Pacific Marine Products, Inc.
Safe, biodegradable products to keep your boat engine clean and running smooth.

P.O. Box 5085 • Bremerton, Washington 98312 • (360) 509-3269

RYDLYME MARINE ENGINE FLUSHING

1. ***RYDLYME Marine*** is most effective when it is circulated through components or washed over surfaces causing fresh product to constantly make contact with the affected area.

2. Individual engine components can be cleaned or the entire salt water or fresh water circulation paths can be cleaned without disassembling and removing components.
You'll need the following equipment:

- A separate pump, preferably a diaphragm type that pumps 2.5 to 4 GPM.
- A bucket. Five gallons will do.
- Enough hose to run from the separate pump to the engine raw water pump, the engine exhaust to the bucket, and the suction side of the pump to the bucket. 1/2" hose will work well.
- Adapters to go from the pump hose to the engine hose size (see procedure below).
- ***RYDLYME Marine***. I've found that one gallon per engine when doing the salt water side is sufficient.
- Copious amounts of water for flushing.

3. When doing the salt water side, the following procedure produces excellent results:

Secure the raw water intake hull valve.

Remove the hose on the discharge side of the raw water pump and attach a hose from the discharge side of a separate diaphragm style pump. This will be the entry point of the flush.

Remove any zincs installed in the heat exchanger and coolers or plan to replace them following the flush. Plug the holes as required.

Pinch off lines or secure valves that lead to any additional cooling component such as PSS (mechanical shaft seal) or stuffing box cooling.

Disconnect the hose that feeds the exhaust elbow with salt water and connect it to a hose that empties into the bucket. Place the suction hose from the independent pump so it draws solution from the bucket.

Pour one gallon of ***RYDLYME Marine*** into the bucket. Jog the pump on and off sucking the solution from the bucket. Jogging the pump allows you to check for leaks throughout the flushing path. When satisfied there are no leaks, start the pump and add water to the bucket so the suction hose from the pump does not suck air. You can add water up to a 50/50 mix of water and ***RYDLYME***.

Continue the flush for about one hour. During the flush, foaming of the solution will occur as it dissolves the calcium buildup in the system. After a while, the foaming will decrease and/or disappear and the solution running back into the bucket will become clearer. This means that either the system is clean or the solution is depleted. To check the effectiveness of the solution, draw a small amount from the bucket, place a seashell in it and see if it still fizzes (you can also use a Tums or Rolaids). If it does, the solution is good and the system is probably clean. If the shell does not fizz, the solution has depleted. To refresh the solution, just add more ***RYDLYME Marine*** to the bucket and continue to flush.

When the cleaning is complete, flush the system through the same route with copious amounts of water. The solution and anything flushed out of the salt water side can be disposed of down the sewer,
or in most cases, overboard. Remove the separate pump hose and fittings, reconnect the engine's hoses, replace the zincs and open the engine intake hull valve.

It's time to go boating.

Any questions, call Dale at 360-509-3269.