

Service Note

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RETROFITTING "BRICK" STYLE O3 GENERATORS INTO M200, M200A, M251 AND M252 NOX ANALYZERS.

SCOPE: API has redesigned the O₃ generator for NO_X analyzers. The new style, or "brick" O₃ generator has been created to reduce failures and eliminate maintenance on O₃ generators.

TOOLS:#2 Phillips Screwdriver9/16" wrench1/2" wrench7/16" wrenchLarge Flatblade Screwdriver (M200A)API PN# KIT000001 for M200API PN# KIT000002 for M200AAPI PN# KIT000008 for M251API PN# KIT000009 for M252

PROCEDURE:

- 1. Remove power from the analyzer.
- 2. Remove the power plug from the old O₃ generator.
- 3. On the M200/251/252 remove the 4 screws which hold the O₃ gen. in the chassis. These screws are located on the bottom of the chassis.
- 4. On the M200A loosen the 4 captive screws which hold the O₃ gen. in the chassis. These are accessible by removing the analyzer cover and looking down at the O₃ generator from the top of the chassis. The screws are large, flat head and located at each corner of the mounting plate.
- 5. Use the 7/16" wrench to remove the black tube on the Rcell.
- 6. A. M200/M200A Follow the white tube from the O₃ generator to the reducer fitting. Use the 1/2" and 9/16" wrenches to remove the reducer fitting from the 1/4" tygon tube. This will leave the reducer fitting attached to the O₃ gen. tube.
 B. M251/M252
 - Follow the white tube from the O_3 generator to the rear panel. Use the 7/16" wrench to remove the tube from the rear panel bulkhead.
- 7. Lift the O₃ generator out of the chassis.
- 8. Install the brick O₃ generator by placing the unit into the chassis and installing the screws from the bottom (M200/251/252) or tightening the captive screws (M200A).

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9. A. M200/M200A

Connect the 1/4" union fitting (included with the O₃ gen. as part of KIT) to the 1/4" tygon tubing in the chassis. Connect the 1/4" tube from the brick to the 1/4" union.

B. M251/M252

Connect the 1/4-1/8" reducer fitting (included in the KIT) to the 1/4" tube on the new O₃ generator. Connect the 1/8" Teflon tube (included in the KIT) to the 1/8" end of the reducer and to the "dry air" bulkhead fitting on the rear of the analyzer.

- 10. Connect the 1/8" tube from the brick to the Rcell.
- 11. Connect the "pigtail" connector (included in the kit) to the PC board on the O₃ generator, (the "pigtail" connector is unique for each analyzer type and allows the existing analyzer power connector to plug into the PC card on the brick O₃ generator).
- 12. Connect the other end of the "pigtail" connector to the 3 pin power plug in the chassis (the plug that used to go into the O₃ generator).
- **13.** Apply power to the analyzer and test.