

# **499003 Strainer Pro Installation; Limited Warranty**

Thank you for purchasing an Indmar Strainer Pro with built in flushing attachment. This sea strainer will only work with raw water inlet systems that are equipped with  $1-\frac{1}{4}$  inch inside diameter hoses. If the boat is equipped with inlet water hoses that are not  $1-\frac{1}{4}$  inch ID, this strainer will not work.

CAUTION: When running the engine using the flushing feature of the Strainer Pro, the transmission must be in neutral. Do not exceed 1200 RPM. Monitor the engine temperature to ensure the engine does not run excessively hot. The temperature must not exceed 200 degrees F. If the engine gets hot, reduce the engine RPM until it operates at a safe temperature.



**NOTE:** Read the entire Installation Instructions before beginning installation.

WARNING: Do not attempt installation of the Strainer Pro while the boat is in the water unless the raw water inlet is equipped with a shut off valve (sea cock) and that valve is in the off position to prevent water entering and possibly sinking the boat.

WARNING: Do not remove the cover of the Strainer Pro to remove debris while the boat is in the water unless the raw water inlet is equipped with a shut off valve (sea cock) and that valve is in the off position to prevent water entering and possibly sinking the boat.

## **Indmar Parts and Accessories Limited Warranty**

Indmar warrants each new or factory rebuilt part and accessory manufactured or sold by it to be free from defects in material and workmanship. This warranty is in effect for one year from the date of original retail purchase. If the Indmar product is used in conjunction with commercial, rental or other income producing activity, this warranty is limited to 90 days from the date of purchase.

The warranty will not include installation errors made by an individual, the servicing dealer and/or his mechanic. Since the warranty applies to defects in material and workmanship, it does not apply to normal worn parts, adjustments, tune-ups or to damage caused by but not limited to: (A) Neglect, lack of maintenance, accident, abnormal

installation or improper installation or service; (B) Use of an accessory or part not sold by Indmar; (C) Operation with fuels, oils or lubricants which are not suitable for use with this product; (D) Participation in or preparing for racing or other competitive activity; (E) Alteration or removal of parts; (F) Water entering the cylinder(s) through exhaust system or carburetor(s).

Claims shall be made under this warranty by delivering the Product for inspection to an Indmar dealer authorized to service the Purchaser's Product. If purchaser cannot deliver Product to an authorized dealer, he may give notice in writing to the company. The Product on which the claim is made must be shipped freight prepaid to Indmar Products at the address below for inspection. The purchaser must provide a valid invoice, receipt or service ticket identifying the part and/or accessories, including the date of purchase and a written statement declaring the specific application in or on which the part was installed including the boat and engine model and serial numbers, the retail customer's name and address, and whether the part was installed by a qualified technician or by the consumer, and the suspected reason(s) for the failure of the part(s).

OUR OBLIGATON UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF A DEFETIVE PART OR PARTS AS IS NECESSARY TO REMEDY ANY MALFUNCTION RESULTING FROM DEFECTS IN MATERIAL OR WORKMANSHIP, OR, UPON RETURN OF THE PRODUCT WITH A WRITTEN REQUEST, A REFUND OF THE PURCHASE PRICE PAID.

THERE ARE NO OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND THE ABOVE DESCRIBED LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTY, AND THIS LIMITED WARRANTY SHALL SERVE AS THE CUSTOMER'S EXCLUSIVE REMEDY.

THIS REMEDY HAS BEEN TAKEN INTO ACCOUNT IN ESTABLISHING THE PRICE FOR THE PRODUCT, AND IS INTENDED AS A MUTUALLY ACCEPTABLE ALLOCATION OF RISK BETWEEN BUYER AND SELLER. IT IS BUYER'S SOLE AND EXCLUSIVE REMEDY AGAINST SELLER FOR BREACH OF WARRANTY OR FOR OTHER CLAIMS REGARDING THE PRODUCT, WHETHER ARISING IN CONTRACT, WARRANTY, TORT, STRICT LIABILITY, OR OTHERWISE.

Any warranty, which may be implied or imposed by law, is limited to the duration of this warranty. INDMAR SHALL NOT BE LIABLE FOR ANY INCIDENAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY relating to the product other than provided herein. Some states do not allow limitations on how long an implied warranty lasts, to the exclusion or limitation of consequential damages, so the elimination or exclusion may not apply to you. This warranty gives you specific legal rights, which vary, from state to state. The Limited Warranty provisions herein shall be governed by the laws of the State of Tennessee.

### Installation

The Strainer Pro must be installed in the inlet side of the raw water system in a location that is between the water inlet fitting and the first connection to the engine or an engine component like the transmission or transmission oil cooler. If the boat is equipped with a raw water shut off valve (sea cock), the Strainer Pro must be installed after the valve.

- **1.** If the raw water inlet is equipped with a shut off valve (sea cock), place it in the OFF position.
- 2. Find a suitable location for installation of the Strainer Pro that is before the engine or any engine component. The location should also allow for access to the sea strainer for cleaning and maintenance and attachment of a flushing hose. Keep strainer away from any moving or rotating components that could damage the strainer. NOTE: The 90 degree

fitting on the strainer is the inlet fitting and must be connected to the hose that comes directly from the water inlet.



Typical Strainer Pro Installation

- a section of the raw water hose to allow connection of the Strainer Pro. The inlet hose will be hard walled and wire reinforced so besides a sharp cutting tool, you will also need a wire cutter to remove the hose section.
- **4.** Place the supplied hose clamps over the cut ends of the hoses.
- 5. Install the Strainer Pro into the cut ends of the hoses making sure to match the flow arrow on the strainer with the water flow in the system. Push the fittings into the hoses as far as they will go. NOTE: A little soapy water or other suitable lubricant on the inside of the cut hose ends will make installation of the strainer easier.
- 6. Position the hose clamps so they are within 1/4" of the end of the inlet and outlet hoses. Tighten the hose clamps securely.
- **7.** Make sure the strainer cap and flush plug are tightened securely.
- 8. Put the boat in the water, open the sea cock if so equipped, and start the engine. NOTE: The Strainer Pro is on the suction side of the raw watersystem. Loose connections on the strainer will be evidenced by air bubbles in the strainer.

Let the engine run for a few minutes and check for air bubbles in the strainer. Retighten clamps and make sure the strainer cap and flush plug are tightened securely. Shut off the engine and close the sea cock. NOTE: We recommend that when the boat is in the water and not being used or attended that the sea cock be closed to avoid sinking the boat in the event of damage or failure of a component in the cooling system.

#### **Maintenance**

The Strainer Pro is designed to prevent weeds and other debris that enters the cooling system from entering the engine and restricting water flow. The strainer basket needs to be checked regularly for debris and cleaned as necessary.

- 1. If there is debris in the Strainer Pro and the boat is in the water DO NOT disassemble the Strainer Pro before you place the sea cock in the off or closed position. If there is no sea cock, remove the boat from the water before disassembling the Strainer Pro.
- 2. Remove the inlet cap retainer by rotating it in a counterclockwise direction.
- **3.** Pull the inlet cap from the sea strainer.
- **4.** Remove the wire mesh screen from the sea strainer and remove the debris from the screen.
- **5.** Reinstall the wire mesh screen in the sea strainer.
- **6.** Reinstall the inlet cap making sure to not damage the sealing 0-ring.
- **7.** Reinstall the inlet cap retainer and rotate it clockwise to tighten. Hand tight is sufficient.

#### **Replacement Parts**

There are replacement parts for certain components of the Strainer Pro. See your Indmar dealer for replacements. They are as follows:

486103 Plug Flush Fitting 486104 Basket Wire Mesh 486105 Seal Kit

## **Flushing the Engine**

An added feature of the Indmar Strainer Pro is the built in flushing connection. To flush your engine with fresh water:

- **1.** If your boat is equipped with a shut off valve (sea cock), place it in the OFF position.
- **2.** Remove the flushing protection plug from the sea strainer.
- **3.** Attach a standard water hose to the flush fitting on the sea strainer.
- **4.** Turn on the water supply to the hose between  $\frac{1}{4}$  and  $\frac{1}{2}$  pressure.
- **5.** Start engine and let it run at idle with the transmission in neutral.
- **6.** Turn water supply to full pressure.
- 7. Increase engine RPM to 1200 RPM maximum and let it run to thoroughly flush the raw water portion of the cooling system (10-15 minutes).
- **8.** Return engine RPM to idle.
- **9.** Reduce water supply pressure to ½ to ½ pressure.
- **10.** Turn engine off.
- 11. Turn water supply off.
- **12.** Remove water supply hose from sea strainer and replace the flush protection plug.
- **13.** If the boat is equipped with a shut off valve (sea cock), place it in the ON position.



5400 Old Millington Rd. | Millington, TN 38053 901.353.9930 | Fax 901.358.4292 www.indmar.com www.indmardealersupport.com