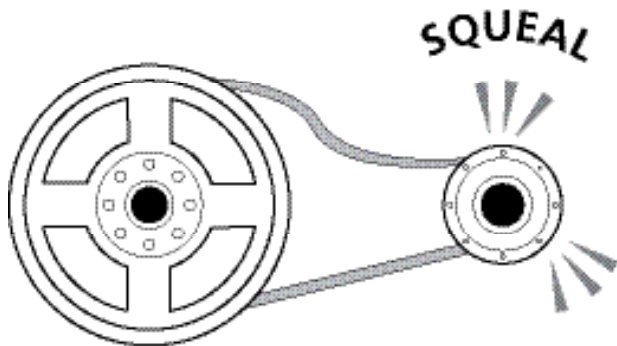


# V-Belt Systems

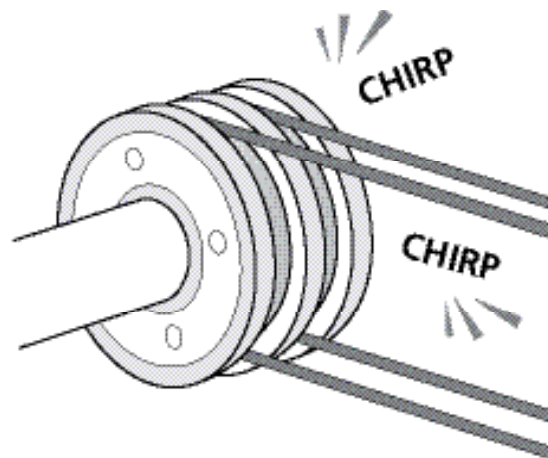
TYPE OF FAILURE											POSSIBLE CAUSE OF FAILURE	CORRECTIVE ACTION	
Excessive edge wear	Excessive tooth wear	Uneven tooth wear	Apparent belt stretch	Cracks in backing	Tooth shear	Tensile failure	Excessive drive noise	Tooth skipping (ratcheting)	Belt tracking	Excessive sprocket/sheave wear			Excessive drive vibration
												Belt hitting obstruction	Remove obstruction or use idler to reroute belt
												Excessive load	Redesign drive
												Belt overtensioned	Use tensioning gauge to set proper tension
												Belt undertensioned	Use tensioning gauge to set proper tension
												Rough or damaged sprocket/sheave	Replace sprocket/sheave
												Misalignment	Align shafts and sprockets/sheaves
												Worn sprocket/sheave	Replace sprocket/sheave
												Sprocket out of tolerance	Replace sprocket/sheave; never attempt to remachine
												Soft sprocket/sheave material	Use harder sprocket/sheave material
												Debris in sprocket/sheave or drive	Shield drive
												Center distance changed	Check lock down bolts on motors and shafts
												Weak drive structure	Reinforce drive structure
												Excessive low temperature	Moderate temperature especially at startup
												Excessive high temperature	Moderate temperature, shield drive
												Exposure to oil, solvents, chemicals	Shield drive, eliminate chemicals
												Sprocket diameter sub minimum	Redesign drive to increased sprocket/sheave diameters
												Back side idler	Redesign to reduce wrap on backside idler
												Shock loading	Eliminate shock loading or redesign drive to handle it
												Less than six teeth in mesh	Increase wrap on sprocket/sheave
												Excessive sprocket/sheave runout	Replace sprocket/sheave
												Damage due to handling	Replace product, don't crimp belt or drop sprockets/sheaves
												Vibrating bearings/mountings	Replace bearings or reinforce mountings
												Center distance greater than 8x small sprocket/sheave diameter	Alignment is critical
												Sprocket/sheave not properly balanced	Check sprocket/sheave balance

PRIMARY CAUSE  
  POSSIBLE CAUSE  
  COULD CAUSE BUT NOT LIKELY

## What to listen for



Squeal is usually a result of insufficient belt tension and requires prompt investigation. If squeal persists after you have checked all belts and adjusted tension, examine the drive itself for overloading.



Chirp, a sound like that of a chirping bird, can occur on all types of belt drives. Never apply dressing or oil to a belt in an effort to eliminate chirps or squeaks. Realignment of an idler may help. Chirps or squeaks are often annoying, but will not harm belts.

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