

OPERATING INSTRUCTIONS AND OWNER'S MANUAL



BATTERY OPERATED SHOWER SYSTEM Fully Portable Instant Hot Water/Shower

Model #

XCW20

READ INSTRUCTIONS CAREFULLY: Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the shower.



BSS

Battery Operated Shower System



⚠ DANGER



CARBON MONOXIDE HAZARD

- This appliance can produce carbon monoxide which has no odor
- Using it in an enclosed space can kill you.
- Never use this appliance in an enclosed space such as a camper, car or home

⚠ WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance
- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light appliance
 - Extinguish any open flame
 - Shut off gas to appliance

WARNING:

⚠ YOUR SAFETY IS IMPORTANT, SO PLEASE READ THESE INSTRUCTIONS BEFORE YOU OPERATE.

⚠ THIS MANUAL CONTAINS IMPORTANT INFORMATION ABOUT THE ASSEMBLY, OPERATION AND MAINTENANCE OF THIS PORTABLE SHOWER.

⚠ SAFETY PRECAUTIONS ARE ESSENTIAL WHEN ANY MECHANICAL OR PROPANE FUELED EQUIPMENT IS INVOLVED. THESE PRECAUTIONS ARE NECESSARY WHEN USING, STORING AND SERVICING. FOLLOWING THESE SAFETY ALERTS WILL REDUCE THE POSSIBILITY OF PERSONAL INJURY OR PROPERTY DAMAGE.

⚠ PROPANE CYLINDERS MUST BE DISCONNECTED WHEN THE SHOWER IS NOT BEING USED OR WHEN STORING THE SHOWER. CYLINDERS MUST BE STORED OUTDOORS, IN A WELL VENTILATED SPACE OUT OF THE REACH OF CHILDREN.

THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING WARNINGS:

⚠ WARNING: COMBUSTION BY-PRODUCTS PRODUCED WHEN USING THIS PRODUCT CONTAIN A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS (OR OTHER REPRODUCTIVE HARM).

⚠ WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

⚠ DANGER

EXPLOSION-FIRE HAZARD

Never store propane near high heat, open flames, pilot lights, direct sunlight, or other ignition sources or where temperatures exceed 120° F (49°C)

During operation this product can be a source of ignition. Never use this appliance in spaces that contain or may contain volatile or airborne combustibles, or products such as gasoline, solvents, paint thinners, dust particles or unknown chemicals

⚠ DANGER



- Water temperature over 125°F (52°C) can cause severe burns instantly or death from scalds.
- Children, disabled and elderly are at highest risk of being scalded.
- See instruction manual before setting temperature at water heater.
- Feel water before bathing or showering.

⚠ WARNING:

- NOT FOR HOME OR RECREATIONAL VEHICLE USE.
- THE WATER HEATER IS FOR POINT OF USE, FOR TEMPORARY WATER HEATING AND NOT FOR CONNECTION TO A PERMANENT INLET WATER CONNECTION OR FOR CONNECTION TO A WATER DISTRIBUTION SYSTEM TO SUPPLY MULTIPLE OUTLETS.
- DO NOT OPERATE HEATER WHERE FLAMMABLE LIQUIDS OR VAPORS MAY BE PRESENT.
- USE THE PRESET REGULATOR THAT IS INSTALLED. DO NOT ATTEMPT TO ADJUST.
- NEVER INSTALL OR REMOVE PROPANE TANK WHILE HEATER IS OPERATING, NEAR FLAME, OTHER IGNITION SOURCES OR WHILE HEATER IS HOT TO THE TOUCH

⚠ PORTABLE HOT WATER/SHOWER:

- THIS APPLIANCE IS NOT INTENDED FOR THE SUPPLY OF DRINKING WATER. HEALTH RISKS CAN OCCUR IF WATER IS CONSUMED INTERNALLY
- THIS APPLIANCE IS INTENDED FOR THE SUPPLY OF HEATED WATER FOR THE PURPOSE OF WASHING AND CLEANING ONLY.
- CHECK AND CONFIRM SAFE WATER TEMPERATURE BEFORE USING THIS APPLIANCE. WATER FROM THIS APPLIANCE MAY BE VERY HOT.

CONTENTS

WARNINGS	2
SHOWER SPECIFICATIONS	3
OPERATING PRECAUTIONS	4
SAFETY PRECAUTIONS	4
OPERATING INSTRUCTIONS	4
MAINTENANCE, STORAGE AND SERVICE	6
WIRING DIAGRAM	7
TROUBLESHOOTING	8
EXPLODED VIEW	9
PARTS LIST	10

Clearance to Combustibles:

Model:	TOP & FRONT	Sides	Rear
XCW20	48"	12"	12"

SPECIFICATIONS

CAUTION: Certified for use only with LP-gas cylinders of the U.S. Department of Transportation (DOT) or Transport Canada, CAN/CSA B339.

Model:	XCW20 (F235350)
Rating: BTU	10,000 -18,000
Battery	5.0Ah Sealed Lead Acid Internal Battery
Run Time (Full Charge)	40 minutes
Fuel Source	Propane
Fuel Supply Pressure (to regulator):	Max. Bottle Pressure
Gas Supply Pressure (Regulator out):	11" WC
Electrical Input	115V, 60 Hz, 1Ø, 2A Min. Operating Voltage: 100V
	230 Watts (W)
	FUSE 3AL 250V
High Temperature Control:	125 (F)
Temperature Rise	42 (F)
Ignition	Electronic Spark



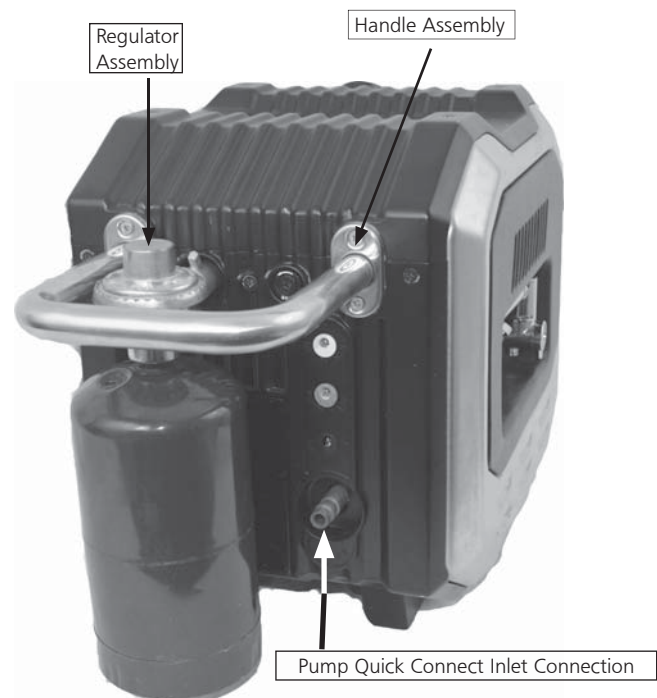
DIMENSIONS

Model:	Length(in)	Width(in)	Height(in)	Weight(LBS)
XCW20	19 1/2" (w/Handle Attached)	10 1/2"	13"	22 lbs.

UNPACKING and ASSEMBLING

1. Remove heater from carton.
2. Remove all protective material which may have been applied to the heater for shipment.
3. Check the appliance for possible shipping damage and straighten out all hoses to remove any kinks or twists.
4. Install handle assembly by screwing it into place.
5. Attach the supplied regulator by rotating the t-wing nut in a "clockwise" direction carefully not to over tighten.
6. Attach the 1 LBS. LP cylinder to the regulator by rotating in a "clockwise" direction. Only use LP cylinders with proper fuel type approved for the appliance. Check for gas leaks with soapy water.

DO NOT USE A FLAME TO CHECK FOR LEAKS.



OPERATING PRECAUTIONS

Propane is heavier than air. If propane leaks from a connection or fitting, it sinks to the floor, collecting there with the surrounding air, forming a potentially explosive mixture. During set up check all connections and fittings for leaks using soapy water. Never use flame. Bubbles indicate a leak. Check that the connection is not cross threaded and that it is tight. Perform another leak check. If there is still a leak, remove the cylinder and contact Mr. Heater direct for service or repair.

- Use for water heating only. Never alter in anyway or use with any device or part not expressly approved by Mr. Heater.
- This appliance is designed to be used with a source water temperature of 60° F or below
- The maximum temperature rise from the appliances is 35° F to the shower head and 42° F from the source water temperature.
- For safety the appliance is designed to shut off the burner when the water temperature from either of the outlets reaches 122°F/50°C
- The average run time for the XCW20 from a fully charged battery is 30 - 40 mins before it will require recharging
- During operation ensure that all air inlets and exhaust (front,sides and back) are kept free from obstructions and closure.

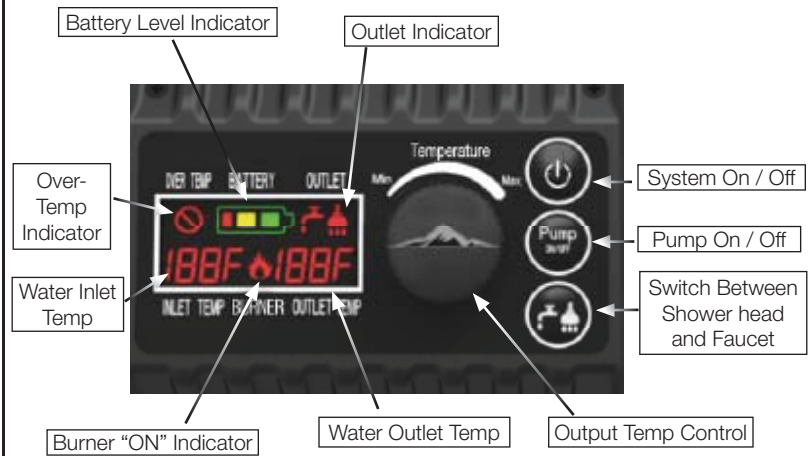


SAFETY FEATURES

This appliance is equipped with the following safety features:

- Over Temperature Sensor – the appliance will not allow the burner to remain in operation once the outlet water temperature reaches 122°F/50°C.
- Water Flow Sensor – water must be flowing through the system to allow the burner to ignite. In the case that the water supply is restricted or ceases, the burner will be extinguished and will not relight.
- Tilt Switch – in the event that the appliance is tilted past 30° during operation the appliance will shut down until it is located on a level surface.

CONTROL PANEL



OPERATING SHOWER INSTRUCTIONS

1. Attach the Quick Connect Fitting for the pump on the backside of shower unit (FIG. 1) and attach the shower head hose Quick Connect Fitting on the front side of shower unit (FIG. 2).

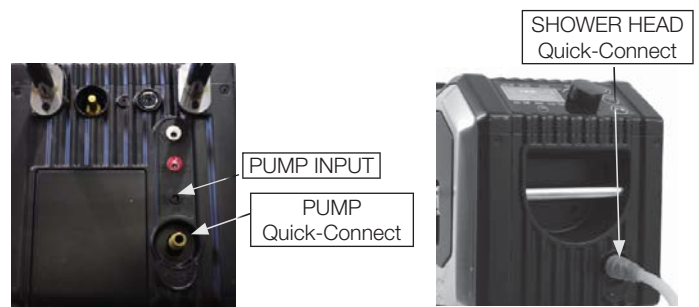


FIG. 1

FIG. 2

2. Submerge the pump in a suitable reservoir of water. The pump motor can be damaged if it is not fully submerged in water while in use.
DO NOT use water from rivers or lakes. Sediment can damage the pump and the appliance. DO NOT use in ocean because salt water can damage the pump and appliance.

WARNING: This appliance will not heat the water enough to kill potentially dangerous microbes. DO NOT use this appliance for potable water.

3. Screw propane clockwise into shower unit regulator.
4. Press the Power button, the unit will switch on and the shower head OUTLET icon will automatically be selected on the control panel.(FIG. 3) Make sure the shower is fully charged. Ensure that the Switch on the shower head is in the "Open" position by sliding the switch downwards. (FIG. 4)



FIG. 3

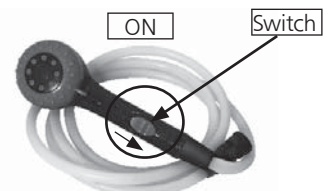


FIG. 4

- Position the Output Temp Control Dial to the central position. Depress the Pump button, the electronic ignition should be heard igniting the burner. When the unit is ignited the Burner icon on the control panel will illuminate and outlet water temperature readout will increase. (FIG. 5)

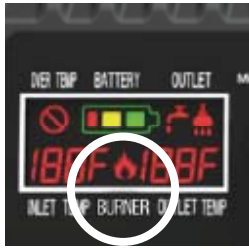


FIG. 5

- Take care to measure the temperature of the water from the shower head, the temperature can be adjusted by turning the "Outlet Temperature Control Dial" until the desired level is reached.
- The water flow can be stopped at any time by sliding the Switch to the "OFF" position (upwards). (FIG. 6) The burner will extinguish and the pump will continue to operate for 5 minutes. To reignite the burner slide the Switch back to the "OPEN" position (downwards), water will flow from shower head and the burner will reignite within 5 to 10 seconds

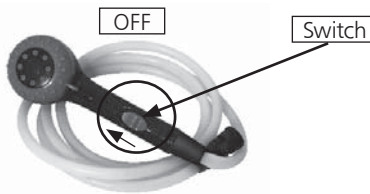


FIG. 6

IMPORTANT – Water remaining in the heat exchanger while the flow is stopped may become hot. When the flow is resumed the user must check the temperature output to ensure that it is suitable and not too hot. Test water temperature before bathing children or pets.

- Once finished with the appliance slide the Switch to the "OFF" position and depress the Pump button to stop the flow of water to the appliance.

OPERATING FAUCET INSTRUCTIONS

- Press the power button and once the unit is ON depress the Shower Head / Faucet button until the Faucet LED "Outlet" indicator lights on the LED control panel. (FIG. 7)



FIG. 7

- Swing the faucet away from its storage position and locate towards the side of the appliance and locate a basin or bucket beneath and locate the water flow to the central position. (FIG. 8.)



FIG. 8

- Position the "Outlet Temperature Control Dial" in the Max position then press the "Pump" button, water will start to flow within a few moments.
- The electronic ignition should be heard igniting the burner, when lit the "Burner" icon on the display will illuminate and the outlet water temperature read out will increase. (FIG. 5)
- The water temperature can be adjusted by moving the "Output Temp Control Dial knob between "Min & Max" or at the "Flow" valve at the Faucet. Turning the flow dial counterclockwise will reduce the flow and cause the water temp to increase. Turning the flow dial clockwise will increase the flow and cause the water to decrease. (FIG. 9)

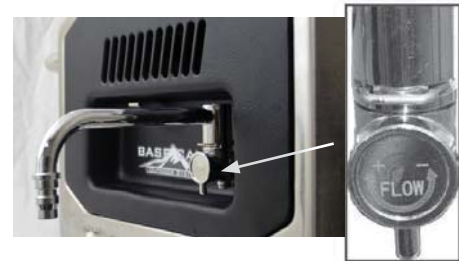


FIG. 9

- The shower head hose can also be attached to the Faucet by connecting the quick connection from hose onto the Faucet outlet. (FIG. 10)



Fig. 10

APPLIANCE POWER & CHARGING

1. The appliance is fitted with a 15V 5A/h battery pack and can be recharged with the AC or DC adaptors /supplied.

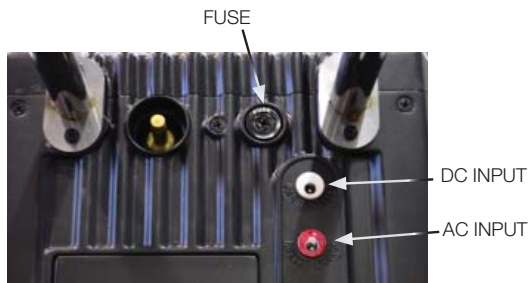


Fig. 5

2. AC: Connect the 120V AC adapter to the appliance then connect the 3 pin AC plug to a suitable outlet (FIG. 5)
 3. DC: Connect the 12V DC adapter to the appliance then connect to a suitable outlet with the cigarette lighter (FIG. 5)
 - To charge the unit using the DC connector the car must be running, due to the 12V direct link to the battery system it will not show on the LED indicator.
 - The unit will run directly from the 12V cigarette lighter but will not charge unless vehicle is running.
- DO NOT– Modify the adaptors supplied with the appliance.
 - Charge time from either power source is 4 hours.
 - IMPORTANT – If the appliance is not being used or is stored it must be recharged every three months to guarantee the battery life expectancy. Failure to do so may result in battery failure.

STORAGE

WARNING: To prevent personal injury unplug the appliance from any electrical outlets.

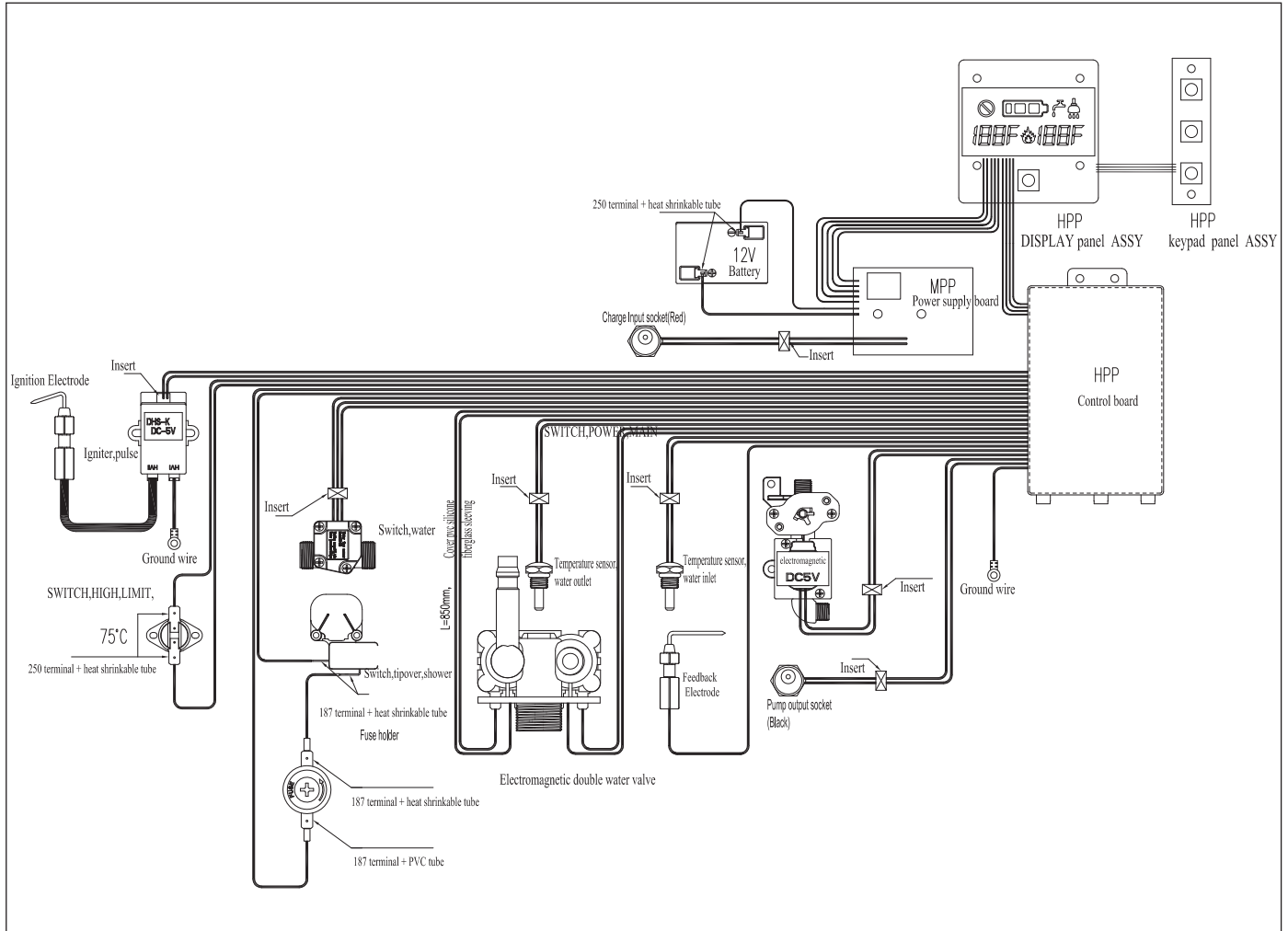
STORING

1. Press the "Power" button & turn the appliance off.
2. Disconnect all hoses and hold vertically allowing all excess water to drain from them. Check that the shower head Switch is in the "ON" position to allow water to drain.
3. Return the faucet to its locked position.
4. Unscrew the LP cylinder from the appliance
5. Unscrew the drain plug which is located on the underside, tipping the unit back and forth to drain excess water from the heat exchanger.

Using warm soapy water with a mild detergent wipe down all surfaces and areas of the appliance. DO NOT submerge the appliance in a sink or bowl. DO NOT use abrasive cleaners or bleach. DO NOT run soapy water through the heat exchanger.

WIRING DIAGRAM

CAUTION: Label all wires prior to disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation. The parts lists and wiring diagram show the appliance as it was constructed. Do not use a heater which is different from that shown. Service should be done by qualified service technician. Verify proper operation of unit after servicing.



TROUBLESHOOTING

PROBLEM	SOLUTION
Water will not flow from shower head	Check that pump debris filter is not clogged
	Check that appliance is switched on
	Check sufficient water is available
	Check that the pump is connected to the appliance
	Make sure the battery is charged
	Check for kinks in shower hose
	Check that pump fuse is not blown
	Check that the shower head ON/OFF switch is in the open position
Burner will not light	Check that there is gas in cylinder
	Check that the water is flowing from shower head
	Check that water is not over temperature
	Check that battery does not require re-charging
	Check the Flow Switch on shower head make sure it is fully open
Water is not hot enough	Check gas control
	Check source water temperature (water temps below 50°F might require recirculation)
	Cycle the water through the system back in to the source reservoir then through the appliance again
	Reduce flow using the flow valve

LED DIAGNOSTIC	
E0	Inlet Temperature Sensor Failure
E1	Flame Sensor Error
E2	Water Flow Error
E3	Unsuccessful Ignition/Flame Out
E4	Outlet Temperature Sensor Fault
E6	Back Up Water Temperature High Limit Fault (131°F, 55° C)
E7	Primary Water Temperature High Limit Switch Fault (122°F, 50° C)

PARTS LIST

Item #	Description	MODEL: XCW20	
		Part Number	QTY
1	High Limit Switch	35526	1
2	Igniter	35548	1
3	Control, Charging Shower	35550	1
4	Switch, Tip over	35546	1
5	Ignition Electrode	35530	1
6	Ignition Electrode	35551	1
7	Switch, Flow, Water	35552	1
8	Handle Assembly	35545	1
9	Faucet(Faucet) Assembly	35553	1
10	Regulator Assembly	35534	1
11	Drain Plug	35536	1
12	Knob, Control	35537	1
13	Fuse	35554	1
14	Power Supply	35557	1
15	Pump Assembly	35558	1
16	Label, Control Panel	35559	1
17	Board LED	35560	1
18	Tube, Gas Inlet	35561	1
19	Valve, Water	35562	1
20	Probe, Water, Temp, Outlet	35563	1
21	Tube, Gas Outlet	35564	1
22	Tube, Water Outlet	35565	1
23	Controller	35566	1
24	Socket, Pump Assembly	35567	1
25	Socket, Charging	35568	1
26	Socket, DC outlet	35574	1
27	Brack, Faucet Fastening	35569	1
28	Battery, 12V	35570	1
29	Cover, Battery	35571	1
30	Charger,Car D/C	35572	1
31	Shower Head	35573	1

ACCESSORIES

F273701	5ft Propane Hose Assembly (Swivel 1"-20 Male Throwaway Cylinder Thread X POL w/ Handwheel)
F273704	10ft Propane Hose Assembly (Swivel 1"-20 Male Throwaway Cylinder Thread X POL w/ Handwheel)
F273702	12ft Propane Hose Assembly (Swivel 1"-20 Male Throwaway Cylinder Thread X POL w/ Handwheel)



OPERATING INSTRUCTIONS AND OWNER'S MANUAL

Model #

XCW20



WARNING:

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH. REPLACEMENT PARTS ARE ONLY AVAILABLE DIRECT FROM THE FACTORY AND MUST BE INSTALLED BY A QUALIFIED SERVICE AGENCY.



ANSI Z21.96-2014•CSA B11.6-2014