



02-011B
2 May, 2007

AMX UPGRADE TO M300 CO ANALYZER

I. PURPOSE:

To help you though upgrading your M300 analyzer to the new AMX software.

II. TOOLS:

Phillips head screw driver.

Flat tip screwdriver.

Diagonal cutters.

Volt meter.

Calibration gasses

III. PARTS:

KIT000015 - AMX upgrade kit.

Plastic tie wraps

009310900 - Motor and wheel mounting plate.

KIT000101 - Dust cover retrofit.

IV. PROCEDURE:

PRELIMINARY CHECK:

-Look at the motor and source mounting plate, on the rear of the plate there has to be two holes. These holes are where the mirror heater and thermistor are going to go.

-If the holes are NOT in the end of this plate you are going to have to order a new plate.

-If the holes ARE in the end of this plate then you don't have to order a new plate.

- i. **Look down at the motor and wheel assembly. If you CAN see the wheel then you are going to want to get the Dust cover retrofit. API will provide this upgrade for free. Contact the sales department and they will send this to you.**

1. Turn off the analyzer, remove the power to the rear of the analyzer, and remove the cover.
2. Remove the CPU and V/F card assy from the analyzer.
3. Remove the Phillips head screw from the CPU and remove the CPU assy from the back plane assy.
4. Install the new CPU assy and re-install the screw that mounts the CPU to the V/F card assy.
5. Remove all the electrical connections that go to the bench.
6. Remove the two pneumatic fittings that goto the bench.
7. Remove 4 Phillips head screws that hold the bench onto the shock mounts.
8. Cut any tie wraps that hold the bench into the analyzer.
9. Remove the bench from the analyzer, and set onto your worktable.
10. Remove the heater and thermistor from the Objective mirror that is on the front end of the bench. Shown in figure 1.
11. Cut the tie wraps that hold the heater and thermistor wiring into the analyzer.
12. Move the heater and thermistor wires to the rear of the bench.
13. Replace any tie wraps that you have had to cut so that they don't get pinched or shorted to the chassis when you re-install the bench into the analyzer.

14. If your analyzer does not have the dust cover, then install it onto the bench with the instructions that come with the KIT000100. Refer to figure 2 .
15. If your analyzer does not have the holes in the motor and source mounting plate then install the new plate now.
16. Lightly coat the thermistor with thermal grease and install the thermistor into the hole in the motor and source mounting plate. Refer to figure 2 If the thermistor does not slide into the mounting plate easily then use a drill bit slightly larger than the hole and make the hole slightly larger.
17. Remove the heater from the KIT000015 lightly coat the heater with thermal grease and install it into the motor and source mounting plate. Refer to figure 2 Again if the heater does not install into the hole easily then use a drill bit and make the hole slightly larger.
18. Install the bench back into the analyzer chassis and install the mounting screws into the bench.

NOTE: IF YOU DON'T INSTALL THE GROUNDING STRAPS FROM THE BENCH TO THE CHASSIS OF THE ANALYER YOU ARE GOING TO HAVE NOISE PROBLEMS WITH THIS ANALYZER. IT IS VERY IMPORTANT THAT THE GROUNDING STRAPS BE PUT BACK INTO THE CHASSIS.

19. Reconnect any wiring or tubing that you had to disconnect, to remove the bench.
20. Leak check the unit to ensure that there are no leaks. If there are any leaks fix them before going any further.
21. Turn the unit on and check to ensure that the CPU comes up and that all the temps and pressures and flows are correct.
22. Calibrate the V/F card (section 9.2 in manual.)
23. Do the dark calibration (section 9.3 in manual.)
24. Do the factory calibration (section 8.2 in manual.)
25. If you have any problems fill out the repair form (section 10.7 in manual) and fax it to API with a summary of the problem and what you have done to the analyzer.

Figure 1.

SIDE VIEW

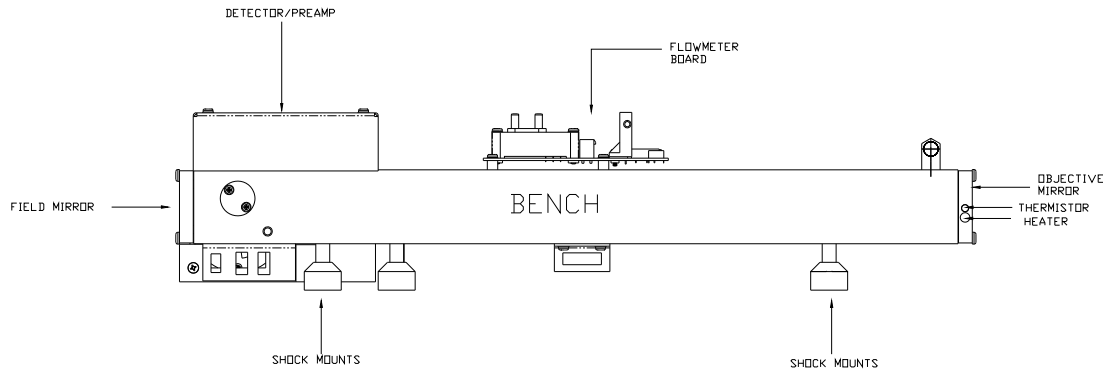


Figure 2.

REAR VIEW

