These instructions describe how to install a Four Port Expansion Kit in the MultiZone (MZ) Gas Monitor. It is assumed that the user is familiar with the operation and menu system of the MZ. If necessary, refer to Instruction 3015-5074 for detailed operation and maintenance information.

ITEMS REQUIRED:
- Four Port Expansion Kit: P/N 3015-5171 or 3015-5595
- Screwdriver
- Teflon tape

PROCEDURE:

NOTE: Before beginning the upgrade procedure, some data should be taken from the MZ for comparison purposes after the procedure is complete. Follow the instructions below to locate and record the necessary data.

- From the MZ SETUP screen, select DIAGNOSTICS.
- From the DIAGNOSTIC MENU, record the following values.

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Record Current Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET. AVE</td>
<td></td>
</tr>
<tr>
<td>PRES</td>
<td></td>
</tr>
<tr>
<td>VAC</td>
<td></td>
</tr>
<tr>
<td>AMB</td>
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</table>

IMPORTANT: Verify that the VAC reading is at least 2.2 psia below the ambient (AMB) reading. If it is not, please contact your nearest Bacharach Service Provider.

WARNING: Disconnect the power from the AC Power from the MZ. For safety purposes, this should be done at the AC breaker that feeds the mains to the MZ.

CAUTION: Failure to remove power prior to plugging or unplugging manifold connectors to the circuit board can result in damage to the circuit!

Verify that power has been removed from the MZ by verifying the following:
- All external LEDs on the MZ are extinguished.
- All MZ Internal LEDs are extinguished.
- The pump inside the MZ is not running.

5 to 8 ZONE UPGRADE

1. Locate the blanking plate adjacent to the current manifold assembly labeled by ports 5-8. The blanking plate is a knockout and can be removed by placing any firm object against the inside and gently tapping the blanking plate with a screwdriver on the outside. DO NOT use excessive force. The knockout will easily fall out of place.

2. With the new manifold assembly oriented with the input ports on the right side and the electrical connector on the left side (with connector sockets facing down), insert the 1.75 inch piece of tubing into the port fitting on the manifold.

3. Remove the barb fitting from the new manifold located on the side opposite the tubing. Remove the plug fitting from the existing manifold and place it in the same side on the new manifold. Secure by coating fitting threads with Teflon tape.
4. Mount the new manifold assembly into the MZ by placing the new manifold assembly adjacent to the installed manifold assembly and inserting the free end of the tubing into the port fitting on the installed manifold assembly. The tubing must slide fully into the port fitting until it stops.

5. Attach the new manifold to the chassis using the supplied fastener.

6. Connect the red electrical connector on the new manifold to the header on the circuit board labeled “ZONES 5-8”.

7. Reconnect power to the MZ and re-energize the unit. The unit will go through a power up self test which will take approximately 30 seconds. After the self-test is complete, the unit will enter a warm-up period, indicated by the GREEN Monitor On LED flashing on the MZ.

8. Enter the MZ SETUP Screen. On the left hand side of the screen the Number of Zones field should be changed to 8. After the change, verify that the field shows 8.

9. After the MZ has completed its warm up cycle (approximately 15 minutes) the GREEN Monitor On light should change from flashing to solid. Allow the unit to complete one purge cycle. This can be verified from the Remote Display (RD) SYSTEM Screen.

10. Navigate to the DIAGNOSTICS Screen and records the values as previously stated. **Verify that the VAC reading is at least 2.2 psia below the ambient (AMB) reading.** If it is not, then an air leak has been introduced into the system. Save the before and after diagnostic records for future reference. This information can be a valuable tool for checking future performance of the equipment.

This completes the 5 to 8 zone upgrade. The unit shows the newly added zones and will now include them in its measurement cycle. Each zone may be individually setup for parameters such as Gas Type and Alarm Levels by using the ZONE Screen from the SETUP Menu.

**9 to 12 ZONE UPGRADE**

Follow Steps 1-9 of the 5 to 8 ZONE UPGRADE with the following exceptions:

- The new manifold assembly is placed below the previously installed 5 to 8 ZONE manifold
- The plug fitting from the existing manifold is placed on the opposite side of the new manifold
- Connect the red electrical connector on the manifold to the header on the circuit board labeled “ZONES 9-12”.
- Change the Number of Zones Installed field on the SETUP Screen to 12, then verify.

**13 to 16 ZONE UPGRADE**

Follow Steps 1-9 of the 5 to 8 ZONE UPGRADE with the following exceptions.

- The new manifold assembly is placed adjacent to the previously installed 9 to 12 ZONE manifold.
- Connect the red electrical connector on the manifold to the header on the circuit board labeled “ZONES 13-16”.
- Change the Number of Zones Installed field on the SETUP Screen to 16, then verify.