

Chain Cross Transfer Maintenance & Service

This section will describe service procedures for major mechanical elements of a chain cross transfer.

⚠ WARNING ⚠

- Only qualified and trained personnel should perform the disassembly and assembly of electrical and mechanical components.
- Before attempting any maintenance on this equipment all involved personnel should follow plant internal regulations along with any state, federal, or province regulations. Do not begin any repair procedure until the proper shutdown procedures and the appropriate power lockout procedures have been applied.

Chain Tension Adjustment

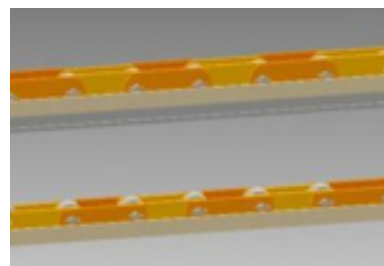
- 1 Lock out power to the Cross Transfer using your plant's procedures.



- 2 Remove safety covers.



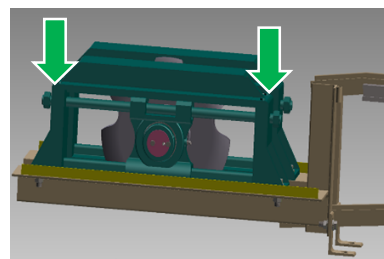
- 3 Before making any adjustments, inspect the chain of the Cross Transfer for signs of wear or damage. Replace any damaged links or components to avoid future issues.



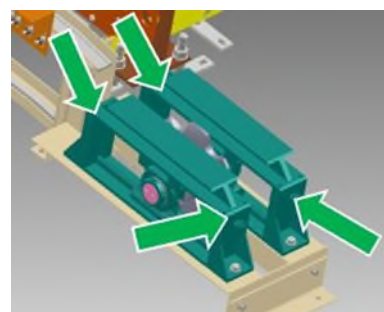
- 4 The Take-Up for the Cross Transfer has two (2) sides for adjusting the tension of the chain on the system. This is found at the tail end of the conveyor and consists of adjustable tensioning screws.



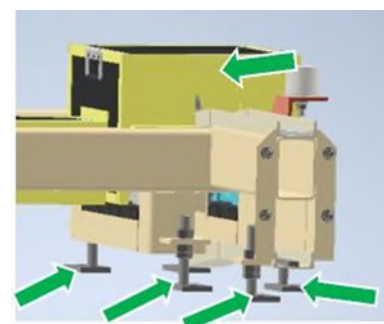
- 5 Locate the four (4) nuts on the end of one side of the Take-Up. These can be adjusted in or out as necessary to tighten or loosen the tension of the chain on the sprocket and must be synced to the same dimensions to avoid wear on the sprocket or chain.



- 6 The same four (4) nuts on the opposite side of the Take-Up should be adjusted in or out as necessary to tighten or loosen the tension of the chain on the sprocket and must be synced to the same dimensions to avoid wear on the sprocket or chain.



- 7 Make sure all floor anchors on the unit are secured before powering up, and all safety covers are back in place.



- 8 Ensure the chain tension has been adjusted to the appropriate tensions for both sides and make sure the tension is the same for both sides, measuring from the center of the sprocket shaft to the front face of the take-up frame on each side ensuring they are equal.



- 9 Restore power to the system and test for proper operation.



Replacing/Repairing the Chain

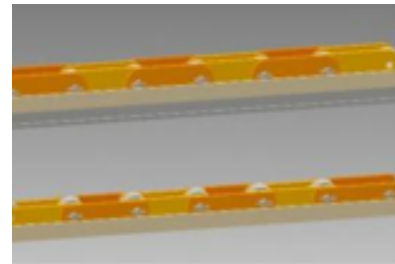
- 1 Lock out power to the Cross Transfer using your plant's procedures.



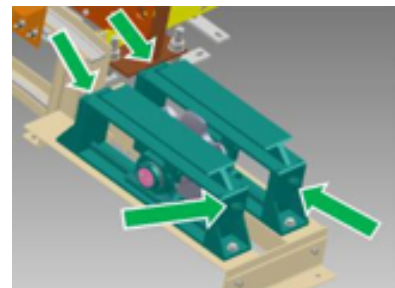
- 2 Remove safety covers.



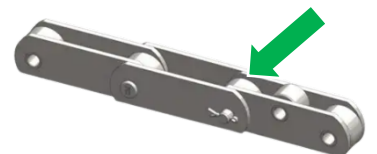
- 3 Locate the connecting link of the chain to confirm it is in a location that is easy to open for removal.



- 4 Loosen the chain tension by adjusting the four (4) nuts located on the side of the Take-Up Assembly.



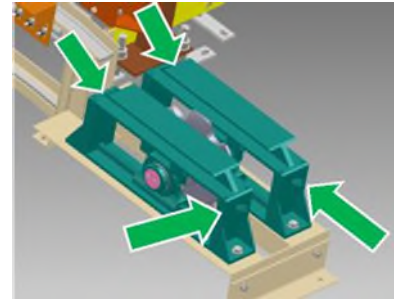
- 5 Open the connecting link of the chain.



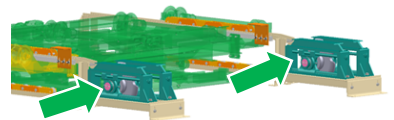
- 6 Pull the chain back through the Drive Assembly Sprocket and Take-Up Sprocket. Reconnect the connecting link to secure the chain.



- 7 Tighten the tension of the chain by adjusting the four (4) nuts on the Take-Up Assembly Sprocket. It is imperative that both frames be tightened either simultaneously, or individually, the amount of incremental travel should be small to prevent excessive misalignment of one from relative to the other.



- 8 Ensure the chain tension has been adjusted to the appropriate tensions for both sides.



- 9 Before powering up the unit, ensure all safety covers are back in place.



- 10 Restore power to the system and test for proper operation.



Replacing the Sprocket

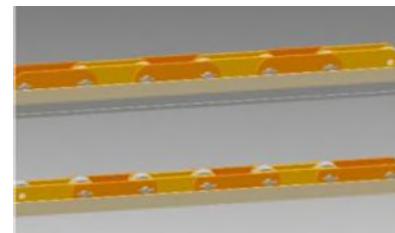
- 1 Lock out power to the Cross Transfer using your plant's procedures.



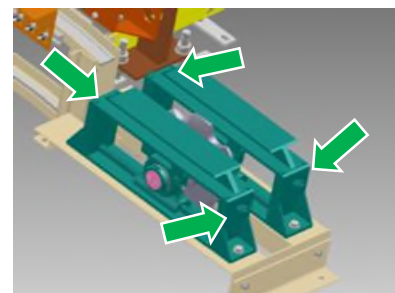
- 2 Remove safety covers.



- 3 Locate the connecting link of the chain to confirm it is in a location easy to remove the chain.



- 4 Loosen the tension of the chain by adjusting the four (4) nuts on the side of the Take-Up Assembly.



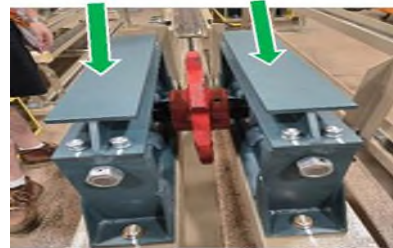
- 5 Open the connecting link of the chain to remove it from the Sprocket.



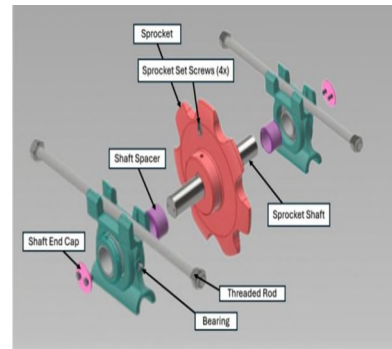
- 6 Remove the chain from the Sprocket to be replaced.



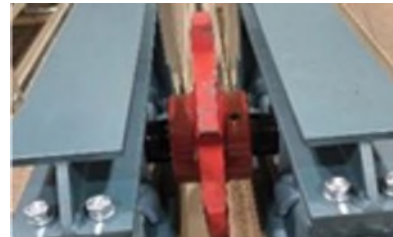
- 7 Remove the top I-Beams of the Take-Up Assembly by removing the eight (8) Hex HD Cap Screws on each end.



- 8 Lift the entire Sprocket Assembly including the Bearings from the lower frame to remove the Sprocket. Remove the Shaft End Cap, Bearing, Sprocket Set Screws, and Spacer on one side to fully remove the Sprocket. Reverse the steps to reinstall the new Sprocket.



- 9 Pull the chain back through the Drive Assembly Sprocket and Take-Up Sprocket. Reconnect the connecting link to secure the chain.

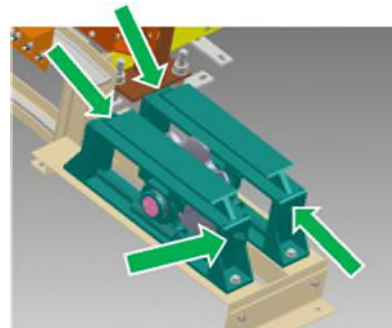


- 10 Replace the top I-Beams of the Take-Up Frame Assembly by securing the eight (8) Hex HD Cap Screws on each end.



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Tighten the tension of the chain by adjusting the four (4) nuts on the Take-Up Assembly Sprocket. It is imperative that both frames be tightened either simultaneously, or individually, the amount of incremental travel should be small to prevent excessive misalignment of one frame relative to the other.


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Ensure the chain tension has been adjusted to the appropriate tensions for both sides.


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Before powering up the unit, ensure all safety covers are back in place.


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Once chain tension has been adjusted to the appropriate tension on both sides, restore power to the system and test for proper operation.

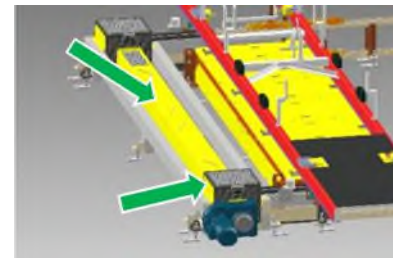


Replacing a Shaft

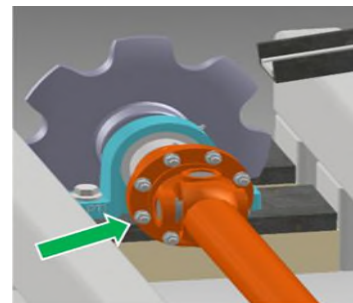
- 1 Remove and lock out power to the Cross Transfer using your plant's procedures.



- 2 Remove the cover guards over the shaft and drive assemblies.



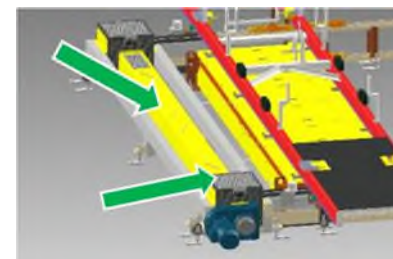
- 3 Remove the bolts securing the shaft to the companion flanges on both ends.



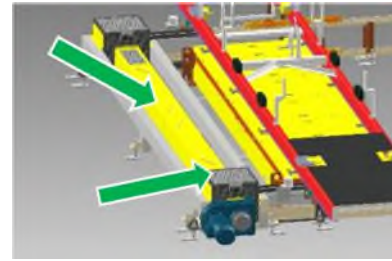
- 4 Remove and replace the cardan shaft.



- 5 Return and tighten the bolts, securing the shaft to the companion flanges on both ends, torqued to specifications.



- 6 Return the cover guards over the shaft and drive assemblies.



- 7 Restore power to the system and test for proper operation.

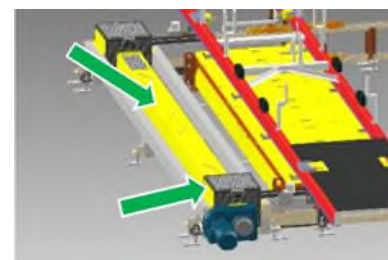


Replacing a Gearmotor

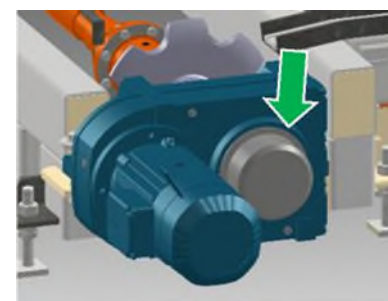
- 1 Remove and lock out power to the Cross Transfer using your plant's procedures.



- 2 Remove the cover guards over the shaft and drive assemblies.



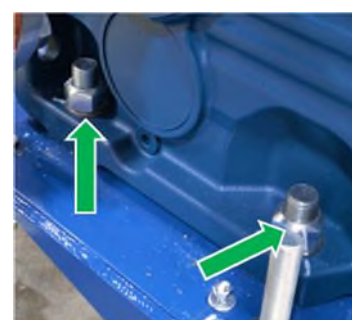
- 3 Disconnect the gearmotor cabling.



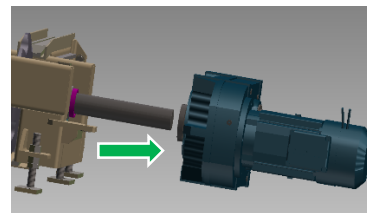
- 4 Loosen the lock nuts and set screws from the gearmotor shaft.



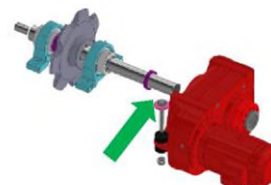
- 5 Remove the M24 bolts (4) securing the gearmotor to the base plate.



- 6** Remove the gearmotor.



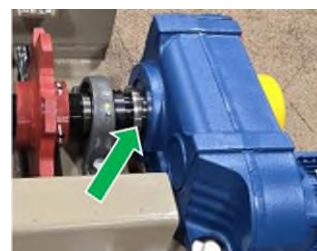
- 7** Inspect the gearmotor shaft and key to confirm they are still serviceable. Replace the original gearmotor with a new gearmotor.



- 8** Hand tighten the M24 bolts (4) at the gearmotor base.



- 9** Secure the lock nuts and set screws on the gearmotor shaft.



- 10** Tighten the M24 bolts (4) securing the gearmotor to the base plate.



- 11** Restore power to the system and test for proper operation.

