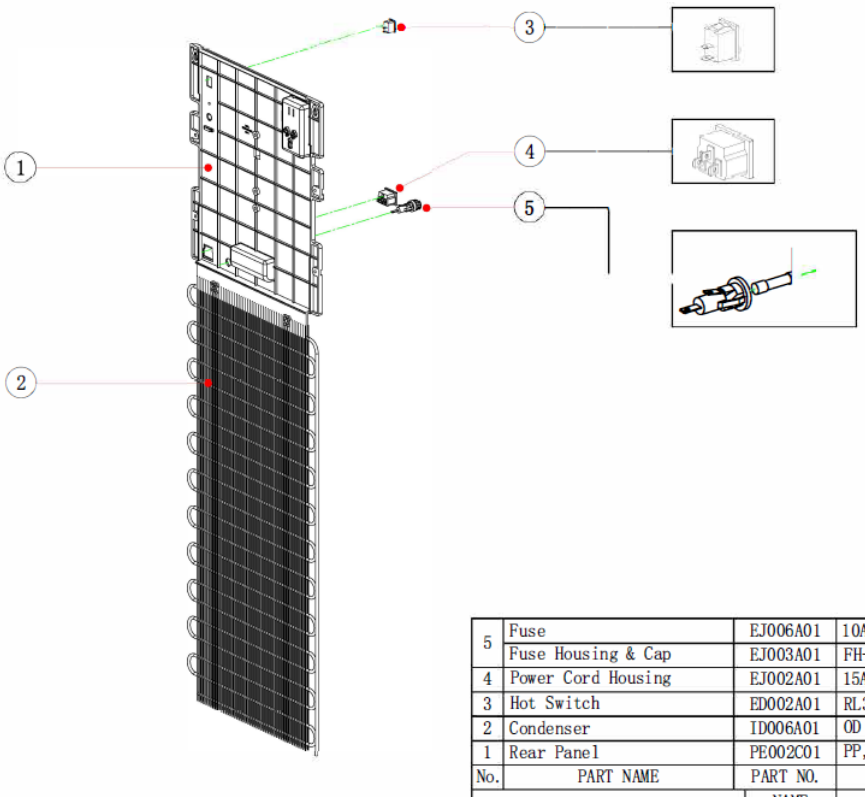
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
G	Filter Assembly	-	-	1
F	Middle Plate Assembly	-	-	1
E	Base Plate Assembly	-	-	1
D	Side Panel Assembly	-	-	1
C	Rear Panel Assembly	-	-	1
B	Front Lower Assembly	-	-	1
A	Front Upper Assembly	-	-	1
1	Top Lid	PA017A01	ABS BLACK	1

NAME	Exploded view Overall		
MODEL	Ascent 100-RO		
PAGE	1	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



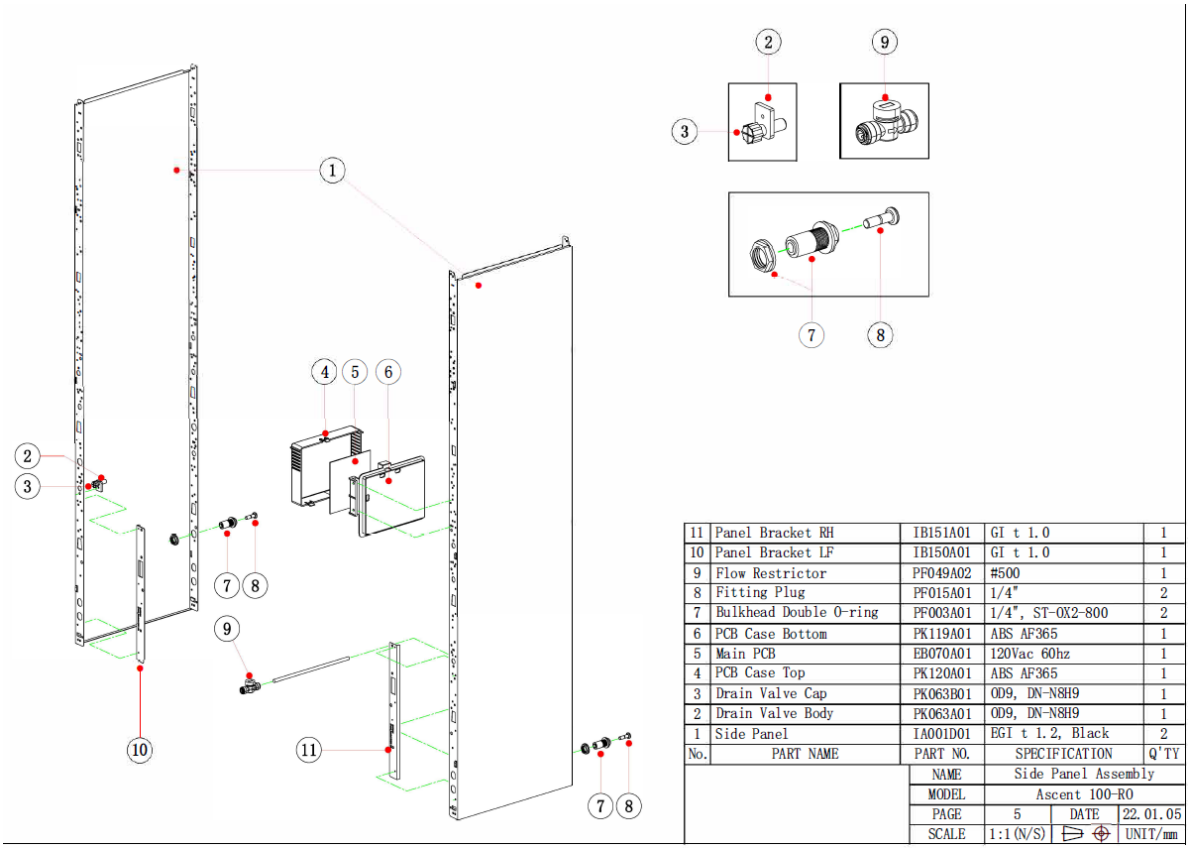
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
8	Spring Holder	PK029A01	Lock Shaft Assembly	2
7	Front Lower Panel	PC012A01	ABS Black	1
6	Drip Tray Bracket Plug	RC011A01	Si, Gray, Hardness 50	1
5	Drip Tray Connect O-ring	RC026A01	AN016, NBR	2
4	Drip Tray	PD042A01	ABS, Silver	1
3	Drip Tray Float	PD022A01	Foam PP	1
2	Drip Tray Grill	PD043A01	ABS, Silver	1
1	Drip Tray Float Cover	PD021A01	PP, Yellow	1

NAME	Front Lower Assembly		
MODEL	Ascent 100-RO		
PAGE	3	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



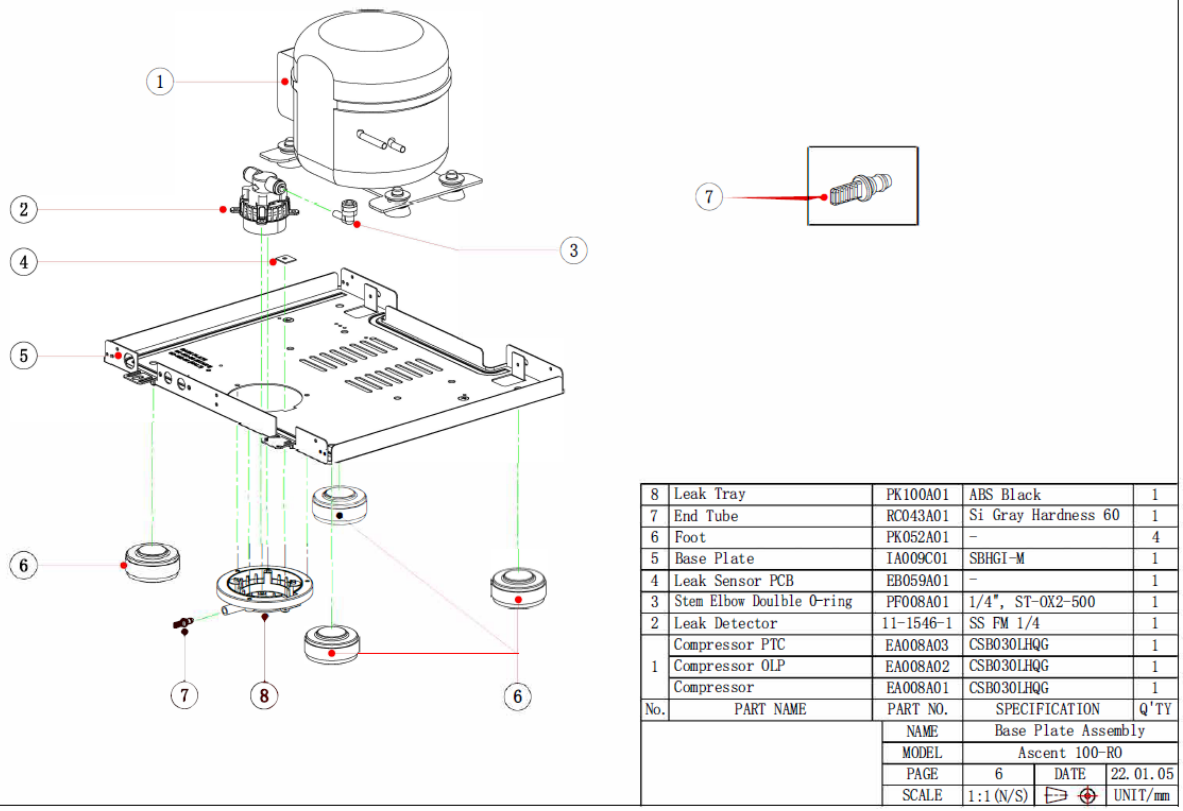
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
5	Fuse	EJ006A01	10A N61	1
	Fuse Housing & Cap	EJ003A01	FH-01A 10A 250Vac	1
4	Power Cord Housing	EJ002A01	15A 250Vac	1
3	Hot Switch	ED002A01	RL3 6A 250Vac	1
2	Condenser	ID006A01	OD 4.76*6000mm, 9435	1
1	Rear Panel	PE002C01	PP, Black	1

NAME	Rear Panel Assembly		
MODEL	Ascent 100-RO		
PAGE	4	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



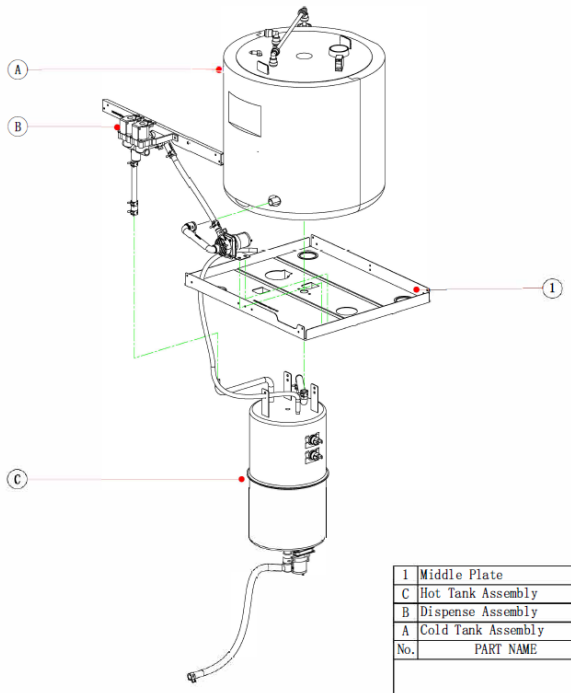
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
11	Panel Bracket RH	IB151A01	GI t 1.0	1
10	Panel Bracket LF	IB150A01	GI t 1.0	1
9	Flow Restrictor	PF049A02	#500	1
8	Fitting Plug	PF015A01	1/4"	2
7	Bulkhead Double O-ring	PF003A01	1/4", ST-OX2-800	2
6	PCB Case Bottom	PK119A01	ABS AF365	1
5	Main PCB	EB070A01	120Vac 60hz	1
4	PCB Case Top	PK120A01	ABS AF365	1
3	Drain Valve Cap	PK063B01	OD9, DN-N8H9	1
2	Drain Valve Body	PK063A01	OD9, DN-N8H9	1
1	Side Panel	IA001D01	EGI t 1.2, Black	2

NAME	Side Panel Assembly		
MODEL	Ascent 100-RO		
PAGE	5	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



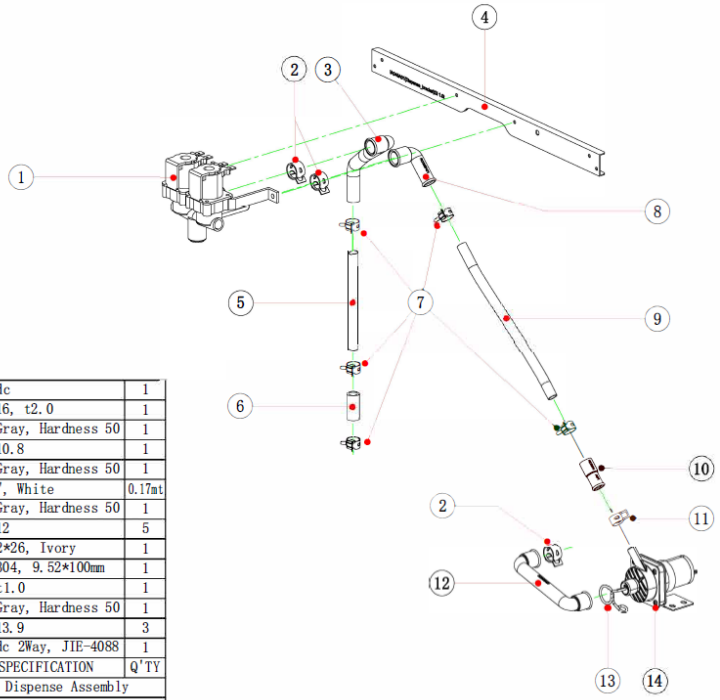
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
8	Leak Tray	PK100A01	ABS Black	1
7	End Tube	RC043A01	Si Gray Hardness 60	1
6	Foot	PK052A01	-	4
5	Base Plate	IA009C01	SBHGI-M	1
4	Leak Sensor PCB	EB059A01	-	1
3	Stem Elbow Doulble O-ring	PF008A01	1/4", ST-OX2-500	1
2	Leak Detector	11-1546-1	SS FM 1/4	1
1	Compressor PTC	EA008A03	CSB030LHQG	1
	Compressor OLP	EA008A02	CSB030LHQG	1
	Compressor	EA008A01	CSB030LHQG	1

NAME	Base Plate Assembly		
MODEL	Ascent 100-RO		
PAGE	6	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



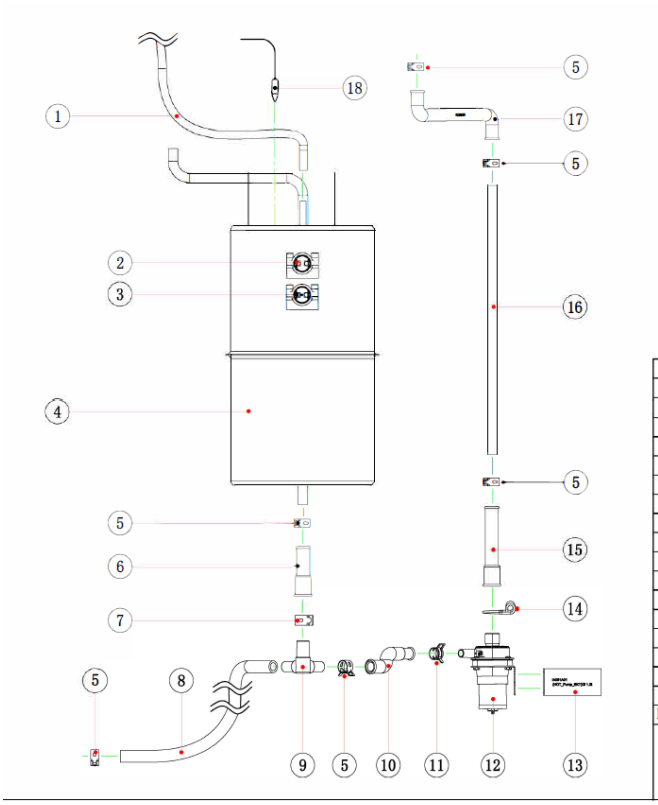
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
1	Middle Plate	IA048A01	GI t 1.0	1
C	Hot Tank Assembly	-	-	1
B	Dispense Assembly	-	-	1
A	Cold Tank Assembly	-	-	1

NAME	Middle Plate Assembly		
MODEL	Ascent 100-RO		
PAGE	7	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



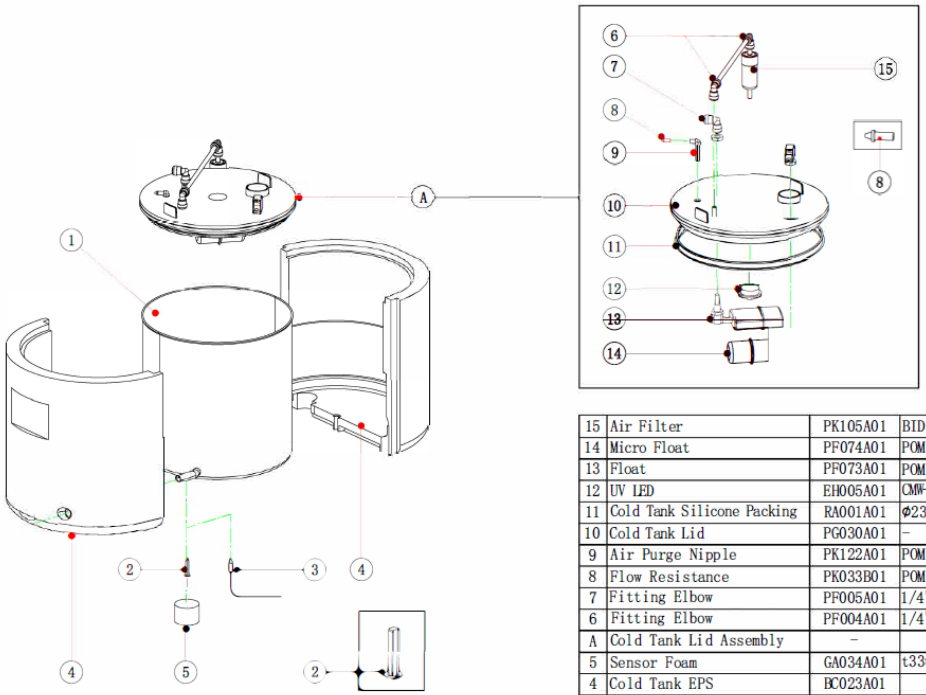
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
14	Water Pump(Cold Water)	EE011A01	24Vdc	1
13	Clamp Wire	IG009A01	ID 16, t2.0	1
12	Cold Pump Silicone	RC051A01	Si Gray, Hardness 50	1
11	Clamp	GB078A01	ID 10.8	1
10	Cold Water Outlet Silicone	RC054A01	Si Gray, Hardness 50	1
9	PE Tube	GB056A01	3/8", White	0.17mt
8	Cold Valve Silicone	RC052A01	Si Gray, Hardness 50	1
7	Clamp	GB013A01	ID 12	5
6	Hot Water Outlet Silicone	RB033A01	8*12*26, Ivory	1
5	Hot Water Supply Pipe	TD009A01	SUS304, 9.52*100mm	1
4	Dispense Bracket	IA049A01	GI t1.0	1
3	Hot Valve Silicone	RC053A01	Si Gray, Hardness 50	1
2	Clamp	GB014A01	ID 13.9	3
1	Dispense Solenoid	EC011A01	24Vdc 2Way, JIE-4088	1

NAME	Dispense Assembly		
MODEL	Ascent 100-RO		
PAGE	8	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



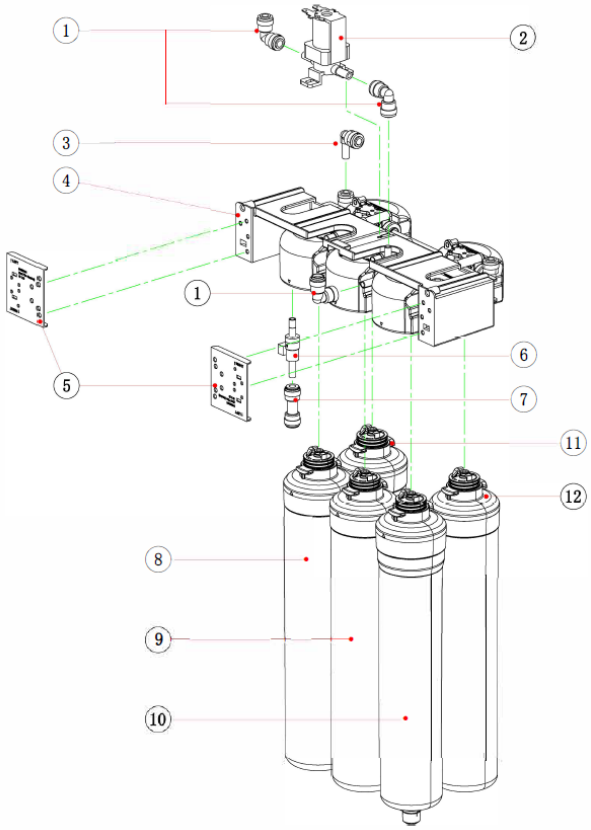
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
18	Hot Tank Thermostat	EF013A01	10k-ohm	1
17	Cold to Hot Silicone	RC055A01	Si Gray	1
16	SUS Pipe	TD012A01	SUS 304 OD 9.5*270(H)	1
15	Hot Pump Silicone	RC039A01	Si Gray	1
14	Clamp Wire	IG009A01	ID 16, t2.0	1
13	Hot Pump Bracket	IA051A01	GI t1.2	1
12	Water Pump(Hot Water)	EE011A01	24Vdc	1
11	Clamp	GB078A01	ID 10.8	1
10	Pump to Hot Silicone	RC036A01	Si Gray	1
9	Connector "T"	PK032A01	POM	1
8	Drain Hose	RB004A01	8*12*390	1
7	Clamp	GB014A01	ID 13.9	1
6	Hot Inlet Silicone	RC006A01	Si Gray	1
5	Clamp	GB013A01	ID 12	6
4	Hot Tank	TB022A01	120Vac, 500W, 4L	1
3	Bimetal Low	EF004A01	PTS13H-WB005, 105	1
2	Bimetal High	EF002A01	PTS12HB, 90/80	1
1	Air Purge Silicone	RB022A01	5*8*540	1

NAME	Hot Tank Assembly		
MODEL	Ascent 100-RO		
PAGE	9	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



No.	PART NAME	PART NO.	SPECIFICATION	Q'TY
15	Air Filter	PK105A01	BID+Sedi	1
14	Micro Float	PF074A01	POM	1
13	Float	PF073A01	POM	1
12	UV LED	EH005A01	CMW-FCC-J01F, 12Vdc 7mW	1
11	Cold Tank Silicone Packing	RA001A01	Φ230	1
10	Cold Tank Lid	PG030A01	-	1
9	Air Purge Nipple	PK122A01	POM	1
8	Flow Resistance	PK033B01	POM	1
7	Fitting Elbow	PF005A01	1/4", Double O-ring	1
6	Fitting Elbow	PF004A01	1/4"	2
A	Cold Tank Lid Assembly	-	-	1
5	Sensor Foam	GA034A01	t33*pi42, PE	1
4	Cold Tank EPS	BC023A01	-	1
3	Cold Tank Thermostat	EF014A01	10k-ohm, Φ6 L1300	1
2	Cold Sensor Cover	PK117A01	PP	1
1	Cold Tank	TA020A01	pi 244	1

NAME	Cold Tank Assembly		
MODEL	Ascent 100-RO		
PAGE	10	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm



12	Mineral RO Filter	CG-QC4R	-	1
11	POST-CARBON FIlter	CG-QC5	-	1
10	RO(80GPD) FIlter	CG-QC3R	-	1
9	PRE-CARBON Filter	CG-QC2	-	1
8	SEDIMENT Filter	CG-QC1	-	1
7	Fitting Straight Double O-ring	PF022A01	1/4", ST-OX2-300	1
6	Flow Sensor	EC021A01	FVS-N6N6-CN(D)	1
5	2nd Filter Bracket	IA050A01	GI, t 1.2	2
4	Q-Change Filter Head Assembly	FL004B01	Culligan RO Type	1
3	Stem Elbow Double O-ring	PF008A01	1/4", ST-OX2-500	1
2	Solenoid Valve High Pressure	EC001A01	JIE-446, 24Vdc 0.65W	1
1	Fitting Elbow	PF005A01	1/4", Double O-ring	3
No.	PART NAME	PART NO.	SPECIFICATION	Q'TY

NAME	Filter Assembly		
MODEL	Ascent 100-RO		
PAGE	11	DATE	22.01.05
SCALE	1:1(N/S)		UNIT/mm

PRODUCT LIMITED WARRANTY

General Provision and Exclusions:

This warranty only applies in the fifty (50) United States and Canada.

This warranty does not apply, and no agreement, either written or implied, shall be applicable if the affixed serial number is removed, defaced or obliterated. This warranty does not apply to the filters or Ultra Violet system after exposure to water. Refer to service manual for filter requirements and expected performance. This warranty does not apply if parts used as original or replacement equipment, including filters, are not obtained or authorized through CULLIGAN, and such unauthorized usage shall void this warranty. This warranty does not apply to any wetted parts that become inoperative due to lime, scale or other water quality conditions. This warranty does not apply to any machine or components that become inoperable due to a failure by Dealer/Distributor or the end-user to satisfy standards or regulations adopted by any governmental agency. This warranty does not cover performance, failure or damages of any part resulting from external causes such as alterations, abuse, misuse, misapplication, neglect, accident, installation, operation contrary to printed material, corrosion or acts of God.

This warranty only applies to the operative components of the machine and does not apply to the exterior shell or frame to which the shell is attached and the appearance of the machine.

This warranty and any applicable industry certifications for this machine are automatically voided if the machine is altered, modified, or combined with any other machine, equipment or device. Alteration or modification of the machine may cause serious flooding and/or hazardous electrical shock or fire Except as set forth herein, CULLIGAN makes no other warranty, guarantee or agreement expressed, implied or statutory, including any implied of merchantability or fitness for a particular purpose.

The foregoing is in lieu of all other agreements expired or statutory and all other obligations or liabilities of CULLIGAN. CULLIGAN does not assume or authorize any person to assume any obligations of liability in connection with this product. In no event will CULLIGAN be liable for special, incidental, consequential or

punitive damages, or for any delay in performance of this warranty agreement due to causes beyond its control.

Export Warranty:
The CULLIGAN export warranty shall apply to all area outside of the Continental limits of the United States and Canada. The export warranty shall mirror the domestic warranty set forth above in all respects except that a) the export warranty shall be limited to the Initial Term and there is no coverage for the additional warranty through the fifth year and b) the Dealer/Distributor shall be responsible for any and all transportation charges to implement the repairs.

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WARRANTY PROCEDURE

Procedure for ASCENT 100 warranty evaluation

File an RMA with Culligan's Returned Goods Department through Cport.
Please document the following information:

1. Serial number
2. Failure
3. Full details around failure
4. Water pressure into the system
5. Tap TDS
6. TDS out of the cold and hot tanks
7. Pictures

Depending on the situation, technical support may request more information. Upon approval, CULLIGAN will process warranty credit. Dealer must maintain possession of the part or system until authorized to discard, failure to do so may result in a denial of warranty.

Certification Conformance

NSF/ANSI/CAN 61: Q ≤ 1

IAPMO R&T

C ®

The Culligan Ascent 100 system is certified by IAPMO R&T against NSF/ANSI/CAN 61: Q ≤ 1, NSF-372 and CSA B483.1 for material safety, structural integrity, and lead free requirements.

NRTL ®

IAPMO

EGS

C US

Certified to UL Standard 399, Drinking Water Coolers and CSA C22.2 No. 120-13 (R2018), 4th Edition, CSA Standard for RFefrigeration Equipment.