

SUPPORT KIT FOR Titanium LOGGERS

Proper maintenance of the O-ring is a simple, low-cost, preventative measure that can prolong the life of your logger. Any kind of water leak can damage the electronic circuitry beyond repair and also cause valuable data loss. The pressure integrity of the logger depends on the O-ring seals and not on the tightness of the screw thread. The logger can be adequately closed by hand (no wrenches are necessary).

To ensure your electronics remain dry during deployment, we suggest the following:

1. **O-rings should be replaced regularly.** There are four O-rings on XR Ti bodies, two on the battery end-cap and two on the sensor end-cap. The battery end-cap O-rings should be checked each time you replace the batteries, and replaced as necessary. The sensor end-cap O-rings should be checked each time the sensor end-cap is opened and be replaced at least once a year. When the logger is disassembled, handle only the sensor end-cap. We strongly suggest that you replace the O-rings regularly, e.g. before every deployment, or after a change of batteries, or at least once a year. Please note that each end-cap requires one flat back-up O-ring and one round O-ring. The flat O- ring is placed toward the inner side of the end-cap and seats against the wall of the groove. Looking at the logger picture below the sequence of O-rings is round O-ring followed by the flat O- ring for the battery end cap and the flat O-ring followed by round O-ring for the sensor end-cap. The flat O-ring is always on the inner side of the end-cap



2. **O-rings should be seated in a clean and un-scored groove.** Carefully inspect the O-ring grooves and the logger body for nicks and scratches. If any are found, contact RBR for advice. Gently clean all grease and dirt from the O-ring grooves, end cap surfaces, and logger body end bores.
3. **New O-rings should have a thin layer of silicone applied.** If the groove is smooth and clean, apply a thin film of silicone grease to the O-ring groove. Roll on the new O-ring from the circuit board end, being very careful you don't touch the board. Install it swiftly to prevent permanent stretching. After it is properly seated, apply a thin layer of silicone to the outer surface of the new O-ring.
4. **Batteries should be checked.** Before setting up and deploying your logger, be sure to check the batteries. If you have any doubts about their charge, then replace them. Be sure to consider the planned sample rate and duration. See the mechanical section of the User Manual for battery removal instructions.
5. **Use desiccant.** Internal condensation can result if the logger is closed up in a hotter and more humid environment than the deployment environment. Desiccant should always be used with Delrin™ body loggers due to the permeability of the logger housing to water. Since condensation can cause the circuitry to malfunction in such circumstances, we advise you to contact RBR for an application-specific solution. The use of desiccant should always be considered prior to a deployment.

This support kit consists of: 10 backup (flat) O-rings, 10 end-cap (round) O-rings, desiccant, one O-ring removal tool and silicone grease

Contact RBR for additional Support Kits: info@rbr-global.com