



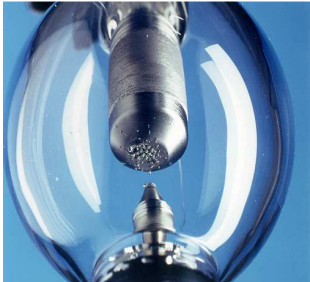


# Troubleshooting

## *Xenon Lamps >450W lamps to include XBO® and Xstage types*

There are a number of reasons why a lamp may not give satisfactory performance. The following may help you to locate and correct the more common problems that can cause failure, and ensure longer life for the replacement lamp.

Symptom	Fault	Remedy
 <p>1. Connector base discolored</p>	<p>Connector base overheated above 230°C due to:</p> <ul style="list-style-type: none"> <li>- Faulty electrical connection</li> <li>- Improper lamp cooling</li> <li>- Improper lamp current</li> <li>- Optical system out of alignment</li> </ul>	<p>Check electrical connections:</p> <ul style="list-style-type: none"> <li>- Tighten or replace</li> <li>- Check operating current</li> <li>- Check cooling system (forced or convection)</li> <li>- Check optical adjustment</li> </ul>
 <p>2. Blackening or clouding of quartz bulb</p>	<p>Operational air infiltration due to:</p> <ul style="list-style-type: none"> <li>- Crack in graded seal typically caused by overheated connector base (maximum temperature of 230°C exceeded).</li> </ul>	<p>Ensure proper operational current. Check electrical connections:</p> <ul style="list-style-type: none"> <li>- Tighten or replace</li> <li>- Check cooling system</li> <li>- Check optical adjustment</li> <li>- Check operation current</li> </ul>
 <p>3. Severe cathode electrode damage, grey/brown deposits on quartz envelope</p>	<p>Reversed polarity due to:</p> <ul style="list-style-type: none"> <li>- Electrical connection incorrectly applied to lamp</li> <li>- Incorrect wiring</li> </ul>	<p>Check polarity, correct connections if necessary.</p> <ul style="list-style-type: none"> <li>- Vertical lamp operation only with anode electrode (+ connection) up</li> </ul>
 <p>4. Abnormal anode electrode deterioration, blackening of lamp</p>	<p>Arc instability due to:</p> <ul style="list-style-type: none"> <li>- Lamp operated outside current control range</li> <li>- Lamp operated with poor quality operational current</li> <li>- Improper magnetic stabilization</li> <li>- Improper forced cooling</li> </ul>	<p>Check correct current setting</p> <ul style="list-style-type: none"> <li>- Check magnetic stabilization</li> <li>- Ensure proper quality current</li> <li>- Ensure forced cooling as required by OSRAM</li> </ul>
 <p>5. Deposits on anode face</p>	<p>Rectifier/power supply defect:</p> <ul style="list-style-type: none"> <li>- Inrush current limit exceeded</li> <li>- High current ripple</li> </ul>	<p>Check</p> <ul style="list-style-type: none"> <li>- Rectifier/power supply</li> <li>- Inrush current</li> <li>- Current ripple</li> </ul>

Professional and Industrial Applications Laboratory  
OSRAM SYLVANIA  
129 Portsmouth Avenue  
Exeter, NH 03833  
Phone: 888-677-2627  
E-mail: [osrampia.us@osram.com](mailto:osrampia.us@osram.com)

**OSRAM**