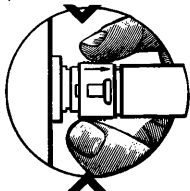


DO-6 DISSOLVED OXYGEN

1. Vinyl storage cap

2. DO sensor Quick connect sensor
(Squeeze to disconnect)



3. Do not immerse below sensor cap

4. Sensor pivot hinge

5. LCD display and annunciators
PPM
°C

6. Function switch
DO/Temp

7. Stand-by switch

8. D.O. adjustment potentiometers: Zero
Span

10. Battery compartment

11. 9V transistor battery

12. Battery compartment door

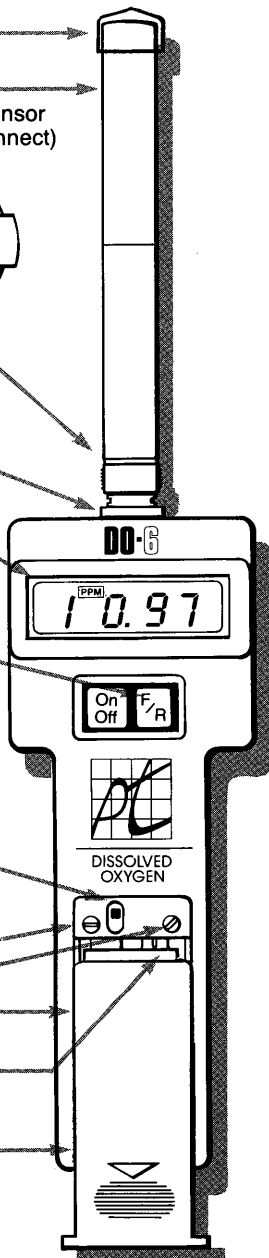
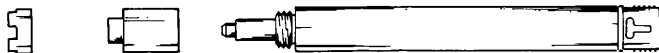
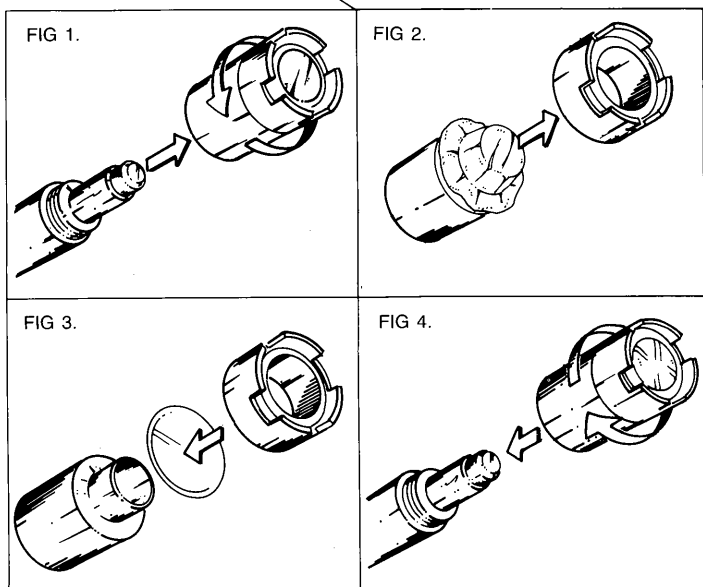


Table 1

Dissolved Oxygen PPM vs. Temperature
(in distilled water)

° C	PPM	° C	PPM	° C	PPM
0	14.6	12	10.8	24	8.5
1	14.2	13	10.6	25	8.4
2	13.8	14	10.4	26	8.2
3	13.5	15	10.2	27	8.1
4	13.1	16	10	28	7.9
5	12.8	17	9.7	29	7.8
6	12.5	18	9.5	30	7.6
7	12.2	19	9.4	35	7.1
8	11.9	20	9.2	40	6.6
9	11.6	21	9	45	6.1
10	11.3	22	8.8	50	5.6
11	11.1	23	8.7		

Figure 1



*** IMPORTANT ***

To insure proper calibration it is necessary to repeat steps 7&8 and 9, unit readings stabilize.

OPERATING INSTRUCTIONS

1. Slide the standby switch to the On position 30 minutes prior to using the dissolved oxygen meter. This polarizes the sensor and prepares it for testing.
2. Deploy the polarographic D.O./Temp sensor to the 90 or 180 degree measurement position.
3. Remove the protective plastic cap. Rinse the sensor in pure water and immerse the sensor 1/2 its length in the solution to be measured.
4. For reading to be accurate, the solution must be stirred. If in the lab, use a magnetic stirrer. If in the field, stir the solution with the sensor, taking care not to bang the sensor.
5. The sensor should be at the same temperature as the solution. An integral 1000 ohm platinum RTD provides precise ATC and temperature readings. To read the solution temperature, depress the F/R switch. When (C) appears in the display and the reading has stabilized, read the temperature.
6. Depress the F/R switch again "PPM" will be displayed, wait for the reading to stabilize (1 to 2 minutes), and take the dissolved oxygen reading.

CALIBRATION INSTRUCTIONS

The D.O. instrument is calibrated at the factory and ready for use upon receipt. Calibration should be verified periodically to insure accurate results. In order to calibrate, you will need an aerated water sample, and pure nitrogen or a sodium sulfite solution.

1. Slide the stand-by switch to the On position 30 minutes prior to calibrating the dissolved oxygen meter.
2. Remove the protective cap.
3. Immerse the sensor in the aerated water sample. Make sure to allow the water sample to become thoroughly aerated.
4. Switch the instrument to the temperature range and observe the temperature reading. (Annunciated C)
5. Switch the instrument back to the D.O. function. (Annunciated PPM)
6. Use the enclosed temperature vs. PPM of D.O. chart to find the corresponding PPM value.
7. Adjust the instruments Span pot to indicate the correct PPM value.
8. Next, immerse the sensor in the zeroing solution (saturated sodium sulfite solution) for approximately 5 minutes.
9. Once the sensor has stabilized, adjust the Zero pot to zero.
10. The dissolved oxygen instrument is now ready for use.

DO SENSOR MAINTENANCE

When a constant shift in the D.O. reading is observed, the sensor should be cleaned and the old membrane replaced. Instruments are shipped with 10 spare membranes and fill solution. Additional kits may be ordered. (part # 856250). Detailed instructions are provided in the instruction manual. A brief list of steps is outlined below. Change the membrane and the internal filling solution when a constant shift in reading occurs.

1. Unscrew the lower cap portion of the probe and discard the fill solution that it contains. (FIG 1.)
2. Remove the serated ring that holds the membrane in place (it is a force fit over the membrane and can be removed by twisting it and pulling it off the cap. (FIG 2.)
3. Remove the old membrane from the end of the cap.
4. Place the new membrane over the end of the cap, and force the serated ring over the membrane (this will stretch the membrane tightly across the end of the cap). (FIG 3.)
5. Fill the cap with KCL filling solution.
6. Clean the glass tip with a tissue.
7. Screw the probe cap in place (excess fill solution will escape around the threads), wipe clean and the probe is ready for use. (FIG 4.)