

RARITAN RAW WATER STRAINER

INSTALLATION AND MAINTENANCE INSTRUCTIONS

WARNING: *Raritan Engineering Company, Inc. recommends that a qualified person install this product. Equipment damage, injury to personnel or death could result from improper installation. Raritan Engineering Company, Inc. accepts no responsibility or liability for damage to equipment, or injury or death to personnel that may result from improper installation or operation of this product.*



WARNING: HAZARD OF FLOODING. Failure to observe cautions below could result in flooding, property damage or loss of life. Failure of the Raw Water Strainer, after installation below the waterline, can result in sinking of your vessel.



1. Any installation made below the waterline must have hoses connected properly and connections double clamped; and be tested and responsibly maintained to protect the installation.
2. Always be sure both inlet and outlet seacocks or valves are in the closed position when the strainer will not be in use or when leaving the boat unattended.
3. Use only PVC fittings. Never install the Raw Water Strainer using metal adapters. The different expansion rates of metal and plastic can result in leakage or cracks.
4. Use only teflon tape or paste; never install using any other sealants or lubricants.

The Raritan Raw Water Strainer (RWS) can be used to protect engines, generators, air conditioning systems and other water cooled equipment from damage due to debris entering and clogging water passages. The RWS is also useful in marine toilet installations. It helps to prevent unpleasant bowl odors caused by eel grass and other marine life.

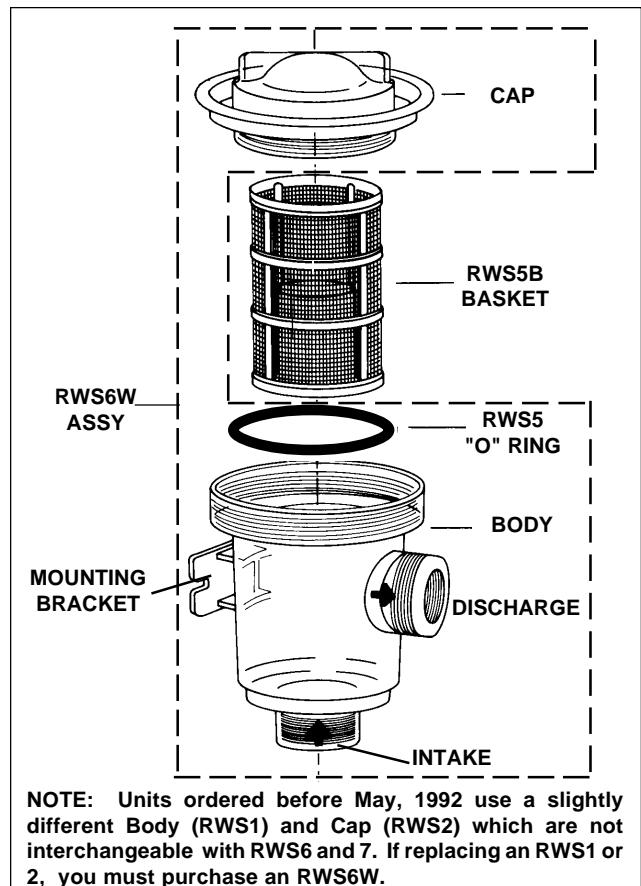
The RWS has a high capacity clear plastic body that lets you see trash accumulation, water condition and circulation. A large strainer basket catches and holds trash, debris, grass and other material that may be drawn into the intake lines. A molded bracket facilitates mounting.

For boats with several different applications it is useful to have more than one strainer.

The intake and discharge plumbing connections accept PVC 1 1/2" MNPT adapter fittings. Male or Female reducing bushings are available from Raritan in standard sizes to 1/2".

INSTALLATION - MOUNTING

1. The RWS should be installed where it can be secured to a bulkhead or other solid area. **Locate the RWS above the waterline, when possible.**
2. Mount with cap upright using the molded bracket. Secure with stainless steel bolts, washers and nuts or stainless steel wood screws at least 1 1/4" long.



Maximum working pressure: 5 PSIG.

Dimensions: 9 3/4" (24.8cm) high and mounting bracket to discharge fitting 7 1/4" (18.4cm) wide

PLUMBING

CAUTION: Plumbing connections can not be used to support the RWS. Install all hoses to RWS before mounting to prevent damage to mounting bracket. Close seacocks before installing strainer. DO NOT OVERTIGHTEN the adapters; tighten only enough to prevent leakage. Certain joint compounds will cause deterioration of the plastic material resulting in cracks around the threaded areas. Never use metal adapters as the different rates of expansion may cause leakage or cracking of the plastic case.

1. Arrows indicate direction of flow in and out of strainer.
2. Do not use teflon tape on cap threads; use only Superlube (SL) to lubricate cap threads.
3. Use teflon tape on threads of fittings and adapters. Secure proper size adapters onto intake and discharge fittings.
4. Connect hoses to the adapters using two stainless steel hose clamps per connection.
5. Tighten cap onto strainer body. A positive stop prevents overtightening. **DO NOT TIGHTEN PAST STOPS.**

5. Once installed, open seacocks and check strainer installation for leaks. Turn on the equipment the strainer is protecting. Check the flow and check for leakage at the fittings. If leakage occurs shut off the equipment and recheck the installation.

MAINTENANCE

Periodically check strainer for debris. Check all connections for leaks. Strainer basket can be removed for easy cleaning.

WINTERIZATION

Close seacocks, drain the strainer completely. Do not add anti-freeze compounds, they will cause deterioration of the plastic, causing it to crack.

INSTALLATION PARTS LIST

<u>Part #</u>	<u>Description</u>
RWS13	Reducing Bushing 1½"x1½"
RWS14	Insert Reducing Male Adaptor 1¼"x ¾"
RWS16	Insert Reducing Male Adaptor 1½"x ¾"
RWS17	Insert Reducing Male Adaptor 1½"x1"
SL	Superlube

LIMITED WARRANTY

Raritan Engineering Company warrants to the original purchaser that this product is free of defects in materials or workmanship for a period of one year from the product's date of purchase. Should this product prove defective by reason of improper workmanship and/or materials within the warranty period, Raritan shall, at its sole option, repair or replace the product.

1. TO OBTAIN WARRANTY SERVICE, Consumer must deliver the product prepaid, together with a detailed description of the problem, to Raritan at 530 Orange St., Millville, N.J. 08332, or 3101 SW 2nd Ave. Ft. Lauderdale, FL 33315. When requesting warranty service, purchaser must present a sales slip or other document which establishes proof of purchase. THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION PRECEDENT OF WARRANTY COVERAGE. However, please complete and return the owner Registration Card so that Raritan can contact you should a question of safety arise which could affect you.

2. THIS WARRANTY DOES NOT COVER defects caused by modifications, alterations, repairs or service of this product by anyone other than Raritan; defects in materials or workmanship supplied by others in the process of installation of this product; defects caused by installation of this product other than in accordance with the manufacturer's recommended installation instructions or standard industry procedures; physical abuse to, or misuse of, this product. This warranty also does not cover damages to equipment caused by fire, flood, external water, excessive corrosion or Act of God.

3. ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY FOR BREACH OF CONTRACT WHICH BUT FOR THIS PROVISION MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. ALL IMPLIED WARRANTIES SUCH AS THOSE OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE, IF APPLICABLE, AS WELL AS ANY IMPLIED WARRANTIES WHICH MIGHT ARISE BY IMPLICATION OF LAW, ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG A LIMITED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

4. UNDER NO CIRCUMSTANCES SHALL RARITAN BE LIABLE TO PURCHASER OR ANY OTHER PERSONS FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

5. No other person or entity is authorized to make any express warranty, promise or affirmation of fact or to assume any other liability on behalf of Raritan in connection with its products except as specifically set forth in this warranty.

6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SAVE THESE INSTRUCTIONS

Replacement parts are available from Raritan Dealers or the factory, please contact Raritan Technical Support.



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