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	Screw caps and O-rings of the GKE Steri-Record® Compact-PCD®s	Created	07.12.2009	UK
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GKE Process Challenge Devices (PCD) to monitor the efficacy of steam sterilization processes have a dead-ended capsule to host the indicator strip, sealed with a screw cap with an O-ring inside.

The pressure difference during a steam sterilization process on the screw cap is very tiny and only a short time during the pressure gradients. During the sterilization process the pressure difference is zero. For correct function of the PCD the screw cap requires only slight hand-tight torque force. In practice however screw caps are sometimes heavily tightened where the seal O-ring will be strongly squeezed with the result that the O-rings may wear out easier.

GKE already has modified the seal of the cap in 2009 so that the risk of destroying the O-ring is not anymore given at all, since the cap is screwed getting metal to metal without destroying the O-ring, so the risk for a leak is extremely seldom.

The screw caps cannot be exchanged by mistake because their threads have different square diameters. The O-ring (colour black) is included in both screw caps (M10: inner diameter of the suitable O-ring: 6.5 mm and M12: inner diameter of the suitable O-ring: 9 mm).

According to the directions for use the O-ring should be exchanged after 500 cycles even with normal use, the O-ring will last much longer. All GKE refill packs include one O-ring for M12 screw caps. For older PCDs (e.g. Compact-PCDs manufactured before 2009) no O-ring is included, they require a different O-ring (for M10). In this case please contact GKE.

Users of the GKE Steri-Record Bio-C-PCD® to be used with Mini-Bio-Plus indicators are delivered with 5 replacement O-rings, sufficient for at least 2,500 cycles. If more O-rings are required, they may be ordered separately.