

Sources of Drive Problems		
Poor Drive Maintenance	Improper Installation	Environmental Factors
Improper Retensioning	Pulley misalignment	Dirt & Dust
Not replacing worn out or damaged pulleys	Incorrect Belt Tension	Water / Humidity
Not cleaning guards	Improper handling of belts	Oil / Grease
Not correcting weak drive components	Wrong belt size	Heat & Cold
Improper alignment checking	Mis-matched pulley and belt grooves	Rust
Improper checking of bracketry components	Tensioner / Idler improper tensioning	
	Guard interference	
	Wrong tooling used for belt fitment	
Poor Drive Design	Defective Drive Components	Belt Storage or Handling
Under design drive	Worn out pulleys or sheaves	Inadequate storage temperature
Over design drive	Cracked or weakened bracketry	High Humidity
Pulleys not as recommended	Weak mounting brackets	Storing for too long
Incorrect Belt type	Worn out belts	Exposed to sun light
Excessive Rim speed	Non functioning idler or tensioner	Ozone environment
	Damaged guard	

Belt Symptoms	Probable Causes	Suggested Remedial Measures
Cracks	Belt used for too long	Replace belts
Layer Separation	Oil Contamination	Clean oil contamination
	Belt Slip or insufficient tension	Readjust tension
	Misalignment	Correct alignment
	Wrong installation	Correct installation
Wear on the belt	Interference with guard	Replace, repair or redesign guard
	Incorrect pulley fit	Correct pulley belt fit
	Idler Malfunction	Replace idler
	Pulley is too small	Use correct pulley
Belt Surface Glossy, sticky or swollen	Oil Contamination	Clean oil contamination
	Chemical contamination	Do not use belt dressing.
	Belt slip	Eliminate source of grease or
		chemical contamination
Edge Cord Failure	Pulley misalignment	Check alignment and correct
	Damage tensile member	Follow correct installation procedures
Belt De-lamination or under cord separation	Small pulleys or sheaves	Check drive design, replace with larger pulleys / Sheaves
	Use of small backside idler	Increase backside idler to acceptable diameter
Excessive Wear of rib surface	Belt Slip	Re-tension until slippage stops
	Misalignment	Re-align pulleys / sheaves
	Worn out pulleys / Sheaves	Replace damaged pulleys / sheaves
	Debris in pulleys / sheaves grooves	Clean the pulley / sheave grooves
	Incorrect belt selection	Replace with correct belt size
Under Cord Cracking	Pulley / Sheave diameter too small	Use recommended pulley / sheave diameter
	Belt Slip	Re-tension until slippage stops
	Back side idler too small	Use larger diameter back side idler
	Improper Storage	Avoid coiling of belt too tightly or bending
		Avoid heat and exposure to direct sun light

Belt Symptoms	Probable Causes	Suggested Remedial Measures
Belt Surace Hard or Stiff Tension loss	Hot drive environment	Improve ventiation to drive
	Weak support structure	Reinforce structure
	Excessive sprocket wear	Use alternative sprocket material
	Fixed (non-adjustable) centres	Use auto tensioner or idler for belt adjustment
	Excessive debris	Remove debris, check guard
	Excessive load or shock load	Redesign drive for increased capacity
	Belt, sprocket or sharts running too hot	check for conductive heat transfer from prive mover
	Pulley diameter too small	Use recommended pulley / sheave diameter
Unusal Vibration : Belts flapping	Loose Belts (under tensioned)	Re-tension unitl slippage stops
	Mis-matched belt	Replace with suitable belt
	Pulley misalignment	Align the pulley
Excessive Vibration	Incorrect belt	Use correct belt section. Use correct tooth profile and tooth profile and pitch sheaves
	Poor drive design	Verify drive and correct drive design.
	Pulley out of round	Replace with non-defective pulley.
	Loose drive components	Check engine components and guards, engine mounts bushing, brackets and frame work for stability, adequate design, strength, proper maintenance and proper installation.
	Misalignment	Correct alignment
	Long center distance	Reduce center distance
Excessive Drive noise : Squeal Noise	Belt slips	Re-adjust tension
	Contamination	Clean belt and pulley
	Excessive load or shock load	Re-design drive for incresed capacity
Jumping Noise	Insufficient tension / loose belt	Re-adjust tension
	Misalignment	Correct alignment
	Mismatched belt	Replace with suitable belt
Rubbing Noise	Guard interference	Replace, repair or redesign guard

Belt Symptoms	Probable Causes	Suggested Remedial Measures
Grinding Noise	Damaged bearing	Replace bearing, lubricate
Abnormally loud noise	Worn out pulleys / Sheaves	Replace pulleys / sheaves
	Incorrect belt	Replace with correct belt type
	Debris in pulleys / sheaves grooves	Clean pulleys / sheaves
	Small pulleys or sheaves	Increase pulley diameter