

Belt Drive Troubleshooting

This troubleshooting checklist provides actions and solutions to help identify and solve typical causes of belt-drive issues. Possible issues include poor component alignment, debris interfering with function, improper belt tension and on rare occasions, incorrect components. For safest and best resolution of issues, please follow the maintenance methods specified in the User Manual for your specific Marley product. **Please follow all steps on this checklist before submitting a support request.**

Belt Drive Mechanical Equipment Troubleshooting Checklist				
Step	Action	Solution		
1	Shut down the cooling tower pumps and motors and lockout/tagout the power source before proceeding.			
2	Check to be sure the correct mechanical equipment components are installed (fan sheaves, motor sheaves, belts and bearings).	Confirm the tower model's mechanical configuration matches the components specified in the bills of material, and/or match the mechanical drive configuration in the Engineering Specification for the appropriate model/product line.		
3	Is the tower producing sound levels much higher than normal?	Check for obstructions in and around the belt path. Confirm the belts are properly installed within the grooves of the sheaves. Depending on the noise, the source may vary:		
		noise	source of noise	resolution
		squealing and/or squeaking	belt slippage	adjust belt tension
		popping and/or slapping	component alignment	align and adjust belt tension
		growling	bearings	lubricate or replace bearings
4	Do the motor and fan sheave pairs appear correctly aligned?	If not, disassemble the belt-drive system and adjust the alignment of the fan, bearing housing and sheaves. For detailed instructions on proper alignment, refer to the cooling tower User Manual.		
5	Will the fan and motor sheaves spin smoothly by hand?	If not, determine what the root cause of the resistance is and replace parts if necessary.		
6	Is there visible belt slack or do the belts appear to be stretching?	If so, adjust the belt tension to where the fan can spin by rotating the belts by hand. For detailed instructions on proper belt tensioning, see the tower User Manual. If proper belt tensioning cannot be achieved, order and replace the belts per the bills of material and/or Engineering Specification.		
7	Is there unusual visible wear in the sheaves and/or belts?	Double check for causes of unusual wear to prevent reoccurrence. Order and replace the appropriate components per the bills of material and/or the Engineering Specification.		
8	All the components are as specified and in proper working order and there still are issues with belt-drive system.	Consider replacing components. Contact your SPX Project Manager to help identify root cause of issues.		

SPX COOLING TECH, LLC

7401 WEST 129 STREET
 OVERLAND PARK, KS 66213 USA
 913 664 7400 | spxcooling@spx.com
spxcooling.com

SB-25 | ISSUED 11/2022

©2022 SPX COOLING TECH, LLC | ALL RIGHTS RESERVED

In the interest of technological progress, all products are subject to design and/or material change without notice.

