

TIDES MARINE

SureSeal™ System

Lip Seal Replacement With Spare Seal Carrier in place.

- Inspect the exposed shaft surface between the Spare Seal Carrier and the SureSeal™. Make certain it is clean and free of any nicks or burrs which might damage the spare lip seals. If necessary, you may polish the shaft using 200-300 grit wet/dry sandpaper, working radially around the shaft.
- Remove the five cap screws from the front of the housing.
- Slide the front cap forward, passing it over the replacement seal.
- Separate the split retaining washer from the housing and remove it from the shaft.



- Pry out the old lip seal with a screw driver, working alternately on opposite sides. Cut the old seal off of the shaft with diagonal pliers.
 - Carefully slide the replacement seal down the shaft and into the chamfered opening in the front of the housing.
- Return the split retaining washer to the shaft in front of the new lip seal.
 - Fit the split retaining washer into its recess inside the cap. Slide cap and washer until they touch the lip seal. Align the holes and start the cap screws.
 - Alternately tighten cap screws in a criss-cross pattern, pressing the lip seal into the opening. The new seal is seated properly when the cap and housing touch.
 - Loosen the hose clamps on the stern tube end of the blue hose and move the shaft seal assembly fore and aft until it feels like the seal housing is centered on the drive shaft. Retighten the hose clamps. This process will make sure the shaft seal assembly is centered on the shaft in case the drive shaft angle has changed.

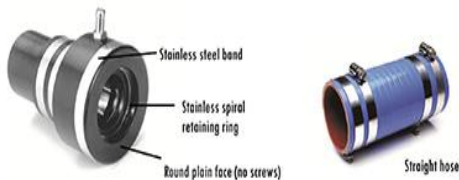
TIDES MARINE

STRONG™ Seal

Lip Seal Replacement With Spare Seal Carrier in place

- Inspect the exposed shaft surface between the Spare Seal Carrier and the STRONG™ Seal. Make certain that it is clean and free of any nicks or burrs, which might damage the spare lip seals. If necessary, you may polish the shaft using 220-300 grit wet/dry sandpaper, working radially around the shaft.
- Remove the retaining ring from the front the STRONG™ Seal unit. DO NOT DISPOSE OF IT. You may first need to loosen the screws on the carrier and slide it away from the STRONG™ Seal for better access.
- Remove the screws from the Spare Seal Carrier and separate the halves, exposing the spare replacement lipseal(s).

STRONG™ Seal
(sold prior to year 2000)



- Spiral the retaining ring off of the shaft and put it aside for future use. DO NOT lose this part. You will need it.
- Using a hook or needle nose pliers, remove the worn lip seal and cut it off the shaft.

******* DO NOT PRY ON THE SEAL BODY *******

- Carefully slide the replacement seal down the shaft until it touches the STRONG™ Seal unit.
- Reassemble the Spare Seal Carrier housing on the shaft with the long shoulder touching the replacement seal.
- Do not tighten assembly screws fully, as the housing must be able to slide down the shaft and into the front of the STRONG™ Seal unit.
- With a mallet or hammer, gently tap the end face of the carrier housing to drive the lip seal into position. Be careful not to damage the shaft or housing.
- When the lip seal is properly seated in the STRONG™ Seal housing, the groove which accepts the retaining ring will be fully visible.
- Remove the carrier and reinstall the retaining ring.
- If the carrier contained two spare seals, the housing should be reassembled over the remaining seal as before.