
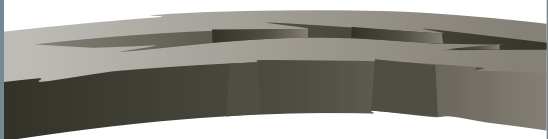

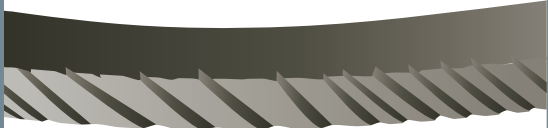
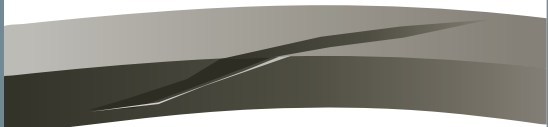


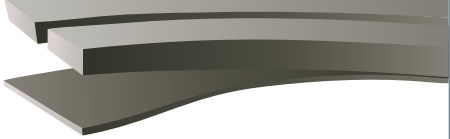


# Belt Failure Analysis


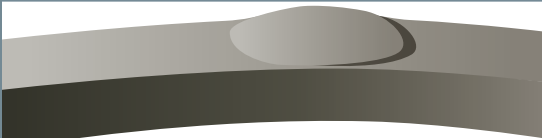
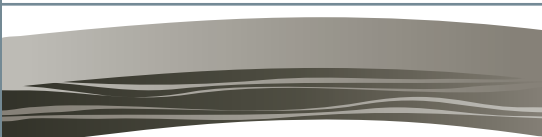
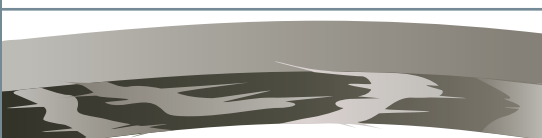
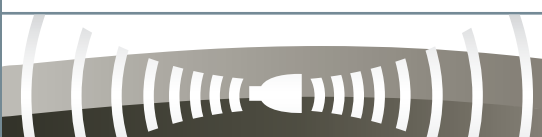
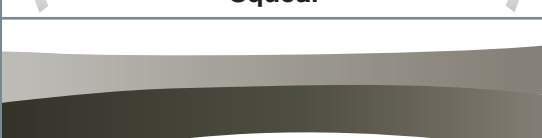


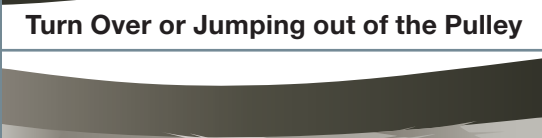
Symptom	Possible Cause(s)	Possible Solution(s)
 <p><b>Broken Belt</b></p>	<ul style="list-style-type: none"> <li>• Pried onto pulleys</li> <li>• Extreme shock load</li> <li>• Foreign object damage</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure proper installation</li> <li>• Confirm you have the proper belt</li> <li>• Shield drive if possible</li> </ul>
 <p><b>Cracking or Weathering</b></p>	<ul style="list-style-type: none"> <li>• Exposure to sun and heat</li> </ul>	<ul style="list-style-type: none"> <li>• Replace belts</li> <li>• Shield drive if possible</li> </ul>
 <p><b>Top Cracking</b></p>	<ul style="list-style-type: none"> <li>• Incorrect backside idler</li> <li>• Pulleys too small</li> <li>• Excessive temperature</li> <li>• Wrong belt for drive</li> </ul>	<ul style="list-style-type: none"> <li>• Replace idler and/or pulleys based on the manufacturer's recommendation</li> <li>• Protect drive from the environment</li> <li>• Confirm you have the proper belt</li> </ul>
 <p><b>Underside Cracking</b></p>	<ul style="list-style-type: none"> <li>• Excessive heat</li> <li>• Sheaves too small</li> <li>• Undersized backside idler</li> <li>• Improperly positioned backside idler</li> <li>• Sheaves misaligned</li> <li>• Improper or prolonged storage</li> </ul>	<ul style="list-style-type: none"> <li>• Replace idler and/or pulleys based on the manufacturer's recommendation</li> <li>• Protect drive from the environment</li> <li>• Confirm you have the proper belt</li> </ul>
 <p><b>Cuts or Gouges</b></p>	<ul style="list-style-type: none"> <li>• Contact with an obstruction</li> <li>• Pried onto pulleys</li> </ul>	<ul style="list-style-type: none"> <li>• Remove obstruction</li> <li>• Ensure proper installation</li> <li>• Confirm you have the proper belt</li> </ul>
 <p><b>Edge Cord Failure</b></p>	<ul style="list-style-type: none"> <li>• Misaligned pulleys</li> <li>• Damaged tensile members</li> <li>• Worn or incorrect pulleys</li> </ul>	<ul style="list-style-type: none"> <li>• Check alignment</li> <li>• Ensure proper installation</li> <li>• Verify belt and pulleys are compatible</li> <li>• Replace pulleys</li> </ul>
 <p><b>Excessive Vibration</b></p>	<ul style="list-style-type: none"> <li>• Improper tension</li> <li>• Damaged or broken power transmission cords</li> </ul>	<ul style="list-style-type: none"> <li>• Properly tension</li> <li>• Replace belts</li> <li>• Ensure proper installation</li> </ul>
 <p><b>Joined Belt Band Separation</b></p>	<ul style="list-style-type: none"> <li>• Improper groove spacing</li> <li>• Worn or incorrect pulleys</li> <li>• Misaligned pulleys</li> </ul>	<ul style="list-style-type: none"> <li>• Verify belt and pulleys are compatible</li> <li>• Replace pulleys if necessary</li> <li>• Realign drive</li> </ul>

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# Belt Failure Analysis

Symptom	Possible Cause(s)	Possible Solution(s)
 <p><b>Localized Wear, Sidewall Burn</b></p>	<ul style="list-style-type: none"> <li>• Stalled pulleys</li> <li>• Under tensioned</li> <li>• Plugged drive</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure pulleys move freely</li> <li>• Properly lubricate pulleys</li> <li>• Ensure proper tension</li> </ul>
 <p><b>Loose Cover or Swelling</b></p>	<ul style="list-style-type: none"> <li>• Excessive oil in contact with the belt</li> </ul>	<ul style="list-style-type: none"> <li>• Properly lubricate</li> <li>• Clean pulleys and belt</li> <li>• Replace belt after issue is resolved</li> </ul>
 <p><b>Ply Separation, Side Splitting</b></p>	<ul style="list-style-type: none"> <li>• Over tensioned</li> <li>• Foreign object</li> <li>• Worn or incorrect pulleys</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure proper tension</li> <li>• Inspect pulleys</li> <li>• Replace pulleys if necessary</li> </ul>
 <p><b>Sidewall Wear</b></p>	<ul style="list-style-type: none"> <li>• Slippage</li> <li>• Excessive dust</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure proper tension</li> <li>• Provide protection if possible</li> <li>• Realign drive</li> </ul>
 <p><b>Squeal</b></p>	<ul style="list-style-type: none"> <li>• Insufficient tension</li> <li>• Shock load</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure proper tension</li> <li>• Confirm you have the proper belt</li> </ul>
 <p><b>Stretch</b></p>	<ul style="list-style-type: none"> <li>• Wrong belt for drive</li> <li>• Mixing old and new belts</li> <li>• Mixing different manufacturers belts</li> <li>• Misalignment</li> <li>• Belt and pulleys incompatible</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm you have the proper belt</li> <li>• Replace belt sets at same time</li> <li>• Use same belts when replacing sets</li> <li>• Realign drive</li> <li>• Verify belt and pulleys are compatible</li> </ul>
 <p><b>Top Wear</b></p>	<ul style="list-style-type: none"> <li>• Rubbing against guard</li> <li>• Damaged idler</li> </ul>	<ul style="list-style-type: none"> <li>• Repair and/or replace guard</li> <li>• Replace idler</li> </ul>
 <p><b>Turn Over or Jumping out of the Pulley</b></p>	<ul style="list-style-type: none"> <li>• Drive misalignment</li> <li>• Worn pulleys</li> <li>• Excessive vibration</li> <li>• Shock load</li> </ul>	<ul style="list-style-type: none"> <li>• Realign drive</li> <li>• Replace pulleys if necessary</li> <li>• Ensure proper tension</li> </ul>
 <p><b>Bottom Side Wearing</b></p>	<ul style="list-style-type: none"> <li>• Belt bottoming out in pulley</li> <li>• Belt and pulley are not compatible</li> <li>• Debris in pulleys</li> <li>• Worn pulleys</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure you have correct pulley for the belt being used</li> <li>• Clean pulleys</li> <li>• Replace belt and/or pulleys</li> </ul>

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