

52 SC OWNER'S MANUAL



REGAL #526043





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Chapter 10

DIESEL GENERATOR (WESTERBEKE)

Selected yachts feature Westerbeke diesel generators. If equipped, the generator must be decommissioned for storage in freezing climates. Your Regal dealer or marine professional has special training along with the necessary parts for winterizing your generator.

If tackling the procedure yourself, here are the basics of winterizing the generator. Refer to your generator operator's manual for further information. The vessel must be in the water for the procedures below. Remove any sound shield enclosure as equipped.

A 50-50 solution of antifreeze and distilled water is recommended for use in the fresh water cooling system at all times. This solution may require a higher concentration depending on the area's winter climate. Check the solution to make sure the antifreeze protection is sufficient.

If you need to add antifreeze, drain an appropriate amount from the engine block and add a more concentrated measure. Start the engine to ensure a complete circulation and mixture of the antifreeze concentration thoughout the cooling system. Then recheck the antifreeze solution's strength with a bulb type checker.

With the engine warm, drain all the engine oil from the oil sump. Remove and replace the oil filter and fill the sump with new oil. Use the correct grade of oil according to the engine lubricating oil section of your generator operator manual. Run the engine and check for proper oil pressure and make sure it is leak free.

Do not leave the old engine oil in the crankcase over the lay-up period. The old oil and combustion products combine to produce harmful chemicals which can reduce the life of your engine's internal parts.

Top off your fuel tanks off with number 2 diesel fuel. Fuel additives such as BIOBOR and STABIL should be added at this time to control algae and condition the fuel. Care should be taken that the additives used are compatible with the primary fuel filter/water seperator used in the system. Change the element in your primary fuel filter/ water seperator and clean the seperator sediment bowl. Change the fuel filter elements on the engine and bleed the fuel system as needed. Start the engine and let it run for 5-10 minutes to make sure no air is left in the fuel system. Check for any leaks that may have been created in the fuel system during this servicing, correcting them as needed. Operating the engine 5-10 minutes will help allow movement of the treated fuel through the injection equipment on the engine.

Close the through hull seacock. Remove the raw water intake hose from the fitting. Place the end of this hose into a five gallon bucket of clean fresh water. Before starting the engine check the zinc anode found in the primary heat exchanger on the engine and clean or replace it as required and also clean any zinc debris from inside the heat exchanger where the zinc anode is located. Clean the raw water strainer.

Start the engine and allow the raw water pump to draw the fresh water through the system. When the bucket is empty stop the engine and refill the bucket with an antifreeze solution slightly stronger than needed for winter freeze protection in your area.

Start the engine and allow all of this mixture to be drawn through the raw water system. Once the bucket is empty, stop the engine. This antifreeze mixture should protect the raw water circuit from freezing during the winter lay-up, as well as providing corrosion protection.

Remove the impeller from your raw water pump (some antifreeze mixture will accompany it, so catch it in a bucket). Examine the bucket. Get a replacement if needed and a cover gasket. Do not replace the impeller (into the pump) until recommissioning, but replace the cover and gasket.



Storage & Winterization

MODELS W/ SEA KEY SYSTEM

If you winterize or store your boat for an extended time, and it is not connected to shore power, it is recommended that you put the MSU into off season power mode.

The power mode puts the MSU into a very low power state, minimizing the drain on the boat's battery and the internal battery of the MSU.

While in this mode, the MSU will continue monotoring the float switch and SOS button, responding immediately to either alarm. However, the MSU disables the following functions:

1. GeoFence violation

2. Responding to website commands, including polling the vessel's location and status

3. Battery voltage monotoring

Note: If someone attemps to start the engine, power switch alarm will trigger if enabled.

Off season can be commanded from the operator mode or from the Sea Key Response Center. Swithching on the main battery and/or starting the engine will stop Off Season and restore normal MSU functions.

Enable Off Season Power Mode

1. On the main menu, select Off Season Power Mode.

2. Press the Enter button. The Off Season Power Mode screen will display the instructions. Press the down arrow button to read the instructions.

3. Press the Enter button. to put the SeaKey in Offf Season Power Mode. The Confirm Off Season Power Mode screen is displayed. Read the instructions.

4.Press the Enter button to put SeaKey in Off Season Power Mode and return to the main menu.

5. The Off Season Power Mode is fully activated when the main battery switch is turned to the Off position.



Chapter 10

SEA KEY-GLOBAL POSITIONING SYSTEM

If you winterize or store your boat for an extended time, and it's not connected to shore power, you should put the MSU into Off Season Power Mode. This power mode puts the MSU into a very low power state, minimizing the drain on the boat's battery and the MSU's internal battery.

While in this mode, the MSU will continue monitoring the Float Switch and SOS button, responding immediately to either alarm. However, the MSU disables the following activities:

- GeoFence violation
- Responding to website commands, including polling the vessel's location and status
- Battery voltage monitoring



Note: If someone attempts to start the engine, power switch alarm will trigger if enabled.

Off Season can be commanded from the Operator Module or from the SeaKey Response Center. Switching on the Main Battery and/or starting the engine will stop Off Season and restore normal MSU functions.

Enable Off Season Power Mode

- I. On the Main Menu, select Off Season Power Mode.
- 2. Press the **ENTER** button. The Off Season Power Mode screen is displays the instructions. Press the **DOWN ARROW** button to read the instruction.
- 3. Press the **ENTER** button to put SeaKey in Off Season Power Mode. The Confirm Off Season Power Mode screen is displayed. Read the instructions.
- 4. Press the **ENTER** button to put SeaKey in Off Season Power Mode and return to the Main Menu.
- 5. The Off Season Power Mode is fully activated when the main battery switch is turned off.



Storage & Winterization

TELEVISION:

The television manufacturer recommends that the unit be removed from the vessel in freezing climates. To remove the flat screen do the following:

1. Pull out the power plug from the rear of the television.

2. Unscrew the antenna cable.

3. While someone holds the flat screen, remove the screws that hold the television to the bracket.

4. Remove the television and store at room temperature.

Chapter 10

WASHER/DRYER

Winterizing Your Machine

If needed, follow these steps to winterize your machine:

- With the machine power OFF, put 1/2 quart of R.V.-type antifreeze in the drum. Close the door.
- Turn the Program Selector knob to Spin. Turn the power On. Let the machine spin for 1-2 min.
- Turn the power OFF. Unplug the washer or disconnect power.
- Shut off both water faucets. Disconnect water inlet hoses from faucets and drain. DONE!

To Use Again:

- · Flush water pipes.
- Reconnect water inlet hoses to the corresponding HOT and COLD faucets. Turn on both water faucets.
- Plug in washer or reconnect power.
- Run the washer through the Express cycle with 1/2 tablespoon of powder detergent (or liquid equiv.) to clean out antifreeze. DONE!

■Optional RV Winterization:

If currently pumping antifreeze through the fresh water system, follow these steps to winterize your machine:

- With the machine power OFF, turn the Wash Temp. knob to WARM.
- Turn the Program Selector knob to Regular wash (located in the Cotton Heavy Duty section of the dial.) Turn the power ON.
- When you see antifreeze in the drum, turn the power OFF. Now advance the Program Selector knob to Spin.
- Turn the power ON. Allow the drum to spin for 30 seconds.
- Turn the power OFF. DONE!





WASTE/TOILET SYSTEM:

1. Pump out waste holding tank, flush the tank with fresh water and pump out again.

2. With non-toxic propylene glycol antifreeze in the fresh water tank, operate head until antifreeze flows into bowl of head. Allow time between flushes for the vacuum to build up.

3. Operate macerator until antifreeze has a steady flow coming from the discharge fitting. Pour non-toxic propylene glycol antifreeze solution in head and flush head as needed to produce enough flow to winterize the macerator.

4. Leave at least 2 gallons of non-toxic propylene glycol antifreeze solution in the holding tank during storage.

NOTICE

USE A SPECIAL NON-TOXIC ANTIFREEZE IN THE FRESH WATER & WASTE SYSTEM WHICH IS AVAILABLE AT RV AND MARINE DEALERS. DO NOT USE AN AUTOMOTIVE TYPE ANTIFREEZE. IT CAN BE HIGHLY POISONOUS AND CORROSIVE.

WATER SYSTEM-FRESH

1. Turn on the fresh water pump switch.

2. Open all faucets including transom shower and allow tank to empty.

3. Drain the water heater; shut off water pump switch.

4. Mix **nontoxic antifreeze** with water in accordance with the manufacturer's recommendations.

5. Pour solution into the fresh water tank.

6. Turn on fresh water pump switch.

7. Open each cold water faucet one by one beginning with the one furthest away from the tank and purge the system until a steady stream flows from the faucet. Then close the faucet.

8. Repeat step 7 for hot water faucets.

9. Shut off water pump switch.

10. Pour a quart of antifreeze into shower drain. Run the shower pump until a steady stream flows from the discharge fitting.

11. Leave at least 2 gallons of antifreeze solution in the holding tank during storage.









Glossary & Index

Following is a brief list of nautical terms useful in everyday boating experiences and communications. For more detailed glossaries of nautical terminology we recommend you check your local library, the internet or a marine store for boating books.

GLOSSARY

Abeam: at right angles to the fore and aft line and off the boat

Aboard: on or in the boat

Above: the part of the boat on a bavin vessel which is above the interor of the boat

Aft, After: aft is the boat section toward the stern or back of the boat

Admidships: toward the center of the boat from either side to side or rear to front

Beam: the width of a boat at its widest part

Bilge: the lower interior of the hull of the boat

Bitter end: the end of a line also the end of an anchor line

Bow: the front, or forward part of the boat

Bulkhead: the vertical partition or wall of a boat

Cast off: to let go or release

Chine: the line fore and aft formed by the intersection of the side and bottom of the boat

Chock: deck fitting used to secure or guide anchor or tie lines

Cleat: deck fitting with protruding arms around which lines are secured

Cockpit: the seating space used to accomodate passengers

Cuddy: a small cabin in the fore part of the boat

Deck: the open flooring surface on which crew and passengers walk



Chapter 11

Draft: the depth from the waterline of the boat to the Lee: the side opposite that from which the wind is blowing: lowest part of the boat, which indicates how much water is required to float the boat

Fathom: a measurement of depth; one fathom equals six feet

Fender: a cushion hung from the side of a boat to prevent it from rubbing against a dock or against other boats

Fend off: to push off to avoid sharp contact with dock or other vessel

Fore: the part of the boat toward the bow or front

Freeboard: the height of the top side from the waterline to the deck at its shortest point. (The distance from the sheer or gunwale to the water)

Galley: cooking area

Gunwale: rail or upper edge of the side of the boat

Hatch: an opening in the deck to provide access below

Head: toilet

Hull: the part of the hull from the deck down

IPS: inboard propulsion system by Volvo

Keel: the lowest point of a boat

Knots: a measurement of speed indicating nautical miles per hour

the side sheltered from the wind

Leeward: the direction toward which the wind is blowing

PFD: personal floatation device; required for each person aboard

Port: the left side of the boat when facing forward (an easy way to remember the difference between "port" and "starboard" is that both "port" and "left" have four letters)

Shank: the main body of an anchor

Sheer: the curve of the boat's deck from fore to aft when seen from the side

Starboard: the right side of the boat when facing forward

Stern: the aft end of the boat

Stern drive: an inboard/outboard (IO)unit

Stringer: strengthening integral unit fastened from fore to aft inside the hull and fiberglass encapsulated for added strength: much like the skeleton system of our body

Top off: to fill up a tank

Transom: the vertical part of the stern.

Trim: the boat's balance when properly loaded

Wake: the path of a boat left astern in the water



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Technical



TECHNICAL INFORMATION

Note that all product specifications, models, standard, optional equipment, systems, along with the technical information is subject to change without notice.

For more information contact your nearest authorized Regal dealer. For the location of your nearest authorized dealer call 407-851-4360

or you can contact Regal through the internet at : **www. regalboats.com.** Your Regal dealer has received special factory training on the entire product line and his services should be employed to solve more technical problems. A portion of the technical drawings found in this chapter are actual product drawings from the Regal factory. These drawings should be of special interest in mechanical and electrical troubleshooting. The equipment in the drawings is discussed in the various sections of this manual. Understanding specific systems and related drawings will go a long ways in solving problems on your vessel.

Note that drawings found here may apply to earlier or later yachts. A portion are marked accordingly. Sometimes knowing the brand of a component or system can help identify the correct drawing along with using the particular schematic from the vendor file found in the owner's information packet.

Again, seek professional help as needed.







Equipment Location Is Subject To Change



52 SC TYPICAL LABEL LOCATIONS









52 SC TYPICAL MAIN SHIP'S AC ELECTRICAL PANEL WITH BREAKER SIZES



REVISED BY REGAL 11/12/07



Technical Information



52 SC TYPICAL BOSE 321 SYSTEM WITH SATELLITE OPTION (1 OF 2)

Technical Information

52 SC TYPICAL BOSE 321 SYSTEM WITH SATELLITE OPTION (2 OF 2)

Technical Information

52 SC TYPICAL DUAL CHARTPLOTTER WITH AUTOPILOT AND RADAR

Technical Information

4- 12GA RED 5- 10GA RED 6- 16GA RED 7- 16GA RED

52 SC TYPICAL MAIN SHIP'S DC ELECTRICAL PANEL WITH BREAKER SIZES

DATE:

11/15/07

DRAWN BY:

DAI GNUYEN

REV. #:

APPROVED BY: M. GARCIA PAGE #

DRAWING #:

1

Technical Information

52 SC TYPICAL BATTERY MANAGEMENT PANEL

Technical Information

Technical Information

52 SC TYPICAL PORT COCKPIT SWITCH PANEL 2 OF 2

Technical Information

52 SC TYPICAL WINDSHIELD WIPER WIRING

52 SC TYPICAL BATTERY CIRCUIT WIRING

Technical Information

52 SC TYPICAL DC NEGATIVE (GROUND) WIRING CIRCUIT

Technical Information

52 SC TYPICAL DUAL BATTERY CHARGER WIRING

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52 SC TYPICAL BATTERY CHARGER SYSTEM CONNECTIONS

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52 SC TYPICAL FRESH WATER PLUMBING LAYOUT

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52 SC TYPICAL OVERALL BOAT DIMENSIONS

Technical Information

52 SC TYPICAL WATERLINE DIMENSIONS

Technical Information

52 SC TYPICAL BOAT LIFTING LOCATIONS (IPS DRIVES)

Technical Information

NOTICE

BOAT OWNER-LIFT OPERATOR

Before lifting boat place a fendor or block between strap and hull just under the swim platform side wing (Both port and starboard) to relieve strap pressure on wing when lifting boat. When fender or block is positioned correctly strap will not put pressure on side wing when full weight is applied.

FAILURETOFOLLOWTHEABOVEINSTRUCTIONS MAY CAUSE FIBERGLASS DAMAGE WHICH IS NOT COVERED UNDER THE REGAL LIMITED WARRANTY.

BEFORE LIFTING THE VESSEL SEE PAGE 22 OF THIS MANUALS TECHNICAL DRAWING SECTION. FOR FURTHER INFORMATION CALL YOUR REGAL YACHT DEALER OR THE REGAL FACTORY.