

Troubleshooting

Problem	Possible Causes	What to Do
Excessive noise	<ul style="list-style-type: none"> • Misalignment of sprocket • Loose casings or bearings • Too little or too much slack • Chain and/or sprocket wear • Inadequate lubrication or no lubrication • Chain pitch size too large 	<ul style="list-style-type: none"> • Realign sprockets and shafts • Tighten set-bolts • Adjust centers or idler take-up • Replace chain and/or sprocket • Lubricate properly • Replace with correct chain size
Chain vibration	<ul style="list-style-type: none"> • Resonance to the vibration cycle of machine to be installed • High load fluctuation 	<ul style="list-style-type: none"> • Change vibration cycle of chain or machine • Use torque converter or fluid coupling
Wear on inside of link plate and one side of sprocket teeth	<ul style="list-style-type: none"> • Misalignment 	<ul style="list-style-type: none"> • Realign sprockets and shafts
Chain climbs sprockets	<ul style="list-style-type: none"> • Excessive chain slack • Heavy overload 	<ul style="list-style-type: none"> • Adjust centers or idler take-up • Reduce load or install stronger chain
Broken pins, bushings or rollers or heavy wear of pins, bushings or rollers	<ul style="list-style-type: none"> • Chain speed too high for pitch and sprocket size • Heavy shock or suddenly applied loads • Material build-up in sprocket tooth pockets • Inadequate lubrication • Chain or sprocket corrosion 	<ul style="list-style-type: none"> • Use shorter pitch chain or install larger diameter sprockets • Reduce shock load or install stronger chain • Remove material build-up or install side gashed sprockets • Lubricate properly • Install anti-corrosive chain or sprockets
Chain clings to sprocket	<ul style="list-style-type: none"> • Center distance too big or high load fluctuation • Excessive chain slack 	<ul style="list-style-type: none"> • Adjust the center distance or install idler take-up • Same as above
Chain gets stiff	<ul style="list-style-type: none"> • Misalignment • Inadequate lubrication • Corrosion • Excessive load • Material build-up in chain joint • Peening of link plate edges 	<ul style="list-style-type: none"> • Realign sprockets and shafts • Lubricate properly • Replace with anti-corrosive chain • Reduce load or replace with chain of suitable strength • Shield drive from foreign matter • Check for chain interference
Breakage of link plate	<ul style="list-style-type: none"> • Subjected to shock load • Vibration • Inertia load is too large 	<ul style="list-style-type: none"> • Reduce shock (e.g., install a shock absorber) • Install a device to absorb vibration (e.g., tightener, idler wheel) • Chain section should be checked (increase number of strands or select next larger size chain)
Camber (curved tracking of straight faced roller chains on long conveyors where chain strands are rigidly attached)	<ul style="list-style-type: none"> • Head shaft sprocket misalignment • Track or rail out of level due to previous chain travel wear • Higher chain tension on one strand than the other strands • Chain strand lengths are different 	<ul style="list-style-type: none"> • Realign head sprockets • Level track or rails • Balance conveyed material load between strands • Specify measured matched and tagged strands