

Introduction

The following instructions can be used to install the C3 Submersible Fluorometer's Antifouling Copper Plate and Collar P/N 2300-507 or the C6P Submersible Fluorometer's and PhytoFind Antifouling Copper Plate and screws P/N 2360-507 onto the optical head. The copper plate deters settling and growth of organisms on or near the optical sensors to help maintain sensor accuracy and precision during long term deployments.



Parts Included with Accessory

- The C3 Antifouling Kit includes the Following: 1X Copper Plate & 1X Securing Collar
- The C6P / PhytoFind Antifouling Kit includes the Following: 1X Copper Plate & 3X Mounting Screws with Thread Locker.

Preparation

Before installing the copper plate onto your Submersible Fluorometer's optical head, prepare the area where the copper plate will be installed by making sure to:

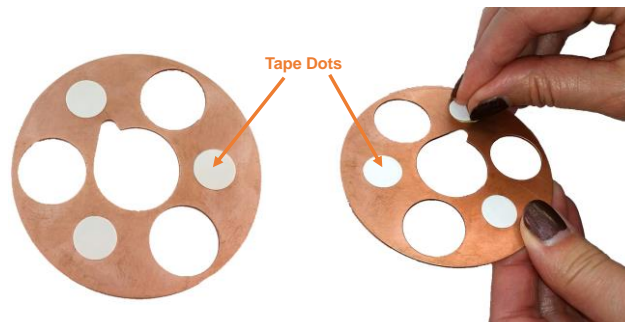
- Remove the tightening nut and wiper assembly from the optical face of the instrument if applicable. Refer to the [Mechanical Wiper Installation](#) instructions for details.
- Remove all existing copper tape (if any) by peeling it away from the optical head
- Clean the area using a soft cloth and warm soapy water
- Dry the area completely



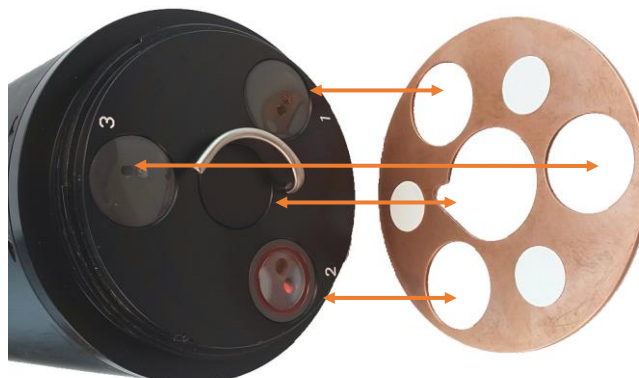
Note: It is important to make sure the area is completely clean and dry before installing the copper plate.

Installation

- 1) For the C3 Submersible Fluorometer's Antifouling Copper Plate and Collar P/N 2300-507 remove the adhesive backing from the three (3) tape dots on the back of the copper plate.



- 2) For all instruments line up the holes in the copper plate with the optical sensors and temperature probe as shown in the diagram below.



- 3) Make sure the copper plate is properly aligned so that it is not covering sensor windows and is aligned with the temperature probe. For the C3 application press down on the copper plate allowing it to stick to the optical head. To ensure good adhesion, firmly press down on the copper plate to avoid having it move when tightening the retaining collar.

For the C6P / PhytoFind application, install the three (3) screws as shown in the picture below. Once the screws are tightened down and flush with the copper plate the installation is complete.

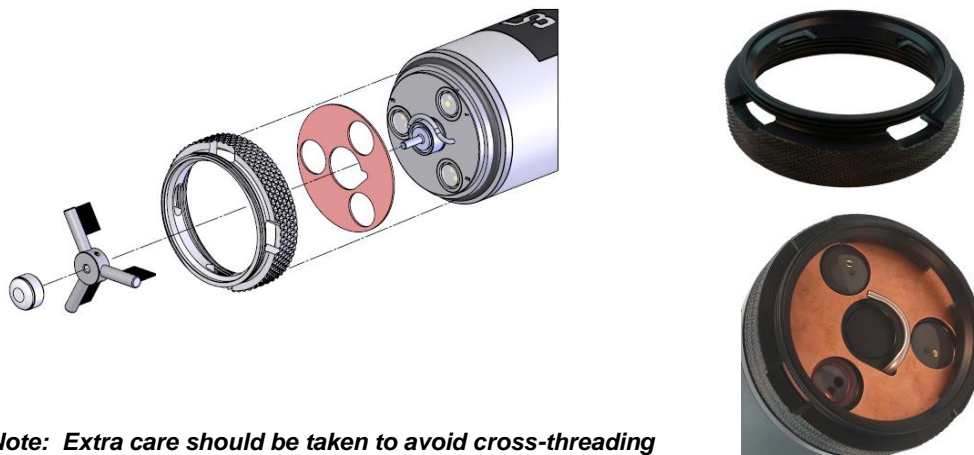
Note: Extra care should be taken to avoid cross-threading or stripping of the threads in the 3 tapped holes when installing the screws.

Note: It is important to make sure that the copper plate does not come in contact with the temperature probe.



- 4) On the C3, place the collar down on top of the optical face and hand tighten it to secure the copper plate. Do not use tools to tighten. If applicable, reinstall the wiper assembly and tightening nut. The C3 Shade Cap P/N 2300/2360-500 and the C-Ray Shade Cap P/N 2300-502 can be installed onto the collar.

Note: The C3 Solid Secondary Cap P/N 2300/2360-905 can NOT be used with the copper plate. The copper plate must be removed when using the Solid Secondary Cap. When removing the copper plate, determine if the tape dots are still suitable for reapplication and proper adhesion. Tape dots should be replaced as needed with double-sided sticky tape.



Note: Extra care should be taken to avoid cross-threading or stripping of the threads in the optical head when installing collar to secure the copper plate.

Recommendation for Copper Plate Replacement

The degradation rate of the copper plate is dependent on environmental conditions. The copper plate may need to be replaced more often in highly productive or extreme areas. Under the majority of sampling conditions the lifespan is lengthy. We do not recommend scrubbing or cleaning the copper plate; it is most effective as it oxidizes. The copper plate should be replaced if it becomes thin/weak or has visible cracks or holes.

