

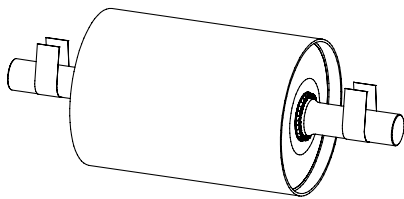


# Installation and Operation Instructions

## Conveyor Pulleys

### Installation Instructions:

1. Failure to follow the installation and operation instructions outlined below could result in serious injury. Follow all safety guidelines that pertain to your company's lockout/tagout/blockout procedures before performing maintenance or installation.
2. Remove debris from underside of the belt prior to installation. Failure to do so can result in belt damage and/or premature pulley wear.
3. Use appropriate lifting equipment when handling the pulley for assembly and installation. Never lift the pulley using the bearing housing. Lifting hardware on the bearing is not designed to support the pulley assembly weight.
4. Place weight rated nylon lifting straps around the pulley shaft between the pulley face and bearings. Place the straps as close to the pulley face as possible. Never use a chain to move a conveyor pulley assembly.



Alternate lifting diagram for pulley assemblies

5. Pulleys delivered on skids or cradles can be lifted with fork trucks, if trucks are rated for the weight capacity and forks extend through the skid or cradle.

### Assembly Procedure:

1. Identify all components for assembly and any specific assembly instructions or component requirements.
2. Clean all components and make sure shafts and bore of pulley hub and locking devices are free of dirt or contamination. Remove any protective coating that may be on shaft surfaces.
3. Place and secure pulley on secure platform or bench for assembly.
4. Install locking device onto the shafts and into the hubs of the pulley by following manufacturer's instructions. Do not apply lubricant to the hardware when installing as this can lead to premature failure.
5. Refer to locking device instruction manual for tightening and torque requirements. Use calibrated torque wrenches to tighten hardware loosely and ensure shaft is in the proper position.
6. Accurately torque the locking hardware per manufacturer's instructions. Confirm pulley is in correct position and properly aligned, as the axial position can move during tightening of locking hardware.
7. Check mounting surfaces and holes before mounting bearings and housing. Follow manufacturer's instructions for proper installation and alignment to ensure bearing and seal life. Secure bearings to the shaft and tighten the fixed/non-expansion bearing before tightening the floating/expansion bearing.
8. If coupling hubs are required, follow manufacturer's installation manual. Verify all coupling components are placed onto shaft before coupling hub. Install hubs based on clearance or interference fit instructions.
9. If any other components are required, follow manufacturer's instruction manual.
10. If not placed into service immediately, protect the entire pulley assembly from direct sunlight, rain, snow, or larger temperature and/or humidity variations.

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### General Operation Instructions:

1. Inspect and torque locking device weekly in the first month of operation. If bolts are loosening, review pulley load and shaft deflection. Excessive shaft deflection may cause bolt retention issues. Do not over torque bolts.
2. Refer to the bearing manufacturers installation, operation and maintenance schedule for all bearing related instructions.
3. Inspect pulley periodically for lagging wear, cracks and rim adhesion. Deterioration may occur if oil, grease, kerosene, solvents or other chemicals remain on lagging.
4. Inspect pulley end discs and shell for cracks and signs of stress fatigue. Never operate a pulley with a cracked end disc and shell. Never drill, weld or make modifications to pulley end disc and shell as this may lead to pulley failure.
5. Inspect all take-up, snub and belt tensioning devices to ensure proper function and movement during operation. Improper belt tensions may result in component failure or belt and pulley wear due to excessive slipping.
6. Monitor bearings for proper alignment, movement and heat during operation. Use a dial indicator, check both elevation and squareness to the shaft is within manufacturer's recommended limits. If excessive movement occurs during operation, the bearing may not be properly secured to the shaft or bearing wear has occurred. A rise in temperature could indicate bearing failure. Re-lubricate per manufacture's recommendation.
7. Modification, repair or other work on a conveyor pulley assembly should not be performed without prior written consent of Martin Sprocket & Gear.