DISPOSABLE GOLD ELECTRODE INSTALLATION GUIDE

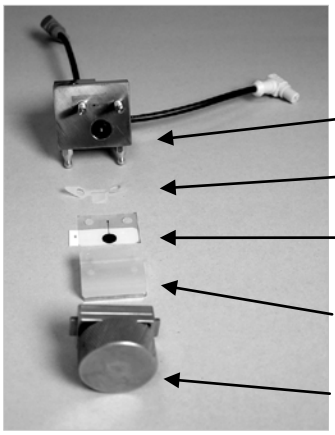
IMPORTANT

- ***Read all instructions and recommendations before beginning the installation of electrodes.***
- ***Always wear gloves when handling electrodes. Never touch the electrode surface.***

ED (ICS3000)

ED40 / ED50 / ED50A

STEP 1
Check availability of all parts



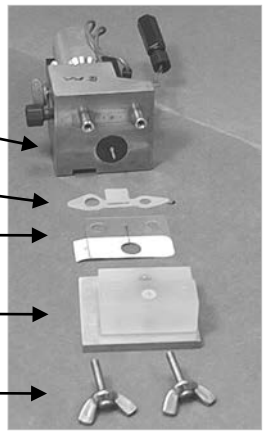
Cell body with reference electrode installed

PTFE gasket for disposable electrodes

Disposable Electrode

Spacer block (P/N 062158)

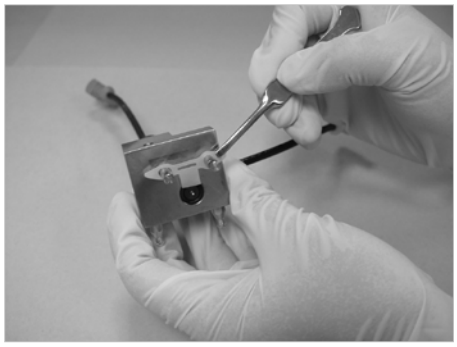
Yoke-knob Assembly



Spacer block (P/N 060297)

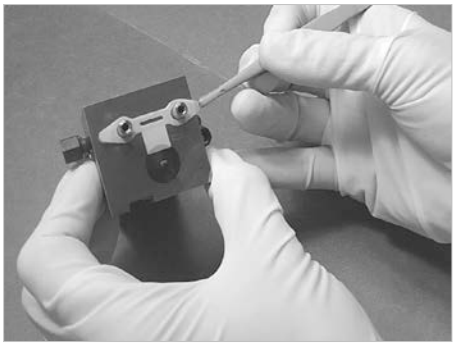
Wing nuts

STEP 2
Install the gasket

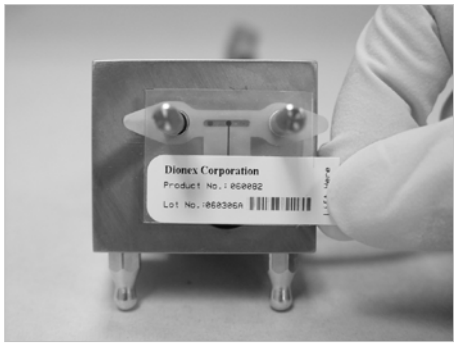


Check for correct gasket orientation.

Avoid any wrinkles inside the sealing area of the gasket.

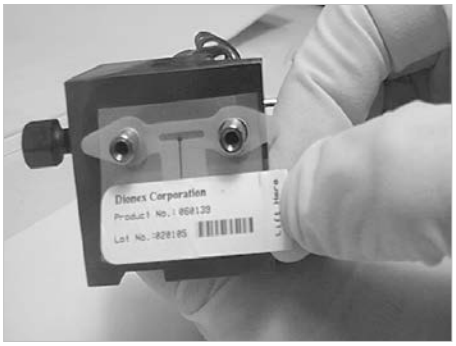


STEP 3
Install the disposable electrode

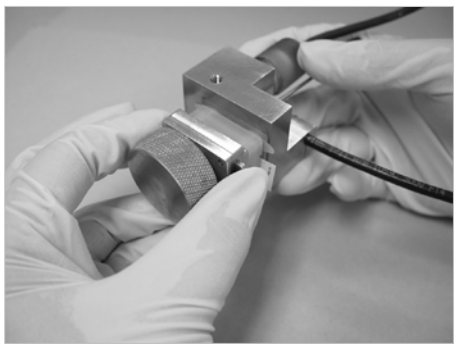


Make sure the disposable electrode is oriented correctly.

The gold electrode surface must face ED cell body



STEP 4
Place spacer block over the disposable electrode

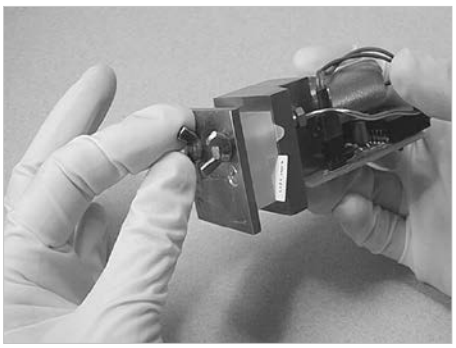


Tighten the yoke-knob till it clicks.

Tighten the wing nuts evenly.

Finger Tight only.

Do not use tools such as pliers.



Thermo SCIENTIFIC

These Waveforms must be used with Gold Disposable Electrodes

For Carbohydrates (Waveform A in Dionex Tech Note 21)		
Time (sec)	**Potential (V) vs. Ag/AgCl**	**Integration**
0.00	+0.1	
0.20	+0.1	Begin
0.40	+0.1	End
0.41	-2.0	
0.42	-2.0	
0.43	+0.6	
0.44	-0.1	
0.50	-0.1	

Refer to “Installation Instructions and Troubleshooting Guide for the CarboPac Columns” (*Doc. No. 031824*).

For Amino Acids (Table 1, AAA Manual: Doc. No 031481,Rev. 05)			
Time (sec)	**Potential (V) vs. Ag/AgCl**	**Potential (V) vs. pH**	**Integration**
0.000	-0.20	+0.13	
0.040	-0.20	+0.13	
0.050	0.00	+0.33	
0.210	0.00	+0.33	Begin
0.220	+0.22	+0.55	
0.460	+0.22	+0.55	
0.470	0.00	+0.33	
0.560	0.00	+0.33	End
0.570	-2.00	-1.67	
0.580	-2.00	-1.67	
0.590	+0.60	+0.93	
0.600	-0.20	+0.13	

Refer to "Installation Instructions and Troubleshooting Guide for the AAA DIRECT ™ Amino Acid Analysis System” (*Doc. No. 031481*).

NOTE

- ***Waveforms B and C in Dionex Technical Note 21 must not be used with gold disposable electrodes, as these will rapidly destroy the gold surface of the electrode.***
- ***Use the Gold on PTFE disposable electrode, P/N 066480, for applications which require continuous hydroxide concentrations above 100 mM. This electrode can withstand extended exposure to hydroxide concentrations up to at least 750 mM.***
- ***Prolonged exposure (more than 8 hours) of any of the other disposable gold electrodes to eluents containing hydroxide concentrations greater than 100 mM should not be done. Short rinse periods (10-20 minutes, i.e. carbonate removal step during monosaccharide and disaccharide chromatography) at high hydroxide concentrations will not affect the electrode performance.***

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
066480	Gold on PTFE Disposable Working Electrodes; pack of 6 electrodes and six 0.002 inch gaskets
060082	AAA-Direct Disposable Working Electrodes; pack of 6 electrodes and two 0.002 inch gaskets
060140	AAA-Direct Disposable Working Electrodes; 4 packs of 6 electrodes plus eight 0.002 inch gaskets
060139	Gold on polyester Disposable Working Electrodes; pack of 6 electrodes and two 0.002 inch gaskets
060216	Gold on polyester Disposable Working Electrodes; 4 packs of 6 electrodes plus eight 0.002 inch gaskets
060141	Gasket for Disposable Electrode, 0.002 inch thickness, 4/pk, PTFE

Recommended waveforms and the PTFE gaskets included in the package must be used. Otherwise, the product warranty is void.