



DC SERIES - OFF-GRID

12VDC 2.6Kg/3.5Kg

Fully Automatic Washing Machine

OPERATION MANUAL



**CAUTION: DO NOT CONNECT TO THE HOT WATER SUPPLY
THE MACHINE IS FOR COLD WATER CONNECTION ONLY!**

**PLEASE READ THE OPERATION MANUAL
IN FULL BEFORE USING THIS UNIT.**

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WARRANTY CLAIM FORM

Warranty Providers Name: Coast RV Pty Ltd trading as Coast to Coast RV Services
ABN 49 097 104 492 - ACN 101 461 330

Warranty Providers Address: PO Box 415 Regents Park NSW 2143 Australia OR;
PO Box 58-054 Botany AUCKLAND 2163 New Zealand

Client:
Contact No.
Description of Goods provided:

Receipt enclosed: (tick box) **Yes** **No**

Receipt No:
Description of defects (Give as much detail as possible. Use a separate page if required):

Date of purchase/services provided:

I hereby declare that the information provided above is true and correct and to the best of my knowledge and belief and I have complied with all the conditions of the warranty.

Signed:.....

Name:
(please print)

Dated:

[Please note, the issue or completion of this form by the Client does not constitute an admission of liability by the Supplier]

6 WARRANTY LIMITATIONS

- 6.1 The Supplier makes no warranties or representations other than those set out in this warranty document except as is required by law.
- 6.2 The Supplier will not be liable under this warranty:-
- (i) to the Client or any other person for any consequential, direct or indirect loss, damage or costs incurred or suffered by the Client or any other person, including but not limited to damage to persons, other property, loss of turnover, loss of profits, loss of business or goodwill;
 - (ii) to the Client for transportation or travel costs which are the Client's responsibility;
 - (iii) for damage or defects in any Goods caused by improper transportation, storage or any other misuse, neglect or accident.
 - (iv) for the installation of the Goods. Any fault or defect due to installation should be referred to the installer. The Goods must be installed in accordance with the Manufacturer's instructions and any relevant legislation or code.

6.3 This warranty covers the Client only and it is not transferrable if the Goods are sold by the Client during the warranty period.

7 WARRANTY EXCLUSIONS

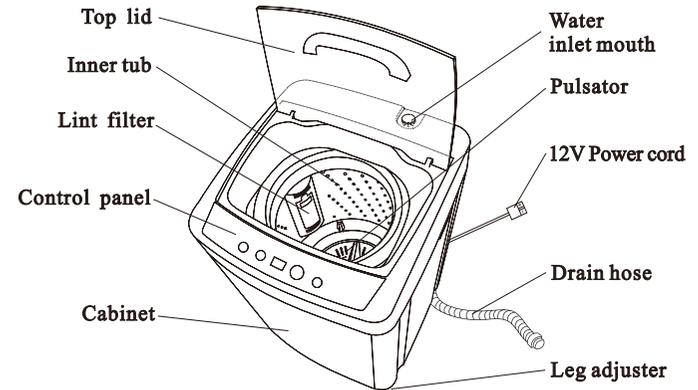
- 7.1 This warranty will not apply where:
- (i) the Goods have been improperly modified or repaired or the Good's defect has arisen due to the Client's failure to properly install, fit, maintain, service or use the Goods in accordance with the specifications and instructions provided by the Manufacturer, including a failure to comply with the relevant maintenance schedule (where applicable);
 - (ii) the Supplier cannot establish any Defect in the Goods after testing;
 - (iii) the Goods have been used other than for the purpose for which they were designed;
 - (iv) the Goods have been subject to abnormal conditions, including but not limited to temperature, pressure, stress, load or similar;
 - (v) the Client or installer have used or fitted non-genuine or non-approved parts and accessories to the Goods or have failed to use recommended parts and accessories;
 - (vi) the Good's defect has arisen due to abuse, misuse, neglect or accident;
 - (vii) the Goods have not been installed in accordance with the relevant instructions;
 - (viii) the Good's defect is caused by use or fair wear and tear of the Goods (or expendable parts).

8 RIGHTS AT LAW

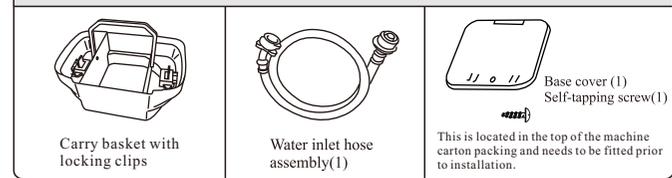
- 8.1 The benefits given to the Client under this warranty are in addition to other rights and remedies of the Client at law in relation to the Goods.
- 8.2 In Australia our Goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Goods repaired or replaced if the Goods fail to be of acceptable quality and the failure does not amount to a major failure.

NAME of RESPECTIVE PARTS and SPECIFICATIONS

Names of respective parts



Accessories



Specifications

Size	2.6kg	410x420x640(mm)	Weight of the product	2.6kg	16kg
	3.5kg	410x420x740(mm)		3.5kg	18.5kg
Rated input power	160W		Rated volume of wash and spinning	2.6kg	2.6kg(dry clothes)
				3.5kg	3.5kg(dry clothes)
Rated voltage	DC12V		Maximum water pressure permitted in the water inlet	0.6Mpa	
			Minimum water pressure permitted in the water inlet	0.1Mpa	

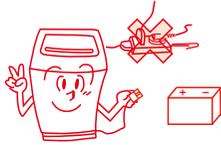
NOTICE: Ensure that a Pressure limiting valve is used if the pressure is outside the above specifications.

PRECAUTIONS

Precautions

Safe use of power

This washing machine is to be used on dedicated 12V DC circuit only.



Avoid from installing in damp areas

To reduce the risk of Electric shock, do not place the washing machine in extremely high areas of moisture.



Don't use hot water

This washing machine is for cold water connection only!



Do not place your hands in the tub while spinning

Please avoid from opening the lid while the unit is in operation. It is very dangerous to place your hands in the tub while it is spinning.



Avoid from spraying with water

Do not spray the washing machine with water, to clean use a damp soft cloth and wipe as required.



Keep away from smoke and fire

Don't place lighted candles, cigarettes, mosquito-repellent incense and thermos bottles nearby to avoid fire accidents or deformation of the plastics.



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



Coast to Coast
CARAVAN & LEISURE

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Warranty Against Defects

1 WHAT THIS WARRANTY RELATES TO

1.1 This warranty covers goods supplied by Coast RV Pty Ltd T/A Coast to Coast RV Services ("Supplier") to the Client ("Goods") and relates to any defects in materials and workmanship under normal use and maintenance ("Defect").

2 WHAT THE SUPPLIER WILL DO TO HONOUR THE WARRANTY

- 2.1 The Supplier will:
- (i) replace or repair the Goods or the defective part of the Goods free of charge;
 - (ii) arrange for the Goods or the defective part of the Goods to be repaired or replaced by a qualified repairer free of charge.
- 2.2 The Supplier reserves the right to replace defective parts of the Goods with parts and components of similar quality, grade or composition where an identical part or component is not available.
- 2.3 Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

3 WHAT THE CLIENT MUST DO TO CLAIM THE WARRANTY

- 3.1 To claim the benefit of the warranty, the Client will need to (sequentially):
- (i) first contact the Supplier; and
 - (ii) present the defective Goods to the Supplier for inspection, including inspection for defective workmanship, or otherwise provide evidence of the claimed Defect, accompanied by evidence of proof of purchase and date of delivery, and if applicable, evidence of maintenance performed in accordance with the relevant maintenance schedules.
- 3.2 The claim listed in clause 3.1 may be made in person, or the claim may be sent to the address listed on this form, including the particulars required under clauses 3.1(i) and 3.1(ii).
- 3.3 The appropriate form for making a claim for warranty is as attached.

4 DURATION OF WARRANTY

- 4.1 This warranty will cease:
- (i) where the Goods are purchased already fitted in or as a component of a vehicle or RV: from the date that is twelve (12) months after the Client takes delivery of the vehicle or RV; and
 - (ii) where the Goods are purchased separately or as an after-market item: from the date that is twelve (12) months from the date of purchase..
- 4.2 If a Defect does not materialise in the Goods prior to the date provided in clause 4.1, the Supplier will have no liability to the Client under this warranty.

5 RESPONSIBILITY FOR COSTS OF CLAIM UNDER THIS WARRANTY

- 5.1 The Supplier is responsible for the costs directly associated with repairing or replacing the Goods in accordance with clause 2.1 only.
- 5.2 Any works required to be completed in addition to fixing the Defect are the responsibility of the Client. Additional works includes any costs associated with any testing or repair of the Goods or any goods to which they are fitted, undertaken by a third party in relation to any defect without prior authorisation from the Supplier.
- 5.3 Where it is determined that the Goods do not have a Defect, the Client will be charged a GST exclusive inspection fee of forty-five dollars (\$45.00AUD in Australia or \$45.00NZD in New Zealand) plus freight costs for the return of the Goods, this is subject to change without notice.
- 5.4 The cost of delivery and insurance of the Goods to and from the Supplier, travel costs to and from the Supplier, and the cost of inspecting and testing the Goods are the sole responsibility of the Client.

ERROR CODES

Other functions

Function of fault alarm

Error code	Indication of fault	Solution of alarm
The indicator flashes and shows "E1"	No water flow	* Check that the water tap is open. * Check mains pressure connection to RV. * Check the water inlet filter screen After the above is rectified, open and close the lid to reset the washing machine.
The indicator flashes and shows "E2"	Lid is open	Ensure that the lid is completely closed. Open and reclose the lid.
The indicator flashes and shows "E3"	Out of balance	* Ensure that the washing machine is level and stable, adjust as required. * If the clothes are uneven, adjust the washing load. After the above is rectified, open and close the lid to reset the washing machine.
The indicator flashes and shows "E4"	Drain alarm	* Ensure drain hose is no higher than 100cm from the ground level. * Do not cover the end of the drain pipe, this MUST drain freely. After the above is rectified, open and close the lid to reset the washing machine.

Should the display show an error "F1" please isolate both power and water and contact the service centre for assistance.

Automatic power off function

1. Should the machine be turned on, with no program selected within 10 minutes, the machine will power off automatically to save power.
2. After the washing program has finished the buzzer will sound six times to alert you that the cycle has finished and will power off to save power.

Out of balance adjustment

1. If the clothes are uneven around the spin dry tub, the safety device will activate and may stop the spin process, the washer may automatically revert to rinse mode to help to adjust the washing load. After the tub is balanced the spin mode will resume.
2. This function will activate twice if needed, if there is no change, the alarm "E3" will be activated.

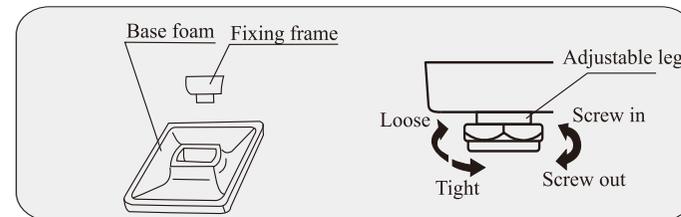
SIMPLE INSTALLATION

Simple installation

- Step 1: The machine must be installed in a serviceable area, this must not be mounted or installed within a concealed cupboard or in a hard to service location. Should a service under warranty be required this cost of accessing the machine is not covered by the warranty terms.
- Step 2: The washing machine should be placed inside the room with a flat floor, which is convenient for water supply and drain, has low moisture and no direct sunshine, and does not freeze in winter.
- Step 3: All foam packing (including the fixing frame on the base foam) should be taken off, otherwise the washing machine will not work.
- Step 4: Adjust by either screwing in or out the leg adjuster and when the machine is level on all 4 corners, lock off the outer adjustment to hold in place. (The Leg Adjuster is located on the front right hand side of the machine.)

NOTE:

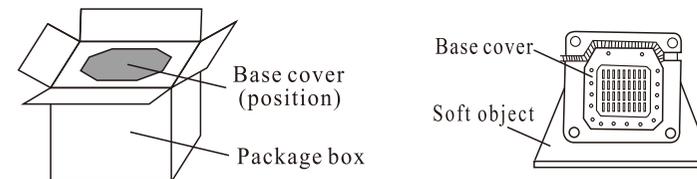
If the washing machine is not placed flat (the inclination angle is over 2°), it may cause great vibration or automatic check and rectification or other abnormal circumstances will often take place in the course of spinning.



Step 5: Installation of the base cover

Place the washing machine down to the front and rest on a soft blanket and screw in place the lower base cover.

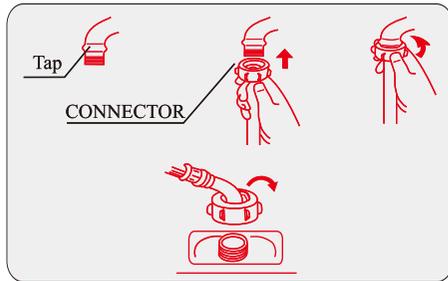
NOTE: The washing machine must not be placed on carpet pile, to where this blocks the lower ventilation of the unit.



SIMPLE INSTALLATION

Step 5: Installation of the water inlet hose

1. Connect the 90Deg end of the water inlet hose to the washing machine.
2. Connect the other end of the water inlet hose to the COLD Water outlet.
3. Ensure that the fitting is not forced or cross threaded as this will damage the fitting.
4. Open the tap to charge the line with water, check the hose fittings to make sure that no water leaks are noted. If water is found to be leaking, close the tap and you will need to check the connection correctly.



NOTE: You must use new water inlet hose in the attachments. Old water inlet hose does not be used again and again.

Step 6: Power source 12V DC

The Sphere 12V DC Off-grid series machines require a dedicated **FUSED MIN 30A** Supply circuit direct from the RV house battery bank. Use a Minimum* 8 B&S wire size for a run of 5m or less from the battery (larger cable will be needed for longer runs).

The machine comes with a pre-fitted 50 AMP "Anderson" style plug for ease of connection/disconnection into the RV power supply.

Please consult your RV Manufacture, RV Dealer or RV Auto electrician if any questions or advice is needed on the correct wiring solution for your particular layout. Warranty may be void if the above wiring requirements are not meet

TROUBLESHOOTING

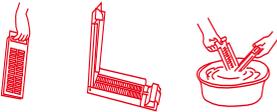
Troubleshooting

Symptom	Cause	Solution
No indication in controller	<ul style="list-style-type: none"> * The power lead may be Disconnected. * The power point may be off. * The machine is not switched on or is in Auto power off function. 	<ul style="list-style-type: none"> * Check the power lead to the machine and power point is on. * Check the Main safety switch in RV or Pole. * Press the "POWER" button.
* Leaking from the Water Inlet hose or fittings.	<ul style="list-style-type: none"> * Incorrect fitment of the inlet hose. * Faulty Water inlet hose. 	<ul style="list-style-type: none"> * Check for correct fitment. * Replace water inlet hose.
Drain failure	<ul style="list-style-type: none"> * The Drain hose is mounted too high. * The drain hose is clogged or bogged. 	<ul style="list-style-type: none"> * Adjust the drain hose. * Check that the drain hose is not blocked and can flow freely.
* Water fill failure	<ul style="list-style-type: none"> * Poor Water Flow * Restricted water inlet filter 	<ul style="list-style-type: none"> * Check water supply connections. * Check water inlet filter screen.
* Water fill during Spin cycle	<ul style="list-style-type: none"> * Clothes are uneven in the tub 	<ul style="list-style-type: none"> * If the clothes are uneven around the spin dry tub, the safety device will activate and may stop the spin process, the washer may automatically revert to rinse mode to help to adjust the washing load. After the tub is balanced the spin mode will resume.
* No spin mode after Rinse mode.	<ul style="list-style-type: none"> * The lid has been opened and may not be closed. 	<ul style="list-style-type: none"> * Check to ensure that the lid is correctly closed.

METHOD of MAINTENANCE

Method of maintenance

Prior to any maintenance or service, please ensure that the power and water have been correctly isolated to the machine.

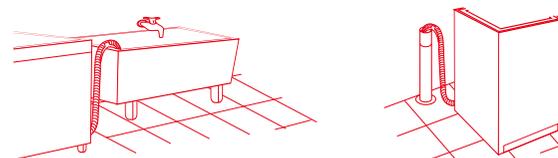
After ending of the program	Maintenance of shell
<p>* At the end of a completed washing program, the machine will sound to alert you that the cycle has been completed. Remove the clothes from the machine and insert the carry basket if washing is completed.</p> <p>* To reduce the risk of electric shock and water leaking, isolate the water and power supply while not in use.</p>	<p>Use a damp gentle cloth to wipe clean the washing machine. Avoid the use of harsh detergents or chemicals as it may damage the surface of the washing machine.</p> 
Cleaning of the lint filter	Cleaning of the water inlet
<p>After each completed washing cycle ensure that the Lint filter is cleaned.</p> <ol style="list-style-type: none"> 1. Remove the lint filter from the tub. 2. Carefully open the filter and remove the lint. 3. Refit the lint filter back into the unit. 	<p>Periodically clean the water inlet filter screen as this maybe blocked by debris.</p> <ol style="list-style-type: none"> 1. Turn off the water source and switch on the power. 2. Start the washing machine cycle and continue for 5 seconds (this allows the water in the hose to flow and removes any pressure in the line) then power off the machine. 3. Remove the water inlet hose, take out the water inlet filter screen from the inlet valve, clean the filter, refit the filter and reconnect the water inlet hose. 

SIMPLE INSTALLATION and FULLY AUTOMATIC PROGRAM

Step 7: Installation of the drain hose(only upper-drain)

- The drain hose must be no higher than 100cm from the ground level.

 NOTE: Make sure that the drain hose can not be blocked, as this will lead to a drain alarm fault.



Preparations before washing

1. Check that the drain hose is correctly fitted.
2. Connect the water inlet hose and open the tap.
3. Put the power plug into the socket.
4. Take out the coins and other sundries and shake off the mud and sand on the clothes.
5. Place the clothes and the detergent into the tub.

Program Time List

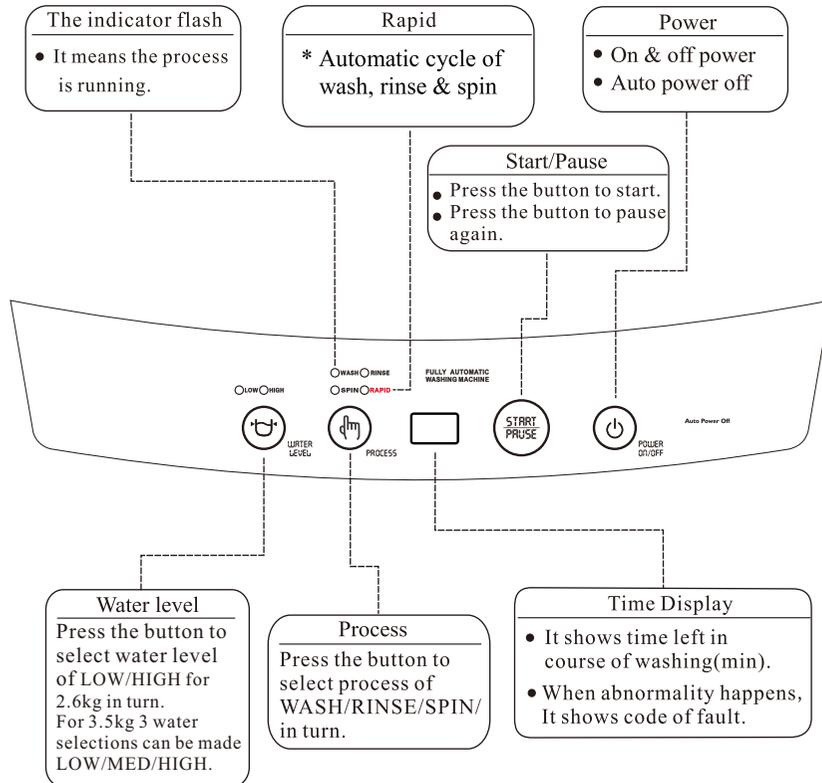
Process	Wash time(min)	Rinse times/time(min)	Spin time(min)	Total time (min)
Wash&Rinse&Spin	Subtly(12)	Normal for twice(16)	Normal(7)	About 38
Wash&Rinse	Subtly(12)	Normal for twice(16)		About 31
Rinse&Spin		Normal for twice(16)	Normal(7)	About 24
Spin			Normal(7)	About 7
Rapid	Subtly(8)	Normal for once(8)	Normal(5)	About 21

Program selection

- According to needs, press the "PROCESS" button, the indicating lights move in turn, you may optionally select "WASH&RINSE&SPIN"、"WASH&RINSE"、"RINSE&SPIN"、single "WASH"、single "RINSE"、single "SPIN" .
- After starting, If you want to re-set "PROGRAM" "PROCESS" "WATER LEVEL" , Please press the "PAUSE" button to re-set programs, then press the "START" button to run new program.

CONTROL PANEL DESIGN

Control panel design



In order to protect controller, the interval of switching on and off power should be more than 30 seconds.

OPERATION METHOD

Operation method

Begin to wash clothes

1. Select the proper water level according to the quantities of clothes.
2. Select the programs and process.
3. Close the lid and press "START/PAUSE" button.

Pre-wash of the dirty clothes

As for seriously stained dirty clothes with mud, one of the "Rinse-spin" program can be selected to perform pre-washing, and then add washing powder and select the fully automatic program to wash them.

Volume of washing and detergent

For 2.6kg

Weight of washing	Water level	Water volume	Dosage of the washing powder
1.0~2.6kg	High	About 20L	25g
<1.0kg	Low	About 15L	18g

For 3.5kg

Weight of washing	Water level	Water volume	Dosage of the washing powder
2.0~3.5kg	High	About 26L	32g
1.0~2.0kg	Med	About 20L	25g
<1.0kg	Low	About 15L	18g

* Please follow the above as a guide, always read the usage and dosage instructions on the detergent used.

Weight standard of the washing

Union coat about 800g	Jacket(cotton) about 800g	Jeans about 800g	Towel quilt (cotton) about 900g
Single bedsheet (cotton) about 600g	Dungaree(1sets) about 1120g	Pyjamas about 200g	Long sleeves shirt (blended) about 300g
Short sleeves shirt (cotton) about 180g	Trunks (cotton) about 70g	Socks (blended) about 50g	Bath towel (cotton) about 300g