



# Wiped Conductivity & Temperature Sensor Spacing Kit Instruction Sheet

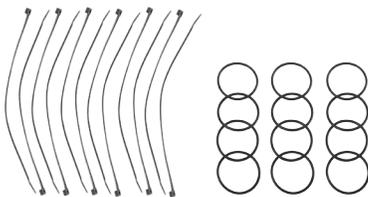


## Maintaining better conductivity measurements.

This kit includes the following items:

- 12 – Wiper o-rings
- 12 – Zip ties used to optimally align the EXO Wiped Conductivity & Temperature sensor to the central wiper brush in an EXO2 sonde.

The use of this kit will improve the performance of your conductivity probe and extend the lifetime of the wiper brush by aligning the wiped channel to the central wiper. Reinstall a new o-ring and zip tie for each long-term deployment.



The o-rings and zip ties included in this kit are key to a successful deployment.

**NOTE:** These consumable items may be sourced locally with like specifications, or reordered using part 599831. The included o-rings are EPDM material. Many available o-rings are not resistant to UV and will break down in seawater. Be sure to use all plastic zip ties. **DO NOT** purchase zip ties with a metal retention device as it will allow biofouling a place to grow.

## Installing spacing o-ring:

- 1** Remove your central wiper from the sonde. Install one of the included o-rings on the wiper, starting from the connector end. Roll the o-ring so the majority of it rests in the groove directly below the black, plastic wiper guard (see figures 1 & 2).

This o-ring is used to ensure a consistent space between the wiper and the adjacent sensors.

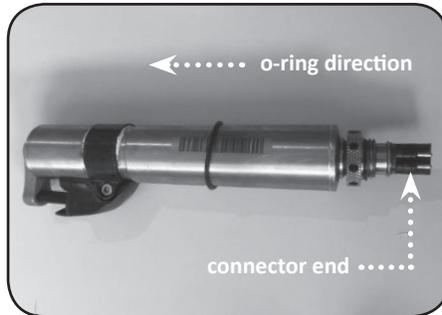


Figure 1 - Roll on the new o-ring starting at the connector end

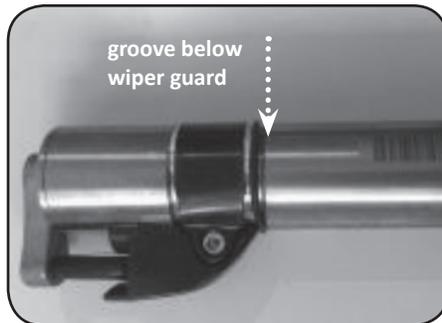


Figure 2 - The o-ring rolled up to the proper position

**NOTE:** If you need a replacement, black plastic wiper guard, a new one can be ordered at [YSI.com](http://YSI.com) (part# 599676).

**NOTE:** If using YSI copper anti fouling tape, the tape can be installed over the o-ring without significantly impacting the spacing.

- 2** After the o-ring is placed on the wiper, install the wiper back into the central port. Next, install all the sensors used for your field deployment noting the optimal position of the wiped C/T sensor in ports 3 or 4 (see figures 3, 4, & 5).

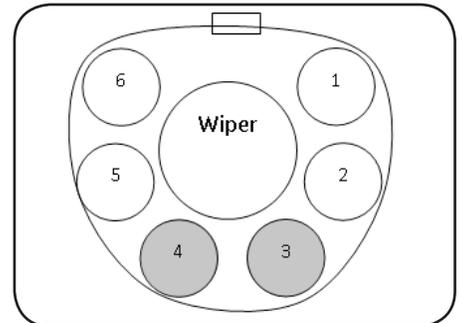


Figure 3 - Optimal Wiped (C/T) Sensor Positions: Ports 3 or 4



Figure 4 - Sensors installed around the Central Wiper with o-ring in place



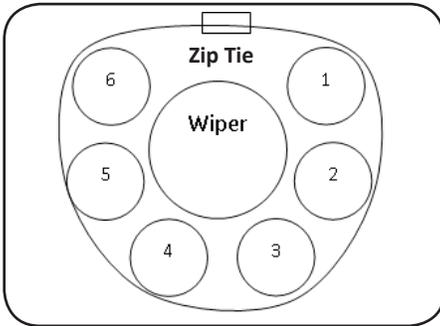
Figure 5 - Wiped C/T sensor in optimal position ready to be secured

Spacing Kit installation continued on reverse.



**3** After all the sensors have been installed and calibrated, apply an all plastic zip tie roughly in the middle of the sensor grouping as shown (see figures 6 & 7).

The latch on the zip tie should be positioned so it is between ports 1 and 6, this will ensure adequate clearance between the zip tie and sensor guard.



**Figure 6** - Note the zip-tie wrapped around the sensors, holding them in place

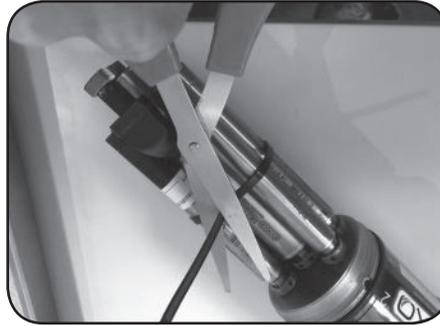


**Figure 7** - Securing the sensors with the zip-tie with adequate clearance

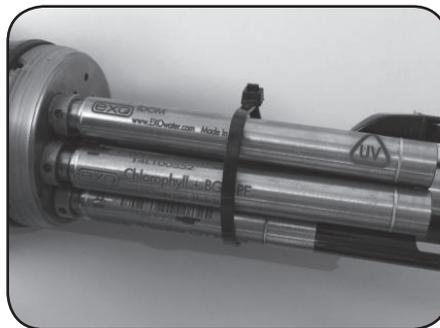
**NOTE:** Do not over tighten the zip tie. The goal of the zip tie is to hold the sensors against the o-ring around the central wiper. You should still be able to gently slide the zip tie up and down, and it is normal for the sensors to still move slightly.

**4** Visually inspect to ensure the sensors are making contact with the o-ring. Cut the excess length of the zip tie off.

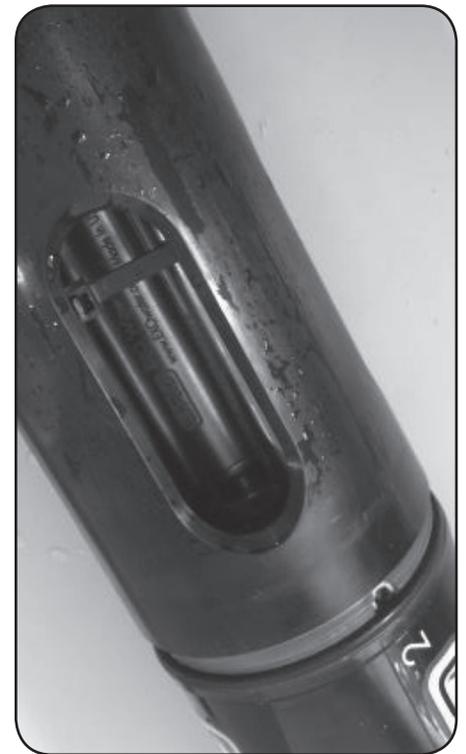
Reinstall the EXO sensor guard and you are ready to collect data (see figures 8, 9 & 10)!



**Figure 8** - Carefully cut away excess length from the secured zip-tie



**Figure 9** - Inspect the finished payload for proper installation



**Figure 10** - Finally, to ensure that the zip tie is out of the way, place the sensor guard back on the sonde.



**Wiped Conductivity & Temperature sensor in optimal wiping position with o-ring and tie in place.**