

# V-BELTS

## Trouble Shooting Tips

Symptom	Probable Cause	Required Action
<b>1. Cracking</b>	<ul style="list-style-type: none"> <li>(1) Sheaves too small for belt section.</li> <li>(2) Belt slip.</li> <li>(3) Backside idler diameter too small.</li> <li>(4) Improper belt storage.</li> <li>(5) Excessive hot or cold temperature.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use larger diameter sheaves.</li> <li>(2) Retension to manufacturer's recommendations.</li> <li>(3) Increase backside idler to acceptable diameter.</li> <li>(4) Don't coil belt too tightly, kink or bend. Avoid heat and direct sunlight.</li> <li>(5) Control drive environment.</li> </ul>
<b>2. Wear on Sidewalls</b>	<ul style="list-style-type: none"> <li>(1) Belt slip.</li> <li>(2) Sheave misalignment.</li> <li>(3) Worn sheaves.</li> <li>(4) Incorrect belt.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Retension to manufacturer's recommendations.</li> <li>(2) Realign drive.</li> <li>(3) Replace sheaves.</li> <li>(4) Replace with correct belt size.</li> </ul>
<b>3. Edge Cord Failure</b>	<ul style="list-style-type: none"> <li>(1) Sheave misalignment.</li> <li>(2) Damaged tensile member.</li> <li>(3) Worn or incorrect sheaves.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Check alignment and correct.</li> <li>(2) Follow correct installation procedure.</li> <li>(3) Replace sheaves for correct belt/sheave match.</li> </ul>
<b>4. Wear on Top Corner</b>	<ul style="list-style-type: none"> <li>(1) Belt-to-sheave fit incorrect.</li> <li>(2) Belt rubbing against guard or drive structure.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use correct belt/sheave match.</li> <li>(2) Remove obstruction.</li> </ul>
<b>5. Surface Flaking, Sticky or Swollen</b>	<ul style="list-style-type: none"> <li>(1) Oil or chemical contamination.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Do NOT use belt dressing; eliminate sources of oil, grease, or chemical contamination.</li> </ul>
<b>6. Wear on Top Surface</b>	<ul style="list-style-type: none"> <li>(1) Belt rubbing against guard.</li> <li>(2) Damaged idler.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Repair or replace guard.</li> <li>(2) Repair or replace idler.</li> </ul>
<b>7. Surface Hard or Stiff</b>	<ul style="list-style-type: none"> <li>(1) Hot drive environment.</li> <li>(2) Belt slip.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Improve ventilation to drive.</li> <li>(2) Retension to manufacturer's recommendations.</li> </ul>
<b>8. Unusual Vibration</b>	<ul style="list-style-type: none"> <li>(1) Incorrect belt.</li> <li>(2) Poor equipment structural design.</li> <li>(3) Excessive sheave eccentricity.</li> <li>(4) Loose drive components.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use correct belt/sheave match.</li> <li>(2) Check structure for adequate strength and rigidity.</li> <li>(3) Replace defective sheave.</li> <li>(4) Check machine components, guards, motor mounts, motor pads, bushings, brackets and framework for adequate strength, stability and installation.</li> </ul>
<b>9. High Belt Temperature</b>	<ul style="list-style-type: none"> <li>(1) Hot drive environment.</li> <li>(2) Slipping.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Improve ventilation to drive.</li> <li>(2) Retension until slipping stops.</li> </ul>

# V-BELTS

## Trouble Shooting Tips

Symptom	Probable Cause	Required Action
<b>10.</b> Wear on Bottom Surface	<ul style="list-style-type: none"> <li>(1) Belt bottoming against sheave groove bottom.</li> <li>(2) Worn sheaves.</li> <li>(3) Debris in sheaves.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use correct belt/sheave match.</li> <li>(2) Replace sheaves.</li> <li>(3) Clean sheaves.</li> </ul>
<b>11.</b> Undercord Cracking	<ul style="list-style-type: none"> <li>(1) Sheaves too small for belt section.</li> <li>(2) Belt slip.</li> <li>(3) Backside idler diameter too small.</li> <li>(4) Excessive hot or cold temperature.</li> <li>(5) Improper belt storage.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use larger diameter sheaves.</li> <li>(2) Retension to manufacturer's recommendations.</li> <li>(3) Increase backside idler to acceptable diameter.</li> <li>(4) Control drive environment.</li> <li>(5) Don't coil belt too tightly, kink or bend. Avoid heat and direct sunlight.</li> </ul>
<b>12.</b> Turns Over or Comes Off Drive	<ul style="list-style-type: none"> <li>(1) Shock loading or vibration.</li> <li>(2) Foreign material in grooves.</li> <li>(3) Sheave misalignment.</li> <li>(4) Worn sheave grooves.</li> <li>(5) Subminimal diameter sheave.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Check drive design; use PowerBand® (joined) belts.</li> <li>(2) Shield grooves and drive.</li> <li>(3) Realign drive.</li> <li>(4) Replace sheaves.</li> <li>(5) Replace sheave with correct diameter.</li> </ul>
<b>13.</b> Sidewall Burning or Hardening	<ul style="list-style-type: none"> <li>(1) Belt slip.</li> <li>(2) Worn sheaves.</li> <li>(3) Under-designed drive.</li> <li>(4) Shaft movement.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Retension to manufacturer's recommendations.</li> <li>(2) Replace sheaves.</li> <li>(3) Redesign to manufacturer's recommendations.</li> <li>(4) Check for center distance changes.</li> </ul>
<b>14.</b> Wear on Bottom Corner	<ul style="list-style-type: none"> <li>(1) Belt-to-sheave fit incorrect.</li> <li>(2) Worn sheaves.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use correct belt/sheave match.</li> <li>(2) Replace sheaves.</li> </ul>
<b>15.</b> Unusually Loud Drive	<ul style="list-style-type: none"> <li>(1) Incorrect belt for sheaves.</li> <li>(2) Incorrect tension.</li> <li>(3) Worn sheaves.</li> <li>(4) Debris in sheaves.</li> <li>(5) Sheave misalignment.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use correct belt size and type.</li> <li>(2) Check belt tension and adjust.</li> <li>(3) Replace sheaves.</li> <li>(4) Clean sheaves; improve shielding; remove rust, paint; or remove dirt from grooves.</li> <li>(5) Realign drive.</li> </ul>
<b>16.</b> Top of Tie Band Damaged	<ul style="list-style-type: none"> <li>(1) Interference with guard.</li> <li>(2) Backside idler malfunction.</li> <li>(3) Debris in sheaves.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Check and adjust guard.</li> <li>(2) Replace or repair backside idler.</li> <li>(3) Clean sheaves.</li> </ul>
<b>17.</b> Tie Band Separation	<ul style="list-style-type: none"> <li>(1) Improper groove spacing.</li> <li>(2) Worn or incorrect sheaves.</li> <li>(3) Sheave misalignment.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Use sheaves manufactured to industry specifications.</li> <li>(2) Replace sheaves.</li> <li>(3) Realign drive.</li> </ul>
<b>18.</b> Broken Belt	<ul style="list-style-type: none"> <li>(1) Under-designed drive.</li> <li>(2) Belt rolled or pried onto sheave.</li> <li>(3) Object falling into drive.</li> <li>(4) Severe shock load.</li> </ul>	<ul style="list-style-type: none"> <li>(1) Redesign to manufacturers recommendations.</li> <li>(2) Use drive center distance adjustment when installing.</li> <li>(3) Provide adequate guard or drive protection.</li> <li>(4) Redesign to accommodate shock load.</li> </ul>