



INBOARD MOTOR DESCALING INSTRUCTIONS

SAFE. FAST. EFFECTIVE.

For Best Results:

- Record “before” and “after” operating temperatures for reference.
- By utilizing similar procedures, fresh water or in-series cleanings can be accomplished. Call for technical assistance on these procedures.
- Prolong engine life by scheduling a **RYDLYME Marine** cleaning each season.
- If there is scale build up on the impeller or the thermostat, soak them in the circulating bucket while cleaning.



Rico Industrial Services Ltd

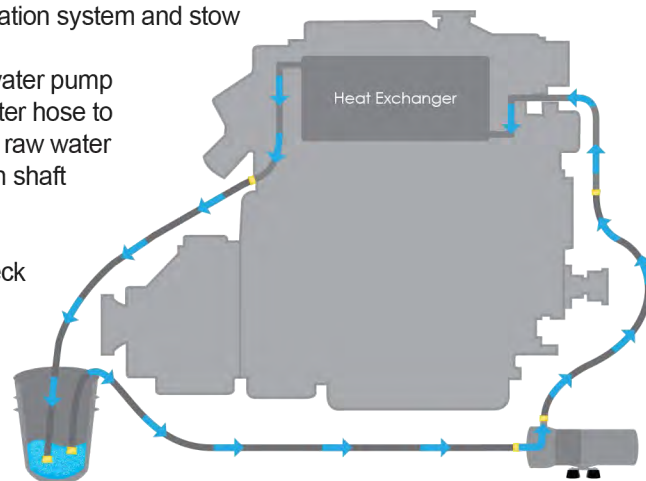
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Preferred Cleaning Method for Inboard Motor:

Contact a RYDLYME Marine Technician for recommended amount and duration.

1. Prepare your motor:
 - a. Isolate the system to be cleaned by first closing the seacock valve. Next, disconnect the hose from the raw water pump discharge. Finally, disconnect the hose that feeds the exhaust elbow with raw water.
 - b. Remove the zinc anodes in the system and plug/cap fittings. If replacing with new anodes, then do so after cleaning the system as **RYDLYME Marine** will dissolve the zinc.
 - c. The raw water cooling line that commonly runs from the heat exchanger to the main shaft will need to be clamped off (if applicable).
 - d. Remove the thermostat and reinstall the thermostat cover (if applicable).
2. Set up a circulating pump system (for convenience, **RYDLYME Marine** offers pump systems for this step. Visit our website for available models):
 - a. Use three hoses with optional valves on one end to connect pumping system.*
 - b. Connect a hose from the circulation bucket to the auxiliary pump suction.
 - c. Connect a hose from the auxiliary pump discharge to the hose that was previously disconnected from the raw water pump discharge.
 - d. Connect a hose to the previously disconnected hose that fed the exhaust elbow with raw water. This hose will be the return hose going back to the bucket (bypassing entire exhaust).
 - e. Check to ensure all hoses and fittings are properly secured.
3. Add recommended amount of **RYDLYME Marine** to bucket and mix 1:1 with water. The pump may need to be switched on to fully fill larger systems.
4. Begin circulating by slowly filling the system with solution while making sure there are no leaks or air pockets. Once you are certain there are no leaks or air pockets, then run the pump for the recommended duration.
 - a. Monitor solution in circulation bucket for fizzing and bubbling. This reaction indicates **RYDLYME Marine** is dissolving scale. This reaction could occur for 1-4 hours.
 - b. Monitor circulating pump system for excessive leaks and be sure the pump doesn't run dry.
 - c. When the fizzing and bubbling stops and the circulation process has been running for at least 1 hour, the solution should be checked to see if it is depleted. This can be done by collecting a sample of the solution and submerging a sea shell or Tums™ tablet in it. If fizzing and bubbling occur, then the cleaning is complete. If no reaction occurs, then additional **RYDLYME Marine** may be needed to completely clean the system.
5. Dispose of the solution and flush the system with clean water for approximately 5 minutes.
6. Drain and disassemble the circulation system and stow for future use.
7. Reconnect the hose to the raw water pump discharge, reconnect the raw water hose to the exhaust elbow, un-clamp the raw water cooling line that leads to the main shaft (if applicable), and reinstall the thermostat (if applicable).
8. Open the seacock valve and check for leaks.
9. Return inboard motor to service at normal operating temperatures!



*We recommend rubber hoses, brass fittings and PVC valves. Do NOT use low-grade aluminum or zinc components.

*For reference only, actual systems may differ.
Please contact us for additional technical assistance.*