

# Roller Chain Troubleshooting Guide

Symptom	Possible Causes	Solution
Abnormal protrusion or turned pins	Excessive internal friction, caused by overloading and inadequate lubrication	Replace chain, improve lubrication and eliminate overload conditions
Broken, cracked or deformed rollers	Speed too high	Replace chain and reduce speed
	Sprockets too small	Replace chain and use larger sprockets
Broken pins	Extreme overload	Replace chain and eliminate cause of overload or redesign chain drive
Corrosion pitting	Exposure to corrosive environment	Replace chain and protect from hostile environment
Cracked plates (fatigue)	Loading beyond chain's dynamic capacity	Replace chain with chain of larger dynamic capacity, or prevent overloading
Enlarged holes	High overload	Replace chain and correct cause of overload
Fractured plates	High overload	Replace chain and correct cause of overload
Hooked sprocket teeth	Excessive chain wear	Replace chain and sprocket
Pin galling	Inadequate lubrication	Reduce load or chain drive speed
		Ensure proper lubrication
Rusted chain	Exposure to moisture	Replace chain and protect from moisture
	Water in lubricant	Change chain lubricant
	Inadequate lubrication	Replace chain and improve lubrication schedule/type/method
Stress corrosion	Severe rusting or exposure to acidic or caustic medium, plus static pressure at press fit. No cyclic stress necessary.	Replace chain and protect from hostile environment
Tight joints	Contamination in joint	Clean and re-lubricate chain
	Corrosion or rust	Replace chain
	Bent pins	Replace chain
Worn colour	Abnormal wear rubbing on guides	Replace roller chain when 5% worn
		Check alignment or increase clearance

## Authorised Distributors for:



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