

## FLASHJET® Service Bulletin

<b>Bulletin Title:</b>	<b>Potential Build-Up of Effluent Residue on the Effluent Capture Sub-System (ECS) Fan and Fan Housing</b>
<b>Bulletin No.:</b>	<b>11.21.02-01</b>

<b>To:</b>	FLASHJET System Users
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<b>Priority:</b>	Medium
<b>Safety Level(s):</b>	<b>CAUTION(s)</b> (See Below)
<b>Problem Description:</b>	Potential build-up of paint ash residue, or effluent, on the ECS Fan and Fan Housing may cause a gradual drop in air volume pressure affecting the effluent capture rate over a period of time. <b>See Figure 1 through Figure 3</b>
<b>Symptoms:</b>	Gradual drop in ECS air volume pressure.
<b>Causes:</b>	Heavy effluents – such as the paint ash residue left behind when stripping Rain Erosion or Radar Absorbing Material Coatings – may not ablate (changing state from surface coating to ash) to as fine a particulate state as standard polyurethane coating systems. This may cause these larger suspended particles to be re-deposited prior to capture by the pre-HEPA (High Efficiency Particulate Air) and Final HEPA Filters.
<b>Prevention or Corrective Action:</b>	<p><b><u>NOTE:</u> Symptoms can also be attributed to ECS Duct leaks. Determine that no leaks are present before performing the following steps.</b></p> <p><b><u>NOTE:</u> The following maintenance procedure is a site-specific action, based on system usage. Some FLASHJET System users may never encounter this problem. Other users, such as WR-ALC, may need to monitor the Symptoms and establish, i.e. schedule, a Preventive Maintenance Action.</b></p> <p><b><i>(Following is a detailed maintenance procedure to remove, clean, and re-install the ECS fan and housing assembly)</i></b></p> <p><b><u>MAINTENANCE PROCEDURES:</u> (See Figure 4 and Figure 5)</b></p> <ol style="list-style-type: none"> <li>1. Secure power to the ECS using lock-out, tag-out procedures.</li> <li>2. Remove the junction box and conduit tubes from the air intake duct leading into the fan assembly and secure them out of the way.</li> <li>3. Remove the (6) bolts on the air intake duct where the duct is secured to the machine frame.</li> <li>4. Remove the (6) bolts on the air intake duct where it attaches to the fan housing assembly.</li> <li>5. Rotate the air intake duct 180 degrees counterclockwise to gain access to the fan cover plate. NOTE: It is not necessary to totally remove the air intake duct to reach the fan assembly.</li> <li>6. Remove the catch can – located at the bottom of the cyclone collector – from the ECS machine.</li> <li>7. Remove the nuts (24) securing the fan cover plate to the housing.</li> <li>8. Remove the fan cover plate by breaking the silicone seal on the cover plate and remove it from the machine.</li> <li>9. Clean the paint residue from the fan collar and bolts for an easier</li> </ol>

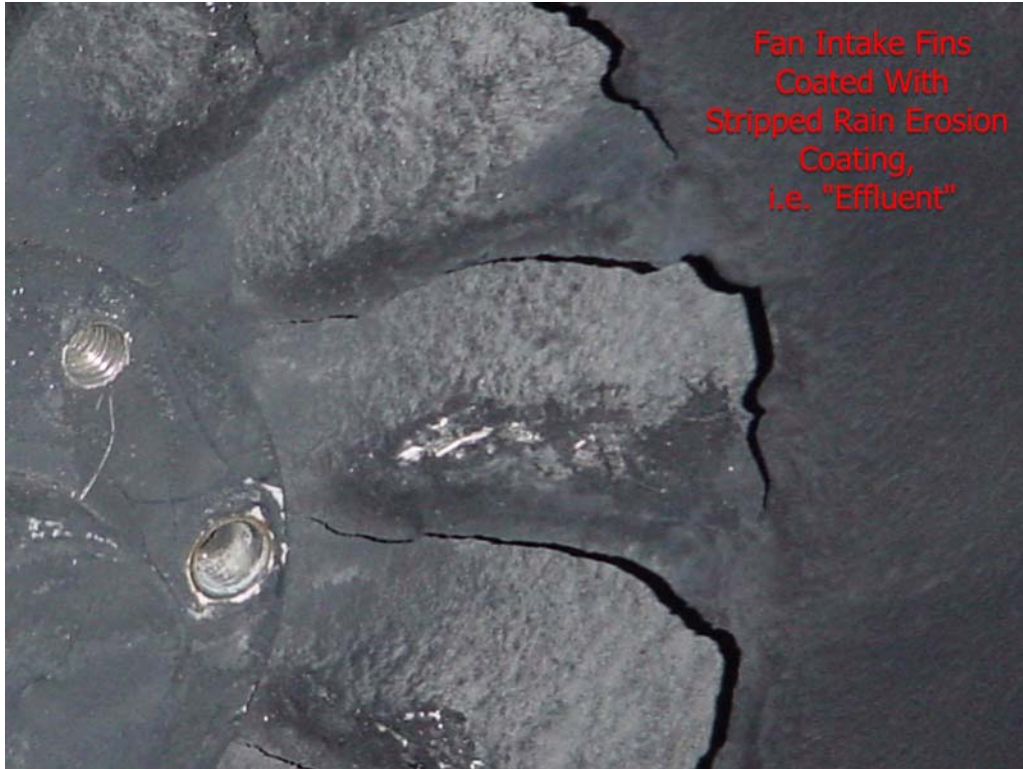
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	<p>removal of the fan.</p> <ol style="list-style-type: none"><li>10. Scribe or mark a line on the shaft to insure the fan collar and fan wheel are installed in the same location on the shaft to alleviate an unbalance condition.</li><li>11. Remove the three (3) fan bolts securing the fan collar and fan to the shaft.</li><li>12. Locate and clean the two (2) fan removal holes on the collar.</li><li>13. Insert two (2) long bolts into the fan removal holes to remove the fan collar and fan wheel.</li><li>14. Remove the fan key way and fan wheel from the shaft</li><li>15. Clean the fan wheel and housing assembly with an appropriate fine abrasive blast <b>or</b> cleaner/degreaser. NOTE: Remove all of the paint ash from the fan wheel and housing to alleviate an unbalance condition. Insure fan balance weights are not damaged or moved during the cleaning process.</li><li>16. Re-install the fan assembly in reverse order. NOTE: Insure the proper alignment and seating of the fan collar and fan wheel on the shaft to alleviate an unbalance condition.</li><li>17. Upon initial startup, ensure fan is balanced (no vibration) under operating conditions.</li></ol>
<b>CAUTION:</b>	<i>Assure that ECS Electrical supply is Locked Out / Tagged Out prior to performing this Maintenance Procedure.</i>
<b>CAUTION:</b>	<i>Avoid inhalation of loose particulate when cleaning fan and housing assemblies. Material is not known to be hazardous. However, error on the side of caution is recommended – meaning consider and handle the material as if hazardous. Paper filter masks and gloves are recommended as a minimum.</i>



Figure 1 – ECS Fan and Housing

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**Figure 2 – DETAIL “A”, ECS Fan Intake Fins**



**Figure 3 – ECS Fan Housing Cover**

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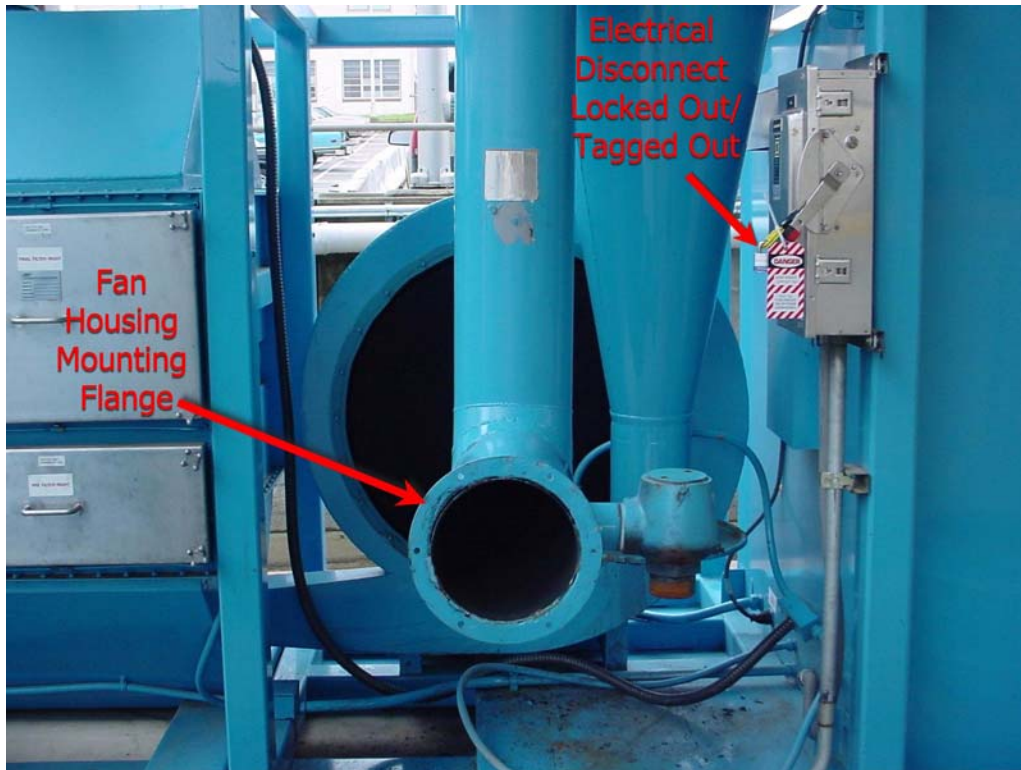


Figure 4 – ECS Overview

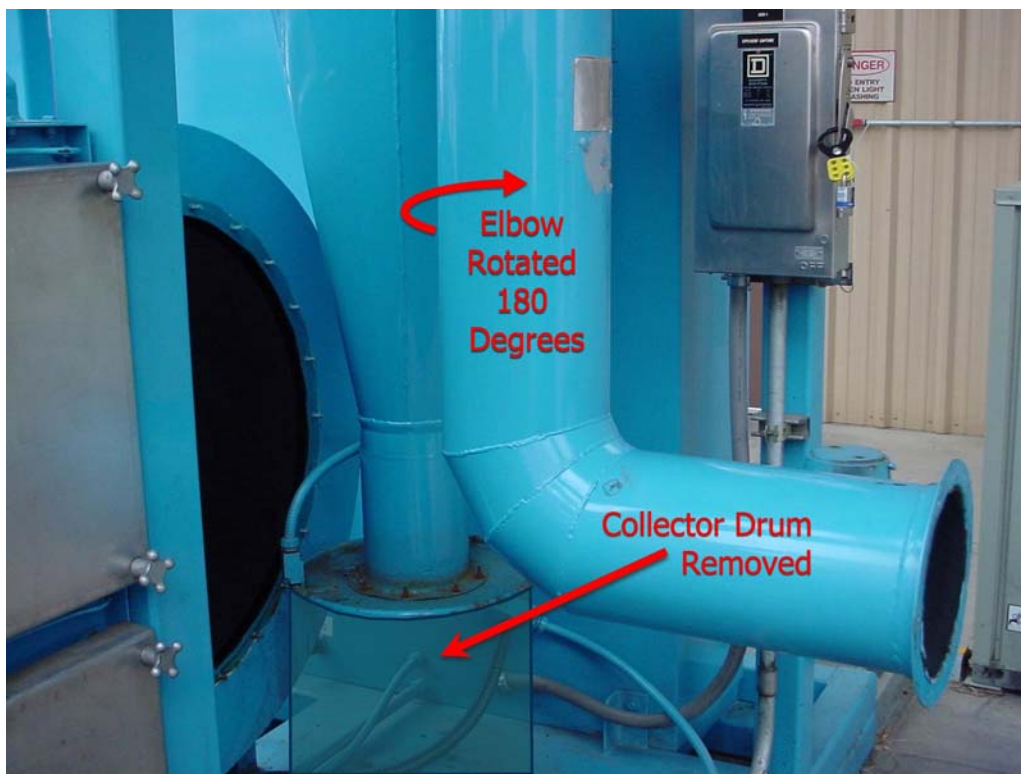


Figure 5 – ECS Side View