

## O-Ring Care and Replacement

**Overview:** O-Rings are critical components of Xeos beacons which have been designed to protect the internal system from water ingress. As such, O-Rings of these devices should be regularly inspected and replaced when appropriate to prevent potential damage to Xeos products.

**O-Ring Inspection:** New or already existing O-rings should be visually inspected to ensure:

- they are evenly seated in their grooves
- there are no signs of visual damage to the O-ring (splits or cuts)
- the O-ring is clean (no dirt or hair)
- the O-ring is lubricated sufficiently and evenly

O-rings should be replaced regardless of visual inspection, if they have been in a device that has been deployed at a depth for **longer than two months**.



**O-Ring Surface Inspection:** Visually inspect the surface that will be next to the O-ring for scratches or debris when the device is fully assembled. Do not reassemble the unit if you believe there is damage to the O-ring surface.

If there is any damage to the O-rings surrounding surface, contact Xeos directly.

### O-Ring Replacement:

#### Cleaning

- Remove the old O-ring with a tool that will not scratch the O-ring groove. A wooden or soft plastic toothpick is ideal.
- Clean the O-ring groove in preparation for the new O-ring. Use a lint-free cloth, cleaning alcohol, and a soft brush to prevent scratching this surface.
- Clean the mating surface of the device the O-ring will meet using the above materials.

#### Installation

- Apply a thin, even layer of seal lubricant (Molykote 111 from Dow Corning) to the new O-ring. This lubricant should cover the entire O-ring.
- Slide the new O-ring into the O-ring groove and press down gently to confirm it is evenly seated.
- Reassemble the device to protect the O-ring as soon as possible to prevent the collection of particles.