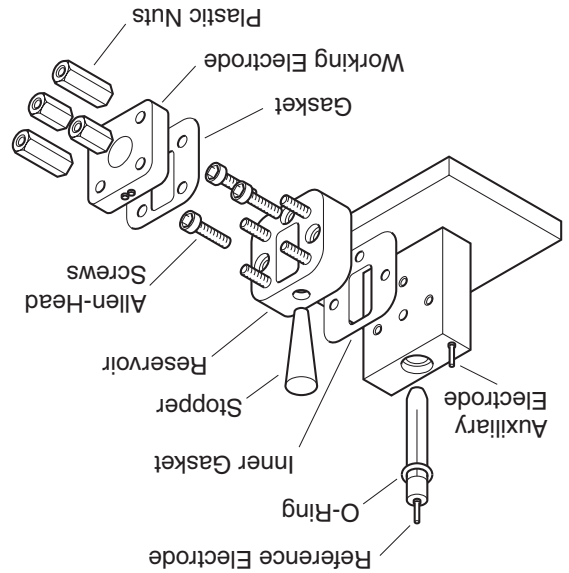


for use with UniJet working electrodes

MD-1022 ACE



for use with cross-flow working electrodes

MD-1021 ACE



ACE

December, 1994

MF-9084

INSTRUCTION MANUAL

Accelerated Cell Equilibration Accessory
for UniJet™ or Cross-Flow Working Electrode

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Manufacturer's Note:

This instrument, either wholly or in part, is manufactured for research purposes only. Use for medical diagnosis in human subjects is not intended, implied, or recommended by the manufacturer. Use for this purpose and accountability for the same rests entirely with the user.

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Instructions for the MD-1021 ACE for use with Cross-Flow Working Electrodes

Assembling and Filling the ACE

1. Remove the four plastic nuts and install a gasket over the four threaded posts that protrude from the plastic reservoir. Align the hole in the gasket over the reservoir hole. Be careful not to tear the gasket as you push it down over the posts.
2. Polish the working electrode, then slide it over the posts. Make sure the connectors on the side of the working electrode face either the top or the side of the assembly (not the bottom).
3. Screw the two short nuts on two of the posts, diagonal from each other. Finger tighten only.
4. Screw the two long nuts on the two opposite posts. Finger tighten only.
5. Pipette in 1.0 mL of mobile phase, using either the reservoir hole or the reference electrode hole.
6. Slide the O-ring down toward the bottom of the reference electrode, and insert the reference electrode (a BAS RE-4, RE-1, or RE-5) into the auxiliary block until seated. The O-ring will slide into place as you push down the reference electrode.
7. Insert the rubber stopper into the hole in the reservoir.
8. Connect the working, auxiliary, and reference electrode leads to the appropriate connectors.
9. Set the potential to the voltage to be used during the chromatographic run, and to a low-sensitivity range. Then turn the cell switch ON.

Emptying the ACE

1. Put the detector in standby mode.
2. Disconnect the working, auxiliary, and reference electrode leads from the cell.
3. Remove and store the reference electrode. Remove the stopper.
4. Turn the ACE upside-down over an approved waste receptacle and rinse out the mobile phase with deionized water.
5. Remove the four nuts and the working electrode.
6. Wipe off the working electrode with methanol and a soft tissue. The electrode is now ready for use.

Replacing the Inner Gasket

(only required if leaking occurs between auxiliary block and reservoir)

1. Remove the four nuts, stopper, working electrode, and outer gasket.
2. Remove the three Allen-head screws in the reservoir.
3. Remove the reservoir and the inner gasket. Discard the inner gasket.
4. Clean auxiliary block with deionized water, then methanol. Allow to dry.
5. Place a new inner gasket (MF-1057) over the three holes in the auxiliary block.
6. Set the reservoir over the holes in the auxiliary block.
7. Position and evenly tighten all three Allen-head screws.
8. Continue assembly from step 1 in "Assembling and Filling the ACE."

Instructions for the MD-1022 ACE for use with UniJet Working Electrodes

Assembling and Filling the ACE

1. Remove the stopper and the two plastic nuts. Lift the plastic lid and the steel auxiliary ring from the threaded posts.
2. Place the working electrode over the threaded posts with the working surface facing up. The working electrode surface should be polished, and the reference electrode surface treated as described in the UniJet manual (MF-9080). While pushing the working electrode down into place, bend the leads to one side so they protrude from the slot in the base.
3. Install the gasket on top of the working electrode by placing it down over the posts. Be careful not to tear the gasket on the posts.
4. Place the auxiliary ring over the posts, with the gold pin on the same side as the working electrode leads. Be sure that the pocket faces up.
5. Put the lid over the posts (either side up) if extended pre-equilibration times (> 8 hrs) are required.
6. Place the two nuts on the posts (short nut first). Finger tighten only.
7. Pipette in 300 μ L of mobile phase. Press in stopper if lid has been installed.
8. With the detector in standby mode, connect the working, auxiliary, and reference electrode leads to the appropriate connectors.
9. Set the potential to the voltage to be used during your chromatographic run, and to a low-sensitivity range. Then turn the cell switch ON.

Emptying the ACE

1. Put the detector in standby mode.
2. Disconnect the working, auxiliary, and reference electrode leads from the cell. Remove the stopper, if present.
3. Turn the ACE upside-down over an approved waste receptacle and rinse out the mobile phase with deionized water.
4. Remove the two nuts, the lid (if present), the auxiliary ring, the gasket, and the working electrode.
5. Wipe off the electrode with methanol and a soft tissue. The electrode is now ready for use.