

CHAIN CARE & TROUBLESHOOTING

Problem	Possible Causes	What To Do
Excessive noise	■ 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	■ Realign sprockets and shafts ■ Tighten set-bolts ■ Adjust center or idler take-up ■ Replace chain and/or sprocket ■ Lubricate properly ■ Check chain drive recommendation
Chain vibration	■ Resonance to the vibration cycle of machine to be installed ■ High load fluctuation	■ 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	■ Misalignment	■ Realign sprockets and shafts
Chain climbs sprockets	■ Excessive chain slack ■ Heavy overload	■ Adjust center or idler take-up ■ Reduce load or install stronger chain
Broken pins, bushings or rollers	■ 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	■ 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	■ Center distance too big or high load fluctuation ■ Excessive chain slack	■ Adjust the center distance or install idler take-up ■ Same as above
Chain gets stiff	■ Misalignment ■ Inadequate lubrication ■ Corrosion ■ Excessive load ■ Material build-up in chain joint ■ Peening of link plate edges	■ 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	■ Subjected to shock load ■ Vibration ■ Moment of load inertia is too big	■ 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)