

FLASHJET® Service Bulletin

Bulletin Title:	Flashlamp Will Not Strike Due To Arcing at Flashlamp Module End Cap.
Bulletin No.:	06.16.03-01

To:	FLASHJET System Users	
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Priority:	Medium
Safety Level(s):	CAUTION(s) (See Below)
Problem Description:	Flashlamp will not strike.
Symptoms:	Flashlamp will not strike. While observing the Power Supply Control Unit panel, you will note that the yellow Cable Dump Relay Indicator (the right most indicator, with a picture of a relay and a ground symbol) is lit for a few seconds, and then the Power Supply shuts down. You never get a lamp struck light and the Capacitor Dump Relay indicator (this is the left most yellow indicator that has a picture of a relay next to a picture of a capacitor) never lights. You may notice arcing inside the anode or cathode end caps, although we didn't until we isolated the dump relays and the simmer power supply.
Causes:	Nylon insulators (spacers) between screws and End Cap Assembly are shorter than required, causing available path for arcing. Arcing events may or may not be visible.
Prevention or Corrective Action:	<p><u>PREVENTIVE MAINTENANCE PROCEDURES:</u> Perform the following steps to check existing End Cap Assemblies' Insulator Lengths and replace incorrect insulators.</p> <ol style="list-style-type: none"> 1. Use the robot to set the stripping head assembly in an attitude where the flashlamp is parallel to the floor, preferably with the front pitched up 45°. Set the vertical ('Z') height for a comfortable working position. 2. Remove the cap assembly by unscrewing four 10-24 cap screws and pulling the cap straight away. <u>NOTE:</u> The flashlamp will naturally try to stick in one of the 2 (Cathode or Anode) electrode sockets. Watch for flashlamp extraction. If necessary, remove the opposite side End Cap, and pull the flashlamp free using contaminant-free needle-nose pliers. <ol style="list-style-type: none"> Set aside the screws. (If "O" Ring seal is dislodged, set it aside, also). 3. Remove the opposite side cap assembly by unscrewing four 10-24 cap screws and pulling the cap straight away. (See <u>NOTE</u> Above.) Set aside the screws. (If "O" Ring seal is dislodged, set it aside, also). 4. Remove the four nylon insulators from each of the two end cap assemblies (total of 8). They should measure 1.47" in length. (Our incorrect insulators were less than 1" in length.) 5. If insulators are correct length, proceed to Step 7. 6. If insulators are incorrect length, DO NOT Continue trying to operate system until replacement parts are received. For replacement parts, contact: <div style="text-align: center;"> Steve King, Flash Tech, Inc, Hazelwood, MO, (314) 895-3200 sking@flashtech-inc.com </div> After receipt of correct replacement parts, proceed to Step 7.

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	<ol style="list-style-type: none"> 7. Assure (8) insulators are fully seated in the Left and Right Manifolds. 8. Assure "O" Rings are correctly installed. (Replace if damaged.) 9. Re-Install one of the End Cap Assemblies. Work in a circular pattern, gradually tightening the 10-24 cap screws, to a maximum torque of 15 Inch-Lbs. 10. Re-Install Flashlamp in Installed End Cap using contaminant-free needle-nose pliers, observing Polarity <p style="margin-left: 40px;"><u>NOTE:</u> <i>The flashlamp is marked with a + Sign on the Anode End, which must mate with the Left End Cap – side opposite of the water lines. Do NOT contaminate flashlamp with fingerprints, grease, etc. Use cotton gloves and/or needle nose pliers to handle flashlamp.</i></p> 11. Push Flashlamp approximately 0.4" into the socket's spring contact ring. 12. Re-Install opposite End Cap Assembly. (Assure flashlamp seats into socket's spring contact ring prior to tightening screws.) Work in a circular pattern, gradually tightening the 10-24 cap screws, to a maximum torque of 15 Inch-Lbs. 13. Allow De-Ionized Water to circulate sufficiently (~ 1 minute) to flush air out. 14. Re-Test Flashlamp Power Supply Sub-System for correct function.
CAUTION:	<i>Assure that Flashlamp Power Supply has its Electrical supply Locked Out / Tagged Out prior to performing this Maintenance Procedure.</i>
Reference Documents:	<i>Kaiser Systems, Inc. – FLASHJET Flashlamp System Operation Manual, Part II – Flash Head</i>