1 Introduction

These procedures must be carried out by a trained technician.

2 For more information

Further information is available from: www.abb.com/analytical

or by scanning these codes:

Sales  Service
3 Safety

**Warning.**

These procedures must be carried out by a trained technician.

**ELECTRICAL**
- Isolate all high voltage supplies to the transmitter before performing replacement procedures.
- The wet-section is vulnerable to electrostatic damage. Wear an anti-static strap or dismantle the wet-section on an anti-static workbench.
- Ensure all electrical connections are kept dry at all times.

**GENERAL**
- Shut off the external sample supply to the wet-section and drain the flowcell – refer to the wet-section Operating instructions (OI/ADS550-EN) for flowcell drainage options.
- When a procedure is complete, restore power to the transmitter and sample to the wet-section at the correct flow rate.
  - If necessary, calibrate the wet-section – refer to the wet-section Operating Instructions (OI/ADS550-EN) for calibration instructions.
- Perform general cleaning of the wet-section using a damp cloth only – mild detergent can be used as a cleaning aid. Do not use Acetone or any organic solvents.
- Dispose of the old components in accordance with the guidelines contained in the Operating instructions (OI/ADS550-EN).

4 Disposal

**Warning.** Dispose of the old components in accordance with the guidelines contained in the Operating instructions (OI/ADS550-EN).

5 Dissolved oxygen sensor assembly location

![Image of dissolved oxygen sensor assembly location](image_url)
6 Replacing the dissolved oxygen sensor

Part number: low level dissolved oxygen sensor assembly (AW502 080)

6.1 Removing the dissolved oxygen sensor assembly

Referring to Fig. 6.1:

1. Disconnect (red) sensor connector A.
2. Unscrew clamping screw B and withdraw the sensor assembly from flowcell body C.
3. Carefully unscrew connector nut G from sensor D and withdraw connector body E.
4. Remove and discard O-rings F and H.

Fig. 6.1 Removing the dissolved oxygen sensor assembly
6.2 Fitting a new dissolved oxygen sensor assembly

Caution.
- Only install the sensor immediately prior to use. The sensor has a limited shelf life and, ideally, should NOT be stored longer than 6 months. Store under cool conditions.
- Take special care to line up the two pins in the sensor with their respective sockets before making the connection and tightening.
- Take care not to damage the delicate membrane on the face of the sensor.
- Ensure that the mating surfaces (carrying the electrical connection) of the sensor and connector body are clean and completely dry.
- Do not overtighten the clamping screw.

1. Remove the top from the new sensor container.
2. Unscrew the protective cap from the rear of the sensor.

Referring to Fig. 6.2:
3. Fit the smaller of the 2 new O-rings (3/4 in. ID) onto the connector body (B).
4. Locate sensor (C) onto connector body (B), ensuring the pins and sockets are engaged correctly and tighten connector nut (D) onto sensor (C).
5. Insert the complete assembly into flowcell (E), ensuring the larger of the 2 new O-rings (7/8 in. ID) is fitted.
6. Screw in clamping screw (G) using finger-pressure only to secure the dissolved oxygen sensor assembly in the flowcell body.
7. Push (red) sensor connector (H) onto sensor connector block (I) firmly and tighten ONE TURN clockwise.

Note. Wet-section enclosure, oxygen sensor container and protective cap not shown for clarity

Fig. 6.2 Fitting and connecting the dissolved oxygen sensor at the flowcell