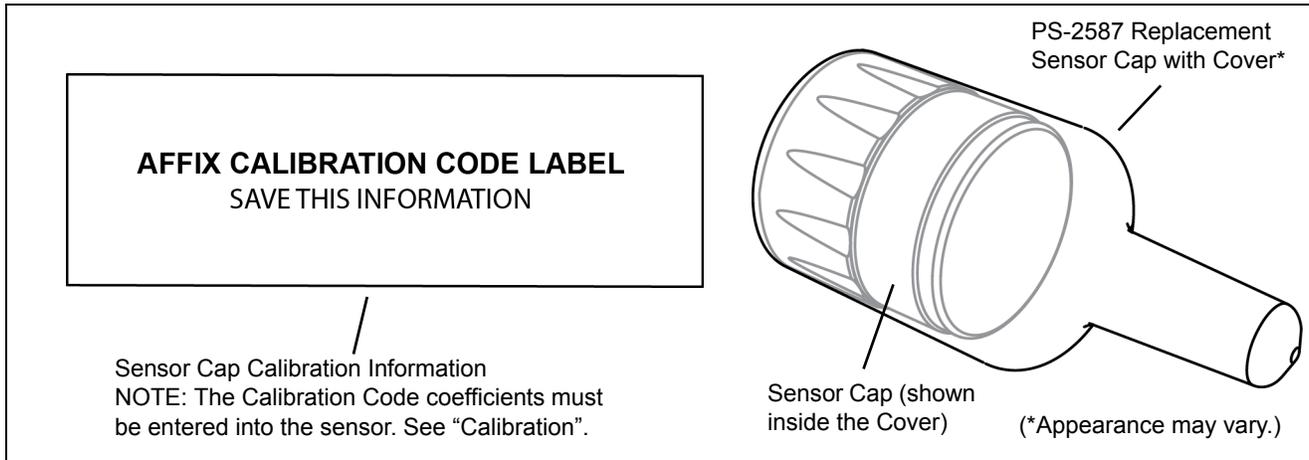


Replacement Sensor Cap

PS-2587

for use with Optical Dissolved Oxygen Sensor

PS-2196

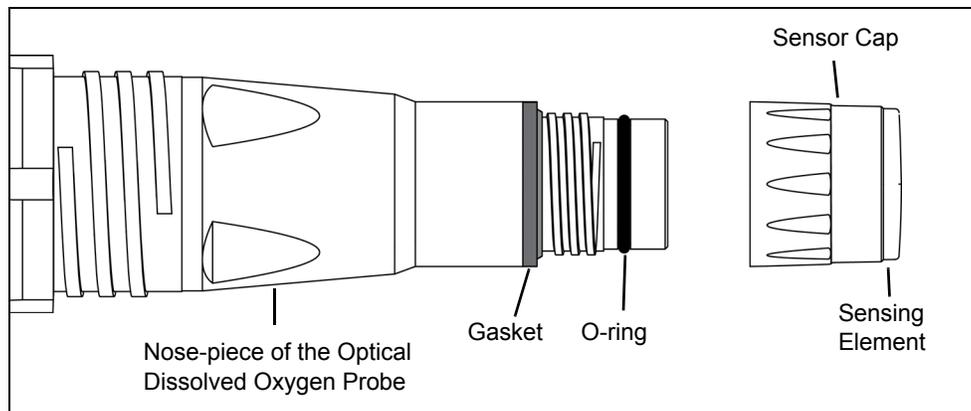


Introduction

The PS-2587 Replacement Sensor Cap fits on the nose-piece of the Optical Dissolved Oxygen Probe, part of the PS-2196 Optical Dissolved Oxygen Sensor. The Sensor Cap is shipped in a humidified container and the package should not be opened until immediately before sensor cap replacement. Once the new Sensor Cap has been installed on the Optical Dissolved Oxygen Probe, it is important to keep the end of the sensor cap in a humid environment. Therefore, store the Optical Dissolved Oxygen Probe in the Probe Cover with the sponge that is in the end of the Probe Cover moistened with water.

Sensor Cap Replacement

CAUTION: Avoid touching the sensing element on the end of the Sensor Cap.



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1. To remove the old Sensor Cap, hold the Optical Dissolved Oxygen Probe with one hand and then rotate the old cap counterclockwise until it is completely free. NOTE: Do not use any tools for this procedure.
2. Inspect the O-ring on the probe for damage. If there is any indication of damage, carefully remove the O-ring and replace it with the new O-ring included with the replacement Sensor Cap. NOTE: Do not use any tools to remove the O-ring.
3. Ensure that the O-ring installed on the probe is clean. If necessary, wipe with a lint free cloth or replace the O-ring.
4. Locate the O-ring lubricant included with the new Sensor Cap. Apply a thin coat of O-ring lubricant to the installed O-ring. After application, there should be a thin coat of O-ring lubricant on the O-ring only. Remove any excess lubricant from the O-ring and probe with a lens cleaning tissue.
5. Remove the new Sensor Cap from its hydrated container, and dry the inside cavity of the Sensor Cap with lens cleaning tissue. Make sure that the cavity is completely dry before proceeding. Next, clean the clear surface on the end of the Optical Dissolved Oxygen Probe with lens cleaning tissue.
6. Using clockwise motion, thread the Sensor Cap onto the probe until it is finger tight. The O-ring should be compressed between the Sensor Cap and probe. NOTE: Do not over-tighten the Sensor Cap and do not use any tools for this step.
7. After installing the new Sensor Cap, store the Optical Dissolved Oxygen Probe in the Probe Cover with the sponge in the end of the Probe Cover moistened with water.

Calibration

IMPORTANT: See the instruction sheet for the Optical Dissolved Oxygen Sensor (PS-2196) for information about calibration using PASCO data acquisition software.

The PS-2587 Sensor Cap Replacement package includes a Sensor Cap Calibration Code Label. After the new Sensor Cap is placed on the Optical Dissolved Oxygen probe, there are two parts to the sensor calibration process.

1. With the probe connected to the sensor and the sensor connected to the PASCO Interface, use the data acquisition software to enter the Calibration Code coefficients (six groups of numbers labeled K1 to K5 and KC) for the replacement Sensor Cap into the sensor.
2. Perform a one-point calibration using a calibration standard such as air-saturated water. Alternatively, a two-point calibration could be performed using two calibration standard solutions.

Technical Support

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