

INSTRUCTIONS FOR INSTALLING THE NEW STYLE

AMPEROMETRIC FLOW CELL

Instructions for installing the amperometric flow cell (PN 330001) in a CN Solution FS3700 or any OI Analytical amperometric detector with an upgrade cable.

TOOLS REQUIRED: 3/32" ALLEN WRENCH

PROCEDURE: 1. Remove the protective boot from the reference electrode (PN 329513). (Figure 1)



2. Rinse and dry off the reference electrode to remove any salts. Next screw the reference electrode into the upper cell assembly. (Figure 2)



(Figure 2)



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PROCEDURE (cont'd): 3. Refer to (Figure 3) for steps 4 through 9.

- 4. Orient the flow cell so that the cell's upper half has the inlet to the left.
- 5. Push the flow cell onto the mounting pins located on the detector module.
- 6. Connect the red wire from the detector module to the reference electrode plug.
- 7. Connect the white wire to the working electrode plug.
- 8. Connect the black wire to the counter electrode (stainless steel cross fitting) (PN 329509)

9. Connect the flow tube from the base flow of the gas diffusion module to the inlet on the left side of the flow cell body.



(Figure 3)



Amperometric Flow Cell Component Detail (PN 330001)







Replacing the Reference Electrode

NOTE: If the reference electrode is removed from the cell for any length of time, place the electrode into the boot with Reference Electrode Storage Solution (PN 326145). The larger volume of solution provides for longer storage times and is the recommended method of storing the electrode for extended periods.

- 1. Unscrew and remove the depleted reference electrode.
- 2. Remove and save the reference electrode boot.
- 3. Rinse and dry off reference electrode to remove any salts then screw the reference electrode into the upper cell assembly.

Cell Cleaning

NOTE: Do not allow the contact surfaces of either the upper or lower cell assembly to become scratched. Doing so could irreparably damage the flow cell.

NOTE: Make sure that the screws are completely removed before pulling the flow cell halves apart.

- 1. Unscrew and remove the screws holding the two halves of the flow cell using a hex key wrench (PN 233346).
- 2. Dry off the gasket and top piece very well, set aside.
- 3. Find a hard flat surface with no bumps or irregularities and place a large round "drop" of water on the 3000-grit wet sandpaper. Can also use 1500 or 2000 for a more rigorous polishing.
- 4. Turn the bottom piece with silver upside down on the water and rub back and forth, side to side across the water in the direction of the flow path created in the gasket. Apply a slight pressure not too much, should move easily. Approximately 25-50 back and forth movements should be enough for a general polishing. (See Figure 5)
- 5. Dry off completely, ensuring no liquid is present.
- 6. Install the gasket on the upper cell alignment pins of the cell's bottom half.
- 7. Reassemble the flow cell, reinsert the screws and tighten.
- 8. Initially it may be necessary to run the curve several times to stable the signal. Or run the high standard of the curve 6-9 times until baseline is stable and quiet and peaks are normal height and shape.



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(Figure 5)