

Problem	Possible Cause	Solution
Belt not engaging drive sprockets	Incorrect belt tension around drive sprockets	<ol style="list-style-type: none"> 1. Ensure the belt returnway allows recommended catenary sag. 2. Respace rollers to get proper sag and bypass the slider bed returnway to get proper sag.
	Incorrect A or B dimension	Compare existing shaft location to that recommended for A and B conveyor frame
	Incorrect belt returnway design	<ol style="list-style-type: none"> 1. Ensure the belt returnway provides recommended catenary sag. 2. Respace rollers to get proper sag and bypass the slider bed returnway to get proper sag.
	Sprockets not aligned correctly on shafts	Ensure sprockets are timed identically and all sprocket teeth line up when looking down the shaft. See Sprocket Installation for more information.
	Insufficient belt wrap around drive sprockets	Move the return roller nearest the drive shaft so at least 180 degrees of the belt
Belt not tracking properly	Drive and idle shafts not plumb, level, and square	<ol style="list-style-type: none"> 1. Adjust shafts to be plumb, level, and square. 2. Ensure sprockets are held in place with shaft collars.
	Conveyor frame and/or components not level or square	<ol style="list-style-type: none"> 1. Square and level the conveyor frame. 2. Check shaft alignment after adjusting the frame. 3. Replumb, level, and square the shafts if needed.
	Return rollers not level and square to conveyor frame	Adjust return rollers to be level or square with conveyor frame.
	Sprockets not aligned correctly on shafts	Ensure sprockets are timed identically and all sprocket teeth line up when looking down the shaft. See Sprocket Installation for more information.
	Locked sprockets on drive and idle shafts are not properly aligned	<ol style="list-style-type: none"> 1. Realign the locked sprockets. 2. Ensure the drive shaft sprocket is aligned with the idle shaft sprocket. See Sprocket Installation for more information.
	Material build-up on bottom of belt interfering with proper sprocket tooth engagement	Clean the bottom of the belt to remove any debris that could interfere with sprocket tooth engagement. Consider installing in-place brushes, scrapers, scrolls, or other devices to prevent future buildup.
	Belt improperly installed	With the exception of Series 200, all belt edges should be flush when spliced properly. See belt series and style instructions for specific splicing instructions.
	Retainer rings improperly installed or missing	<ol style="list-style-type: none"> 1. Install the retainer rings so the locked sprockets on the drive and idle shafts are aligned. 2. Replace any missing retainer rings.
Excessive belt wear	Belts, sprockets, or wearstrip exposed to abrasive material	<ul style="list-style-type: none"> • Eliminate or reduce belt, sprocket, and wearstrip exposure to abrasive material. • Use pressurized air to blow debris from equipment or wash off equipment regularly.



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Problem	Possible Cause	Solution
	Binding of belt in conveyor frame	<ol style="list-style-type: none"> 1. Square and level the conveyor frame. 2. Remove any obstructions causing the belt to rub or bind.
	Uneven or incorrect product loading	<ul style="list-style-type: none"> • Add support under belt loading area. • Consider adding a chute to orient conveyed material so it travels in the same direction as the belt and at a similar speed. • Consider adding a side guide to the opposite side of the belt for side-loaded conveyors.
	Excessive belt speed	Reduce belt speed if possible. High-speed belts, especially those with short shaft centers, wear faster than belts at lower speeds.
	Sharp corners on carryway or returnway wearstrips	Bevel or radius the leading edge of carryway and returnway wearstrips and slider beds for smooth belt travel.
Excessive sprocket wear	Sprockets exposed to abrasive material	<ul style="list-style-type: none"> • Eliminate or reduce sprocket exposure to abrasive material. • Use pressurized air to blow debris from equipment or wash off equipment regularly.
	Incorrect tension on belt	<ol style="list-style-type: none"> 1. Ensure the belt is properly tensioned around the drive sprockets. 2. Ensure the belt returnway allows recommended catenary sag. 3. Respace rollers to get proper sag and bypass the slider bed returnway to get proper sag.
	Excessive belt speed	Reduce belt speed if possible. High-speed belts, especially those with short shaft centers, wear faster than belts at lower speeds.
	Drive and idle shafts not plumb, level, and square	<ul style="list-style-type: none"> • Adjust shafts to be plumb, level, and square. • Ensure sprockets are held in place with shaft collars.
	Insufficient number of sprockets	The conveyor may require a more even load distribution among sprockets. Contact
	Locked sprockets on drive and idle shafts are not properly aligned	<ol style="list-style-type: none"> 1. Realign the locked sprockets. 2. Ensure the drive shaft sprocket is aligned with the idle shaft sprocket. See Sprocket Installation for more information.
	Sprockets not aligned correctly on shafts	Ensure sprockets are timed identically and all sprocket teeth line up when looking down the shaft. See Sprocket Installation for more information.
	Incorrect A or B dimension	Compare existing shaft location to that recommended for A and B conveyor frame
	Shaft deflection or twisting	<ol style="list-style-type: none"> 1. Inspect shaft for deflection or twisting. 2. Replace any bent or twisted shafts.
Excessive belt edge wear or damage	Belt contacting obstructions on conveyor frame, returnway, or adjacent equipment	<ul style="list-style-type: none"> • Square and level the conveyor frame. • Remove any obstructions causing the belt to rub or bind. • Ensure locked sprockets are secure. • Ensure sprockets are square.



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Problem	Possible Cause	Solution
	Belt improperly aligned and not tracking correctly	<ul style="list-style-type: none"> • Realign the locked sprockets. • Align the drive shaft sprocket with the idle shaft sprocket. See Sprocket Installation for more information. • Square and level the conveyor frame. • Remove any obstructions causing the belt to rub or bind. • Ensure sprockets are square.
	Thermal expansion is causing belt edge to rub on conveyor frame	Ensure there is a 0.25 in (6.4 mm) minimum clearance on each side of the belt when the belt is under full thermal expansion (highest temperature).
	Conveyor frame and/or components not level or square	<ul style="list-style-type: none"> • Square and level the conveyor frame. • Remove any obstructions causing the belt to rub or bind. • Ensure locked sprockets are secure. • Ensure sprockets are square.
	Shafts not properly locked in place with shaft collars, allowing the shafts to migrate to one side	<ul style="list-style-type: none"> • Adjust shafts to be plumb, level, and square • Ensure sprockets are held in place with shaft collars.
	Belt improperly installed	With the exception of Series 200, all belt edges should be flush when spliced properly. See belt series and style instructions for specific splicing instructions.
	Belt edge not guided through a submerged application	buoyant in most solutions, it is necessary to control the belt course to prevent edge wear.
Sprockets move laterally to center or edge of belt	Drive and idle shafts not plumb, level, and square	<ul style="list-style-type: none"> • Adjust shafts to be plumb, level, and square. • Ensure sprockets are held in place with shaft collars.
	Retainer rings improperly installed or missing	<ol style="list-style-type: none"> 1. Install the retainer rings so the locked sprockets on the drive and idle shafts are aligned. 2. Replace any missing retainer rings.
	Locked sprockets on drive and idle shafts are not properly aligned	<ol style="list-style-type: none"> 1. Realign the locked sprockets. 2. Ensure the drive shaft sprocket is aligned with the idle shaft sprocket. See Sprocket Installation for more information.
	Sprockets not aligned correctly on shafts	Ensure sprockets are timed identically and all sprocket teeth line up when looking down the shaft. See Sprocket Installation for more information.
	Material buildup on bottom of belt preventing proper tooth engagement	Clean the bottom of the belt to remove any debris that could interfere with sprocket tooth engagement. Consider installing in-place brushes, scrapers, scrolls, or other devices to prevent future buildup.
	Belt improperly installed	With the exception of Series 200, all belt edges should be flush when spliced properly. See belt series and style instructions for specific splicing instructions.
	Shaft deflection or twisting	<ol style="list-style-type: none"> 1. Inspect shaft for deflection or twisting. 2. Replace any bent or twisted shafts.
Belt rod pushing out of belt	Rods not properly installed	See belt series and style instructions for specific splicing instructions.
	Drive and idle shafts not plumb, level, and square	<ul style="list-style-type: none"> • Adjust shafts to be plumb, level, and square. • Ensure sprockets are held in place with shaft collars.
Sideguard wear or damage (including breakage)	Sideguards contacting obstructions on conveyor frame, returnway, or adjacent equipment.	<ul style="list-style-type: none"> • Remove sideguard travel obstructions. • Square and level the conveyor frame. • Remove any obstructions causing the belt to rub or bind. • Secure locked sprockets. • Ensure sprockets are square.



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	Uneven or incorrect product loading	<ul style="list-style-type: none"> • Add support under belt loading area. • Consider adding a chute to orient conveyed material so it travels in the same direction as the belt and at a similar speed. • Consider adding a side guide to the opposite side of the belt for side-loaded conveyors.
Flight wear or damage	Flights contacting obstructions on conveyor frame, returnway, or adjacent equipment	<ul style="list-style-type: none"> • Remove debris blocking the flight travel. • Square and level the conveyor frame. • Remove any obstructions causing the belt to rub or bind. • Secure locked sprockets. • Ensure sprockets are square.
	Uneven or incorrect product loading	<ul style="list-style-type: none"> • Add support under belt loading area. • Consider adding a chute to orient conveyed material so it travels in the same direction as the belt and at a similar speed. • Consider adding a side guide to the opposite side of the belt for side-loaded conveyors.
	High impact in infeed area	Add an impact plate or chute above the belt to absorb initial shock and reduce or eliminate belt impact. Mount the impact plate at an angle so product travels gently onto the belt.
	Improper flight support on returnway	Ensure return rails support flighted belts on both sides of the belt along the
Impact damage to belt	Uneven or incorrect product loading	<ul style="list-style-type: none"> • Add support under belt loading area. • Consider adding a chute to orient conveyed material so it travels in the same direction as the belt and at a similar speed. • Consider adding a side guide to the opposite side of the belt for side-loaded conveyors.
	Application is outside the performance range of a plastic conveyor belt	
Finger transfer plate damage	Incorrect finger transfer plate mounting	<ul style="list-style-type: none"> • Ensure finger transfer plates are not tightened down too firmly on the mounting support surface. • Ensure the finger transfer plates are mounted straight, level, and not bent or twisted.
	Excessive heat at finger transfer plate area	If belts in a high heat area expand beyond the range allowed by the slotted holes on the finger transfer plate
	Raised Rib belt not tracking properly	Correct belt tracking. See Troubleshooting .
	Material buildup between Raised Ribs	<ul style="list-style-type: none"> • If possible, eliminate the source of the material buildup. • Routinely inspect and clean any unpreventable debris from the belt.
	Incorrect A or B dimensions	Compare existing shaft location to that recommended for A and B conveyor frame



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	Shaft deflection or twisting	<ol style="list-style-type: none"> 1. Inspect shaft for deflection or twisting. 2. Replace any bent or twisted shafts.
	Sprockets not aligned correctly on shafts	Ensure sprockets are timed identically and all sprocket teeth line up when looking down the shaft. See Sprocket Installation for more information.
Belt develops excessive catenary sag	Incorrect total belt length	<ul style="list-style-type: none"> • Inspect catenary sag at the belt's coldest operating temperature. • If needed, remove rows of modules to shorten the belt and remove excess catenary sag. <p>NOTE: Some belts can only be shortened in two-row increments.</p>
	Insufficient belt tension in high heat applications	If the excess catenary sag is due to thermal expansion from operational temperatures and is not excessive when cold, adding a take-up/tensioning device on the conveyor to compensate for the thermal growth may be necessary. Contact
	Elongation of belt due to initial startup situation or heavy loads	<ul style="list-style-type: none"> • Belts elongate during the initial break-in period. This is a natural part of the belt adjusting to the application and is more noticeable with heavy loads. • Allow the belt to adjust to operating conditions before shortening. • Monitor the belt during this break-in to avoid binding or catching.

Problem	Possible Causes	Solutions
Belt not engaging with drive sprockets	Incorrect belt tension around drive sprockets	Series 2200 and Series 2400 require little tension, but belt length changes and the dynamics of the returnway can cause the belt to skip off the sprockets. A snub roller is recommended to keep the belt wrapped at least 180° around the sprocket.
	Adjustments are needed o belt length due to changes in temperature, load, or wear	If excess belt slack after the drive sprockets causes the belt to bounce off the drive sprockets, installing a snub roller may prevent this. A vertical belt take-up before the first turn may also be needed.
Belt not engaging with drive sprockets	The straight section of belt from curve to drive shaft is less than 1.5 times the belt width. This difference causes the belt to have different pitches at the two belt edges, which results in the belt walking to the outside of the last curve.	Ensure the straight section is at least 1.5 times the belt width.
	Unsupported belt edge leading to the drive sprockets	Install a guide rail on the outside edge of the belt leading to the drive shaft to prevent the belt from walking toward the outside of the last turn.
	Returnway section not vertically parallel with carryway section, which forces the sprocket rotation to be out of line with the belt travel.	Ensure both the carryway and returnway are vertically parallel.
	Locked sprockets and hold down guides are over-constraining the belt.	Ensure only one method of tracking is used—either locked sprockets or hold down guides. NOTE: DO NOT use a hold down AND locked sprockets on Series 2200 or 2400 belts.



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Problem	Possible Causes	Solutions
Excessive wear on the guide rail wearstrip, especially in turns.	PV value of guide rail wearstrip material is exceeded.	<ol style="list-style-type: none"> 1. Check the temperature of the guide rail wearstrip in the transition between straight and turning sections. A sharp rise in temperature indicates the wearstrip material is insufficient for the application. 2. Install guide rail wearstrips with a higher PV. <p>NOTE: Eventually, the guide rail wearstrip stops wearing and the belt edge begins to wear. It is better to replace wearstrips than belts.</p>
	Not enough belt clearance through the section. If the belt is bound through a section, additional compressive and tensile loads are applied to the wearstrip.	<ul style="list-style-type: none"> • Before belt installation, manually pass a piece of belt through all sections and wearstrips to ensure adequate clearance.
	Wearstrips in the turn not smooth or even	<ol style="list-style-type: none"> 1. Check the temperature of the guide rail wearstrip in the turn. A higher temperature on these wearstrips indicates the wearstrip is not smooth. 2. Replace damaged, worn, or incompatible wearstrips as needed. 3. Ensure all wearstrips form a smooth arc for any turn.
Excessive sprocket wear	Unsupported belt edge leading to the drive sprockets.	Install a guide rail on the outside edge of the belt leading to the drive shaft to prevent the belt from walking toward the outside of the last turn.
	Returnway section not vertically parallel with carryway section, which forces the sprocket rotation to be out of line with the belt travel.	Ensure both the carryway and returnway are vertically parallel.
	Locked sprockets and hold down guides are over-constraining the belt.	Ensure only one method of tracking is used—either locked sprockets or hold down guides. <p>NOTE: DO NOT use a hold down AND locked sprockets on Series 2200 or 2400 belts.</p>
Excessive belt edge wear or damage	A catch point on the guide rail wearstrips or hold down wearstrip is snagging an edge.	<ul style="list-style-type: none"> • Remove any catch points and sharp leading edges from all guide rail wearstrips. • Ensure there is clearance between the outer hold down wearstrips and the belt when the belt is at maximum operating temperature. • Ensure outer hold down wearstrips do not catch the belt.
	Inappropriate guide rail wearstrip material.	<ul style="list-style-type: none"> • Check the guide rail wearstrip for wear. Wearstrips with little wear may have too high a PV value for the belt. • Replace any acetal, nylon, PTFE, etc. wearstrips with a plain or lubricated UHMW wearstrip. <p>NOTE: Eventually, the guide rail wearstrip stops wearing and the belt edge begins to wear. It is better to replace wearstrips than belts.</p>
Belt rod moving out of belt	Rods not correctly installed.	Reinstall the rod. See belt series and style instructions for specific splicing instructions.
Belt rod moving out of belt.	A snag or wear damaged the rod.	<ul style="list-style-type: none"> • Inspect the belt for signs of damage. • Replace any damaged belt edge modules or rods. • Repair any snags on the conveyor frame.
	If Series 2200 or Series 2400 belt, the rod tip has a sharp angle.	Always use a blunt cut on rods. An angled cut can cause the rod tip to move past the retention feature.



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