

What needs to be done to keep the complete system in good condition

Recommissioning, sometimes called "summerizing" (in contrast to "winterizing"), is the essential second stage to the two-part process of laying-up a vessel. Completing all the necessary tasks to return a vessel to service is necessary to ensure trouble-free operation. Recommissioning should be straightforward and simple, if the necessary tasks were completed before layup, e. g. oil change, fuel biocide, battery checks etc.. (See MDB Checklists #1 - 6 available free from www.marinedieselbasics.com)

#### Main Concerns

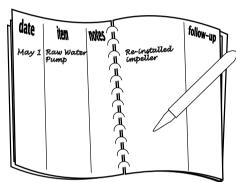
- forgetting what was done/not done during lay-up (not keeping good notes in a Maintenance Log)
- failure to complete of the tasks that must be done with the vessel out of the water

## Value of the Maintenance Log

One of the most important, and easiest ways to ensure the health and longevity of all mechanical equipment on a boat is to keep a Maintenance Log. The more comprehensive and detailed, the more useful the logbook becomes over time.

The Maintenance Log has four main functions:

- early warning of potential problems. Most problems develop slowly and are often simple to correct if caught early
- time and details of any changes in performance
- recording details of work done and equipment serviced
- system history what was done, when, how and by whom



## Engine Essentials

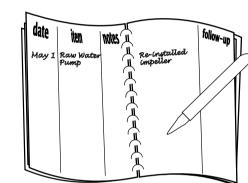
visual engine inspection

check hoses and hose clamps

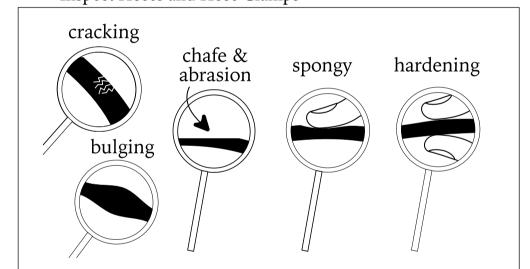
inspect wires and wiring terminals

check pulley and belt alignment

tighten alternator and water pump belts



## Inspect Hoses and Hose Clamps



#### Diesel Fuel

Main Concerns

• water and HUM growth in the fuel tank(s)

forgetting to open all fuel lines causing engine to run out of fuel

check diesel tank(s) for contamination

open fuel valves



return lin



#### Lubrication

Main Concerns

- dried-out bearings inside the engine
- failure to re-check level of transmission ATF or engine oil

rotate engine without starting

drain transmission fluid to maximum level on dipstick (if previously filled before lay-up)

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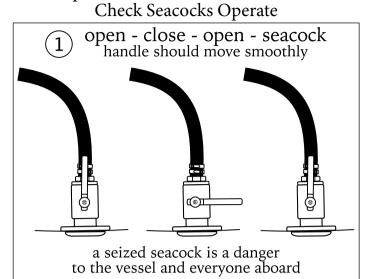
# Raw Water Cooling

Main Concerns

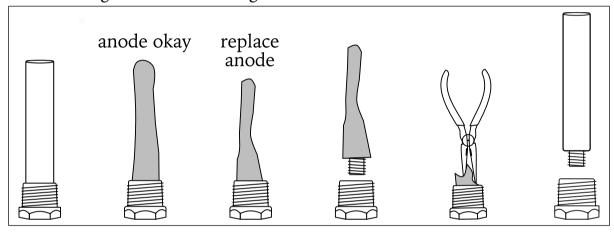
• omitting to check all the raw water circuit before launch and engine start-up

forgetting to open the raw water seacock
 check seacocks open/close smoothly
 check the raw water strainer
 check engine and heat exchanger anodes
 re-install raw water pump impeller & face plate
 open raw water seacock for engine

remove plugs from exhaust & raw water intake thruhulls



Check Engine & Heat Exchanger Anodes

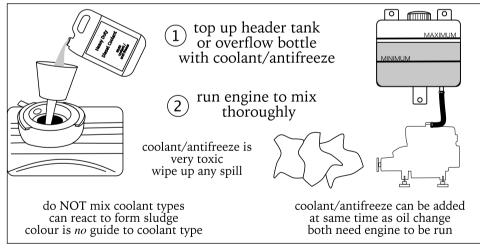


#### Coolant/Antifreeze

Main Concerns

- loss of coolant/antifreeze
- check coolant level in header tank or over-flow bottle

#### Check Coolant/Antifreeze Level



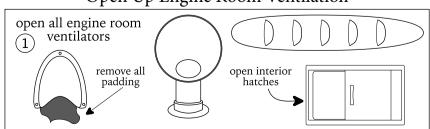
# Breathing - Air Intake & Exhaust

Main Concerns

air intake or engine room ventilation remains closed or blocked

open engine room ventilation
unseal air filter/air intake on engine
re-connect exhaust riser and hoses
close drain on water-lift muffler or reconnect hose





excerpted from Marine Diesel Basics 1 - Maintenance, Lay-Up, Winter Protection, Tropical Storage, Spring Recommission - the first VISUAL guides
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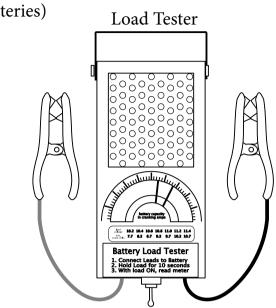


## Electrical

Main Concerns

• battery(s) may be dead due to freezing or 100% discharged and hard sulphation

• low electrolyte levels in wet-cell trickle-charged battery(s) (not sealed batterie	es)
check exterior condition of battery	
check battery electrolyte level & top up, if needed	(
charge battery(s)	
load test a 12 volt battery	//
reconnect battery terminals (lugs)	V



## Drive Train

Main Concerns

- linkage controls may have rusted or seized
- failure to "burp" dripless shaft seal or adjust stuffing box (in water)

# check control cable ends are secure check throttle cable movement check transmission control cable check stop cable or solenoid grease rubber cup on dripless shaft seal

hand tighten & lock gland on traditional stuffing box

# Recommission in Water

Main Concerns

• forgetting routine engine start procedures

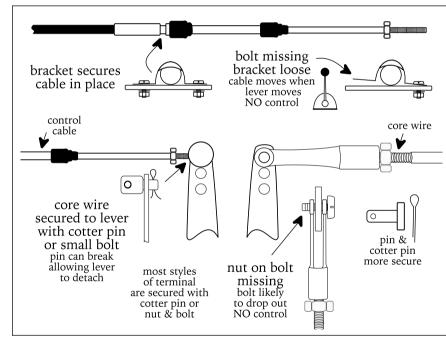
check hose(s) on dripless stuffing box

• forgetting to adjust the stern gland (packing or burping)

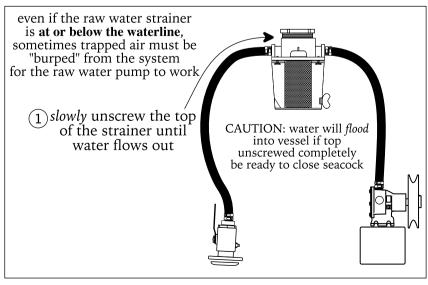
C	O	•	·		•	•
remo	ve prote	ection from	propell	er and	l shaft (	if fitted)
prime	e raw wa	ater straine	er			
start	engine					
burp	raw wat	er strainer	to relea	se tra	pped ai	r
check	oil pres	ssure is no	rmal			
check	raw wa	iter being e	expelled	with 6	exhaust	

continued...

#### **Check Control Cable Ends**



#### Prime Raw Water Strainer



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#### Recommission in Water - continued

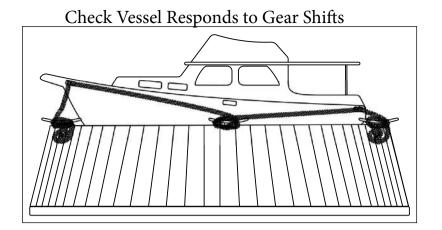
check alternator is charging

check seacocks, raw water strainer & exhaust for leaks

check vessel moves in gear

re-adjust packing in traditional stuffing box

burp air from dripless stuffing box

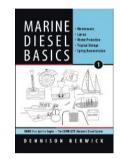


## Get more help: marinedieselbasics.com



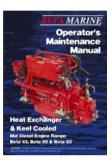
#### **CHECKLISTS**

- what to do and when
- how to winterize etc.
- Saildrive Maintenance
- free downloads



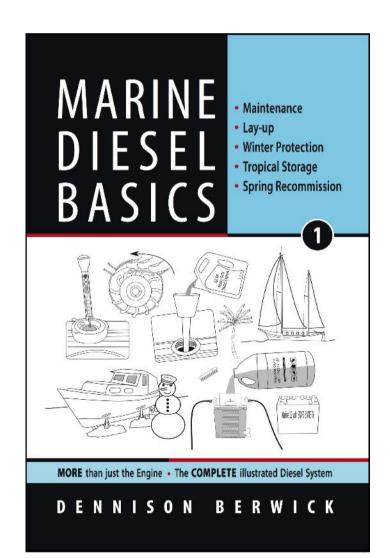
More than 150 tasks explained in clear drawings and simple text.

• \$15.99



100s of **MANUALS** for engines, transmissions, pumps, alternators etc.

free downloads



Seeing is understanding! With more than 300 illustrations, the first book in the Marine Diesel Basics series *shows* how to:

- 1) complete all basic maintenance tasks of the marine diesel system fuel, lubrication, cooling, breathing, electrical, and drive train (coupling, shaft, shaft seal, propeller)
- 2) winterize the complete system and to prepare for tropical storage (high heat and humidity)
- 3) recommission ("summerize") the system to ensure reliable and trouble-free service
- step-by-step instructions in clear, simple drawings
- explains all parts of the system
- lists all necessary tools and supplies to get each task done
- covers sailboats, motorboats and narrowboats
- indirect and direct cooled diesel engines
- saildrives maintenance, lay-up, recommissioning
- 300+ drawings, 222 pages, full Task Lists and Index

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