## Annual Inspections

### Annual VST ECS Membrane Processor Inspections and Replacements

<table>
<thead>
<tr>
<th>Component</th>
<th>Procedure</th>
<th>Fail Criteria</th>
<th>Corrective Action</th>
<th>Reference Manuals</th>
<th>Authorized Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blower</td>
<td>Replace the blower every ten years or 15,000 hrs. (whichever comes first).</td>
<td>Rubber debris is found on or around the vacuum-pump base.</td>
<td>Replace the drive coupling rubber insert</td>
<td>IOM - 11</td>
<td>VST ASC Level C</td>
</tr>
<tr>
<td>Vacuum pump</td>
<td>Replace pump every ten years or 15,000 hrs. (whichever comes first).</td>
<td>If the heat trace cable circuit is open, the cable has failed.</td>
<td>Replace the heat trace cable</td>
<td>IOM - 11</td>
<td></td>
</tr>
<tr>
<td>Vacuum pump drive coupling - rubber insert</td>
<td>Visually inspect the drive coupling between the vacuum pump and the motor for wear</td>
<td>The difference shall be within ±1.0% HC concentration from the calibration gas concentration for zero and mid-range gas and ±2.0% for the high-range gas.</td>
<td>Replace the HC Sensor</td>
<td>IOM – 11 and Exhibit 8</td>
<td></td>
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<tr>
<td>Heat Trace Cable</td>
<td>Check the continuity of the heat trace cable.</td>
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<tr>
<td>HC Sensor</td>
<td>Test the HC sensor</td>
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</tbody>
</table>
# Preventative Maintenance Checklist Form

<table>
<thead>
<tr>
<th>Component</th>
<th>Frequency</th>
<th>Date Inspected</th>
<th>Completed</th>
<th>Required Action Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VST ECS PROCESSOR</strong></td>
<td>Yearly</td>
<td></td>
<td></td>
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<tr>
<td>• Inspect drive coupling on the vacuum pump.</td>
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<tr>
<td>• Check the continuity of the heat trace cable.</td>
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<tr>
<td><strong>RECIRCULATION BLOWER</strong></td>
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<tr>
<td>Replace every 10 years or 15,000 hours, whichever comes first.</td>
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</tr>
<tr>
<td><strong>VACUUM PUMP</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace every 10 years or 15,000 hours, whichever comes first.</td>
<td></td>
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</tr>
</tbody>
</table>