ASPEN 1800BC DESIGN CRITERIA



The ASPEN 1800BC (Brief Case) is packaged in a Pelican carrying case. The water purification systems supplies up to 1,800 gallons per day (75 gallons per hour) of highly purified water from virtually any non-saline water source. Water can be drawn from ditches, ponds, rivers, lakes or standing water that may contain chemical or biological contamination.

Dimensions. The ASPEN 1800BC purifier is 24 1/2" X 20" X 14" and weighs 68 lbs. The 1800BC Support Case is slightly lighter and weighs 51 lbs.

The Purification Process and General Information

Two Stage Filtration. The first stage of filtration removes the large particles along with dirt through a cleanable screen. The second stage removes the harmful micro-organisms such as cryptosporidium, amoeba, giardia, paramecium and any other small matter down to 1 micron in size. The Post Filter, a new edition, filters down to .2 micron and is primarily used on tannins or ultra small particles.

Water Treatment. The replaceable mixed Media Canister effectively treats 7,500 gallons of surface water containing contaminants such as lead, barium, selenium and arsenic prior to replacement. The Media Canister also removes high levels of manmade pollutants such as petrochemicals, insecticides and solvents. When used to eliminate possible microbial contamination in clear water, the canister may be used for up to 9,000 gallons. The 1800BC is factory preset for an optimum flow rate of 1.25 gallons per minute. This flow rate is automatically controlled, monitored and governed by a proprietary electronic flow sensor.

Disinfecting. The ruggedized ultraviolet (UV) exposure system is rated significantly higher than required by US regulatory agencies and exceeds the World Health Organization's standards for total disinfection. UV is much faster acting than chlorine and has been found to destroy 99.99% of all bacteria and viruses found in water, such as e-coli, cholera, typhoid, anthrax and polio.

Power Source. The 1800BC operates on 90V - 240V single phase AC 50/60 hertz, from virtually any international power source, including a 12V - 28V DC civilian or military vehicle. Two military BB-590 rechargeable comm batteries are standard with each system, and are recharged using AC or DC power sources, or sunlight, using the optional solar package.

Pressure. The whisper-quiet, variable-speed, self priming pump draws water up to 10 feet vertically and provides water on demand at pressures between 22 and 45 pounds per square inch (PSI). This is highly desirable when filling containers or pumping through a manifold. The use of quick connects and knobs eliminates wiring or tools to change the pump.

Triple Mode Display. A digital display indicates water volume passing through the system, the total run time of the filter canister, and the UV.

Safety Features. Monitoring components are designed with a two stage protective shutdown circuit. The system will automatically shut down in the event of a failure in the disinfecting process. Additionally, the pump stops and the valve closes preventing any water from passing through the system.

Post Treatment. Stored water should be treated with chlorine bleach or hydrogen peroxide.

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ASPEN 1800BC SYSTEM AND SUPPORT CASE CONTENTS

ASPEN 1800BC			
Qty	Part Number	Item	
1	AWI-40-A020IH	20' Black Suction Hose with Camlock fittings	
1	AWI-40-A019OH	12' Gray Outlet Hose with Camlock fittings	
1	AWI-40-P067UV	UV Bulb (installed)	
1	AWI-FA-1DM-046	UV Quartz Sleeve (installed)	
1	AWI-40-A026MC	Media Canister (installed)	
1	AWI-40-P080F1	1 Micron Pre-filter (installed)	
1	AWI-40-P089AC	110 Volt AC Power Cord	
2	AWI-40-P005BB	Rechargeable Batteries - BB 590/U with charging system	
1	AWI-40-MANUAL	Operation/Service Manual (waterproof)	
1	AWI-40-P110AL	Stainless Steel Allen Wrench	

SUPPORT CASE			
Qty	Part Number	Item	
1	AWI-40-P091NC	24 Volt NATO Cable and Connector	
1	AWI-40-P09512V	12VDC Cable	
1	AWI-40-P067UV	UV Replacement Bulb	
1	AWI-SC-1DM-SSW-1	Sump Wrench (half moon)	
1	AWI-FA-1DM-046	UV Replacement Quartz Sleeve	
1	AWI-40-A025FV	Foot Valve Assembly	
5	AWI-40-A026MC	Media Canister Assembly	
1	AWI-40-P016PC	Pump Assembly	
10	AWI-40-P080F1	1 Micron Pre-Filter	
1	AWI-40-P101RH	2' Long 1/2" Tubing Replacement	
1	AWI-40-A090	O-Ring Kit	
1	AWI-SC-1DM-039	O-Ring Lubricant (Food Grade)	
1	AWI-55-EX-A09	Water Sprayer with Quick Connect	
1	AWI-SC-33-A02	Cleaning Wand, Pre-Filter	
1	AWI-HDE-J19	Travel Adapter	
1	AWI-SC-1001	Collapsible Bucket	
1	AWI-SC-1DM-121	Screwdriver	

OPTIONAL FEATURES		
Part Number	Item	
AWI-40-P093SP	120 Watt Solar Panel	