PSS Shaft Seal Maintenance & User Guidelines

For Sport Boats Using Standard Speed 1-1/8" Seals With 1-3/4" Stern Tube

Please read the available information in the PSS Shaft Seal owner's manual included with your boats documentation. Additional copies can be downloaded here: www.shaftseal.com/en/about/installation_instructions

BREAK-IN PERIOD

On average, the PSS requires approximately one (1) hour of break in time, which allows the carbon ring face to polish the mating face of the stainless steel rotor. During the break in period you will experience a very fine mist, sometimes associated with a black dust coming from the PSS. Under normal conditions, this will stop after an average of one (1) hour running time. After the break-in period clean up any black dust deposits. If the black dust returns after the break-in period, visually inspect the seal for signs of miss-alignment, or excessive wear.

CARBON CHAMFER

The black carbon ring has a chamfer (bevel) machined into it where it contacts the stainless steel rotor that acts as a wear indicator. If at any time chamfer area is worn away, please contact PYI Inc.

Note - The most common cause of leaking after the initial break-in period is not enough compression, or contamination of the seal faces. The most common type of contamination is petroleum or other types of oil.

DRIPPING OR LEAKING AT REST

If the PSS seal drips while at rest it is likely that foreign material is present on the face of the seal between the stainless steel rotor and the carbon flange. To clean the seal faces, insert a clean rag carefully between the two faces *(Note: some water will come into the boat at this time if the boat is in the water)* and work the rag around the seal. As you do this, the incoming water will flush the impurities. Remove the rag from the seal and the leak should stop. If it still drips, repeat the process using a dry wash cloth that has been saturated with dish soap. If the leak persists use a piece of 400 grit "Wet-or-Dry" sand paper that has been folded in half so it is abrasive on both sides and repeat the process using the 400 grit in place of the cloth.

SPRAY OR MIST DURING OPERATION AFTER THE BREAK IN PERIOD

This is typically caused by not enough compression. The compression dimension provided in the "Bellow compression chart" in the instructions is an average figure provided as a guide. The exact amount of compression required can vary due to different types of engine mounts. The ***Installed Length*** for this seal is 5¼" to 5½" as shown on the diagram. If you experience any spray or mist following the break in period, measure the installed length, and adjust the seal as needed for an installed length of 5¼".

INCREASING COMPRESSION IF NEEDED

With the boat out of the water, measure and note the installed length of the seal. Remove two set screws from each of the threaded holes in the stainless steel rotor. The screw that comes out of each hole will go in first when re-installed.

Slide the stainless steel rotor aft until the seal is compressed to an installed length of 5¼". While keeping the bellow in the "compressed" position, tighten one set screw against the shaft in each threaded hole with the provided allen wrench (Use approximately 6 foot pounds of torque, 32lbs on long arm of the PYI supplied wrench). Install a second set screw in each hole to lock the first on in place. With the set screws properly tightened the rotor will not move on the shaft.

PERIODIC INSPECTION

If the boat sits idle for a long period of time (about 3 months), move the black carbon piece aft to allow a small amount of water to enter the boat. This is an important step during the first launch of the season. This can be done after launching while doing the visual inspection of the engine compartment.

Information and product support is available online at www.pyiinc.com or by contacting PYI Inc. at 800-523-7558.

Notes: _____

Other products by PYI Inc. for your 1-1/8″ shaft and 1-3/4″ stern tube PSS Shaft Seal:

SRC
Shaft Retention Collar
Part #07-SRC-118

- *Designed to protect propeller and rudder shafts*
- *Assists in keeping the shaft and rudder in the boat in the event of a coupling failure*
- *Easy installation with the shaft or rudder in place*

PSS Shaft Seal
Maintenance Kit
Part #07-118-134R

It is recommended that you replace your rubber bellows once every six years. The maintenance kit includes new:

- *Rubber bellows*
- *Nitrile o-rings*
- *Set screws*
- *Hose clamps*

R&D Marine
Flexible Shaft Coupling

- *Reduces engine noise & transmission vibration*
- *Fail safe design*
- *Reduces costly transmission repairs*