

Electrode Kit for 871PH Sensors

Kit Inventory

The kit contains the following parts:

| Description | Quantity |
|---------------------|-----------|
| Measuring Electrode | 1 (or 10) |
| Silicone Grease | 1 |
| Cotton Swab | 3 |
| Extractor Kit | 1 |
| MI 611-188 | 1 |

Removing the Old Measuring Electrode

⚠ CAUTION

Do **not** remove the measuring electrode when the reference junction is not in place. Contamination by the reference solution is very possible.

1. Wipe away any crystallized reference solution from the reference junction. Make sure area is dry so that no moisture gets into the electrode socket.
2. Hold the sensor vertically with the electrode end up.
3. Remove the knurled keeper lockscrew (or pan head screw if the optional -T teflon collar or ECS-5 electrode cleaning system is used) and disengage the keeper from the electrode and reference junction.
4. Slide the extractor tool (beveled edges up) into position as shown in Figure 1. Note that the edges fit into the electrode retaining slot.
5. Press down lightly on the end of the extractor.
6. Lift the electrode out of its cavity until the O-ring is clear.
7. Carefully remove the extractor tool.
8. Grasp the electrode and pull it straight out of the cavity using a slight turning motion to assist the removal.

⚠ CAUTION

Never grasp a glass electrode by the bulb. The glass is fragile and can be easily broken. For removal of a broken glass electrode, refer to MI 611-148.

⚠ WARNING

Antimony is a toxic material. When an antimony electrode is installed, avoid contact with the surface of the antimony pellet. If skin contact is made with the antimony pellet, wash the contacted skin area with soap and water. Refer to MSDS051.

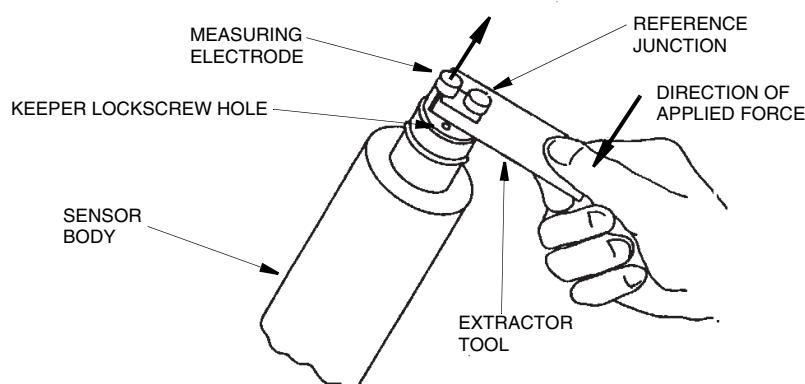


Figure 1. Removing Measuring Electrode

Installing the New Measuring Electrode

1. Clean the measuring electrode cavity thoroughly with the cotton swab provided. The cavity **must** be dry.
2. Using another cotton swab, lubricate (lightly) all the internal surfaces of the electrode cavity with the silicone grease provided.
3. Apply a light coat of silicone grease to the electrode O-rings. Be careful that grease does not get on the electrode measuring surface.
4. Holding the sensor with the electrode cavity facing up, insert the electrode stem into the cavity.

⚠ WARNING

Antimony is a toxic material. When an antimony electrode is installed, avoid contact with the surface of the antimony pellet. If skin contact is made with the antimony pellet, wash the contacted skin area with soap and water. Refer to MSDS051.

5. Gently press the electrode into place until the first O-ring engages with the surface of the sensor body. Continue to press on the electrode until the second O-ring is engaged.

⚠ CAUTION

1. When installing a glass electrode, do **not** push on the glass bulb with your finger. Use the insertion cap provided with the sensor. Place the insertion cap over the glass bulb and press the electrode into place.
 2. To prevent damage to the glass stem of the electrode body, push the electrode straight into the sensor cavity. Avoid twisting the electrode.
 3. When installing a flat glass or metal electrode, place a lab tissue or soft cloth over the electrode surface and gently press in place.
-

6. Slide the keeper into position between the electrode and the reference junction while holding the electrode down.

— NOTE —

Make sure that the keeper engages both electrode and reference junction slots.

7. Install and secure the knurled keeper lockscrew (finger tight) or the pan-head screw (if the optional -T teflon collar or ECS-5 electrode cleaning system is used). Do **not** overtighten.
8. Perform a calibration (1-point for ORP measurement, 2-point for pH measurement).

ISSUE DATES

AUG 2004
FEB 2016

Vertical lines to the right of text or illustrations indicate areas changed at last issue date.

Invensys Systems, Inc.
38 Neponset Avenue
Foxboro, MA 02035
United States of America
<http://www.fielddevices.foxboro.com>

Global Customer Support
Inside U.S.: 1-866-746-6477
Outside U.S.: 1-508-549-2424
Website: <http://support.ips.invensys.com>

Copyright 2004-2016 Invensys Systems, Inc.
All rights reserved.

Invensys and Foxboro are trademarks of Invensys Limited, its subsidiaries, and affiliates. All other trademarks are the property of their respective owners.

Invensys is now part of Schneider Electric.