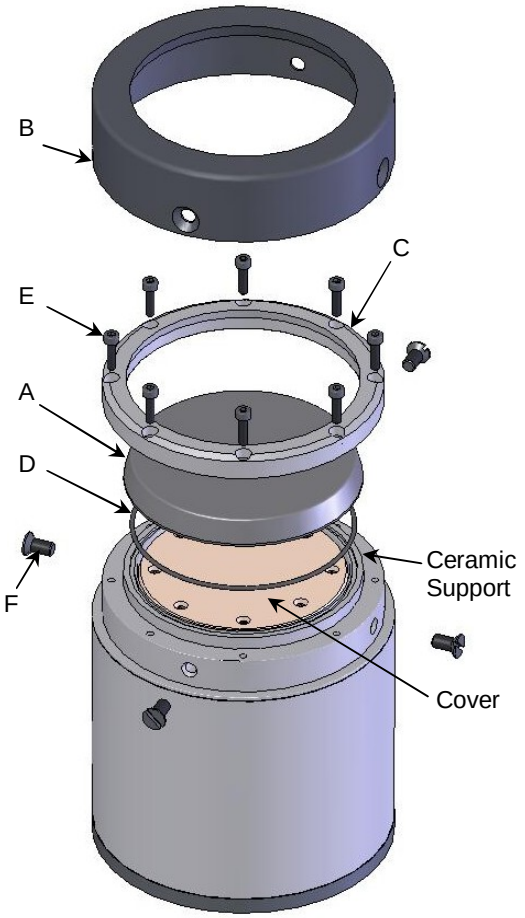
Hydro-Mix VII Ceramic Disc Replacement Instructions

A. Ceramic Disc.
B. Protection Ring.
C. Ceramic Retaining Ring.
D. O-ring (78 x 1.5).
E. M3 x 12 socket cap head stainless steel screws (x8).
F. M5 x 10 slotted counter-sunk stainless steel screws (x4).



REMOVAL OF CERAMIC DISC

1. Unscrew 4 screws (F).
2. Remove Protection Ring (B).
3. Unscrew 8 screws (E).
4. Remove the Ceramic Retaining Ring (C).
5. Remove Ceramic Disc (A) and O-ring (D).
6. Discard all old screws and the O-ring.

RE-ASSEMBLY WITH NEW CERAMIC DISC

1. Clean and degrease the Cover, Ceramic Support, Ceramic Retaining Ring (C) and Ceramic Disc (A).
2. Lightly grease the O-ring (D) and place in the groove on the top of the Ceramic Support.
3. Rest the Ceramic Disc (A) centrally on the O-ring (Figure 1).
4. Place the Retaining Ring (C) over the Ceramic Disc (A). Apply a small amount of low strength thread-lock (e.g. Loctite 222) to 8 screws (D).

It is essential that the Ceramic Retaining Ring pulls down on to the Ceramic Disc evenly.

This is achieved by using the cross bolt tightening pattern shown in Figure 2 with at least 6 passes. In each pass (sequence) gently tighten the screws in the order numbered 1 to 8. The torque is gradually increased on each pass. Check that the Ceramic Retaining Ring is pulling down squarely on the Ceramic Disc after each pass. Tighten the screws to a final torque of 1.0Nm (Figure 3).

Pass 1 - finger tight
Pass 2 – 0.2 Nm
Pass 3 – 0.4 Nm
Pass 4 – 0.8 Nm
Pass 5 – 1.0 Nm
Pass 6 – 1.0 Nm (pattern – 1,5,3,7,2,6,4,8)

5. Locate the Protection Ring (B) over the Ceramic Retaining Ring (C) and Ceramic Disc (A) and secure evenly with 4 screws (F) (Figure 4).
6. Recalibrate the sensor to 'air and water' to ensure the sensor output characteristics remain unchanged (See Hydro-Com User Guide HD0273).

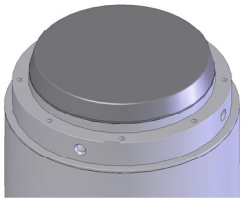


Figure 1

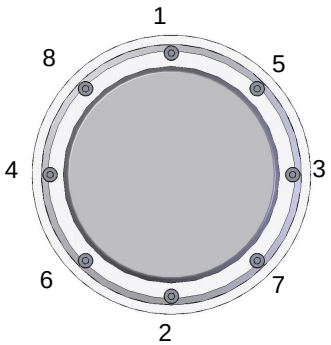


Figure 2

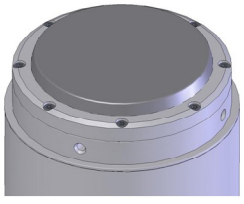


Figure 3

Figure 4

Hydronix Ltd, 7 Riverside Business Centre, Walnut Tree Close, Guildford, Surrey, GU1 4UG, UK
Tel: +44 (0) 1483 468900 Fax: +44 (0) 1483 468919 Email:support@hydronix.com www.hydronix.com