Chain Cross Transfer Maintenance & Service

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

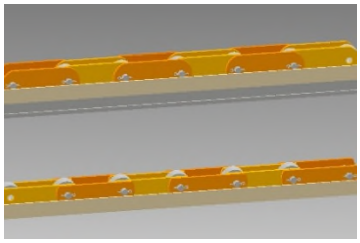
⚠ WARNING ⚠

- 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.

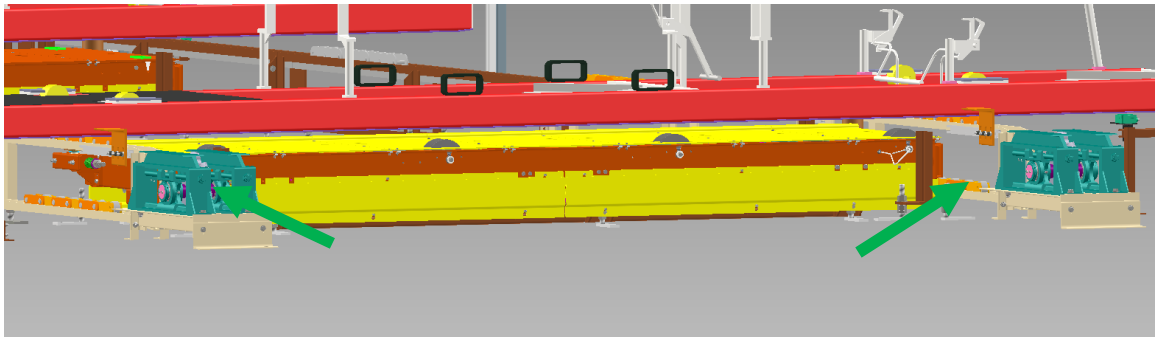
Chain Tension Adjustment

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

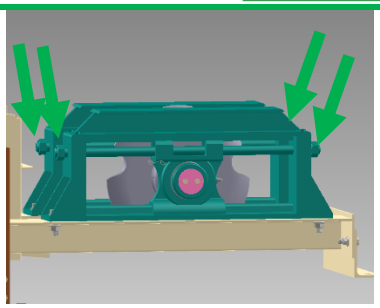
2 Before making any adjustments, inspect the chain of the Cross Transfer for signs of wear or damage. Replace any damaged links or components to avoid future issues.



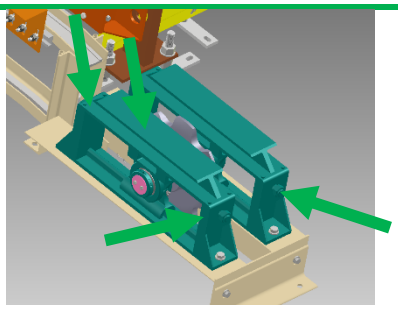
3 The Take-Up for the Cross Transfer has two (2) sides for adjusting the tension of the chain on the system. This is found at the tail end of the conveyor and consists of adjustable tensioning screws.



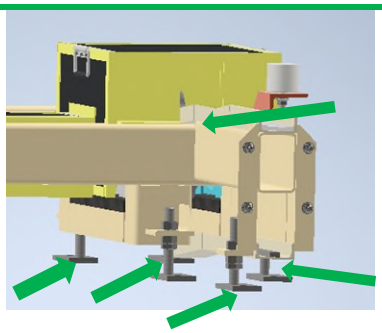
4 Locate the four (4) nuts on the end of one side of the Take-Up. These can be adjusted in or out as necessary to tighten or loosen the tension of the chain on the sprocket and must be synced to the same dimensions to avoid wear on the sprocket or chain.



5 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.



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

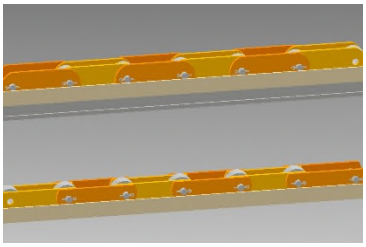


7 Once the chain tension has been adjusted to the appropriate tension on both sides, restore power to the system and test for proper operation.

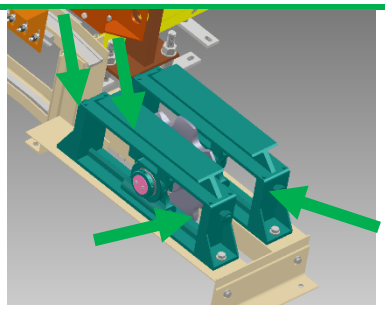
Replacing/Repairing the Chain

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

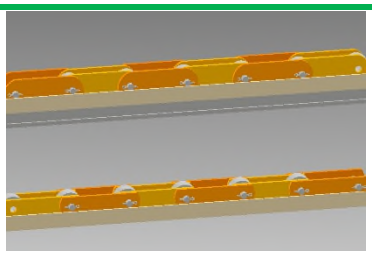
2 Locate the connecting link of the chain to confirm it is in a location easy to open for chain removal.



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

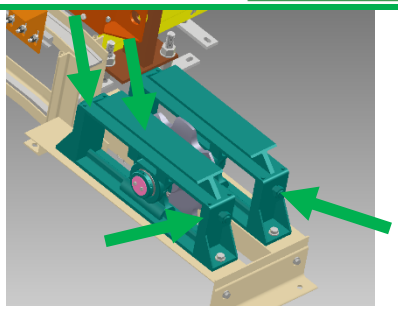


4 Open the connecting link of the chain to free it from the sprocket. Locate section of the chain to be repaired/replaced. Confirm the number of chain links required.

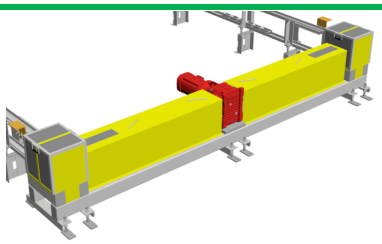


5 Pull chain back through the Drive Assembly sprocket and Take-Up sprocket. Reconnect the connecting link to secure chain.

6 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 simultaneous, or if individually, the amount of incremental travel should be small to prevent excessive misalignment of one frame realtive to the other.



7 Before powering up ensure all safety covers are back in place.

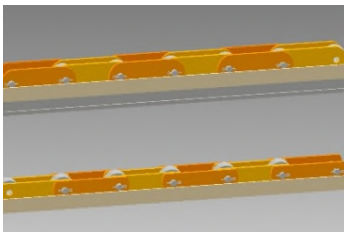


8 Once the chain tension has been adjusted to the appropriate tension on both sides, restore power to the system and test for proper operation.

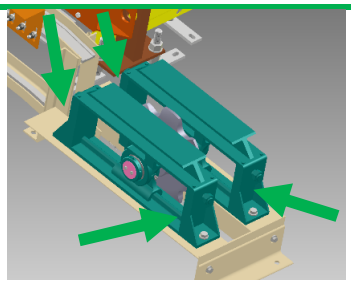
Replacing the Sprocket

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

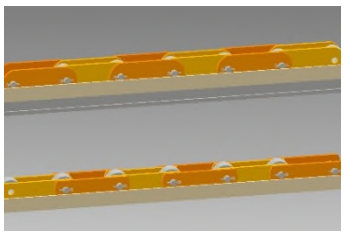
2 Locate the connecting link of the chain to confirm it is in a location easy to open it for chain removal.



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



4 Open the connecting link of the chain to free it from the sprocket.



5 Remove chain from sprocket to be replaced.

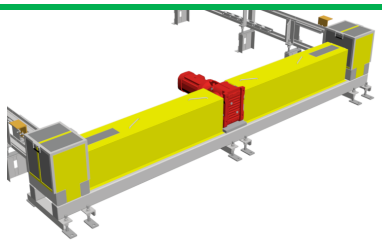
6 Remove the top I-beams from the Take-Up frame assembly by removing the eight (8) hex HD cap screws on each end. Remove and replace the damaged sprocket.

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

8 Pull the bearings and shaft assembly out of the lower frame.

9 Replace the top I-beams of Take-Up frame assembly by securing the eight (8) hex HD cap screws on each end.

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

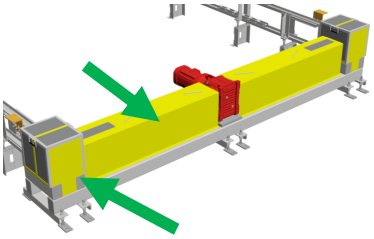


11 Once the chain tension has been adjusted to the appropriate tension on both sides, restore power to the system and test for proper operation.

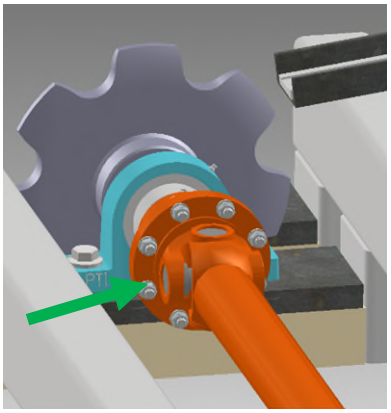
Replacing a Cardan Shaft

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

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

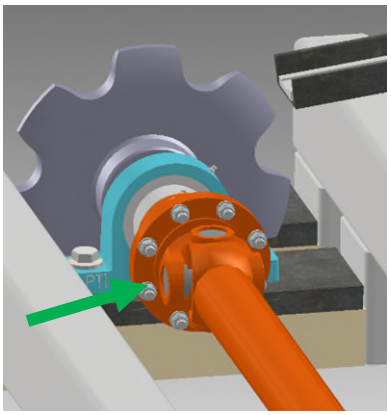


3 Remove the bolts securing the cardan shaft to the companion flanges on both ends.

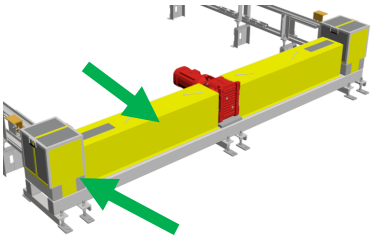


4 Remove and replace the cardan shaft.

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



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

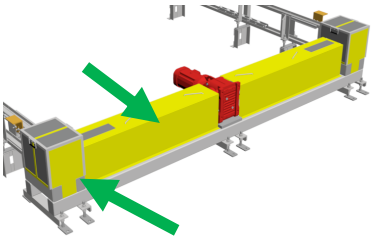


7 Restore power to the system and test for proper operation.

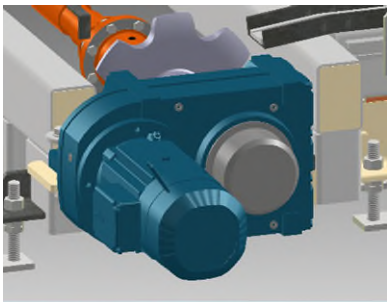
Replacing the Gearmotor

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

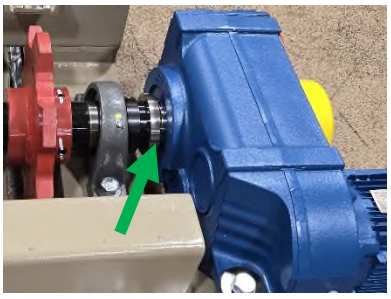
2 Remove the cover guards over gearmotor and the cardan shaft.



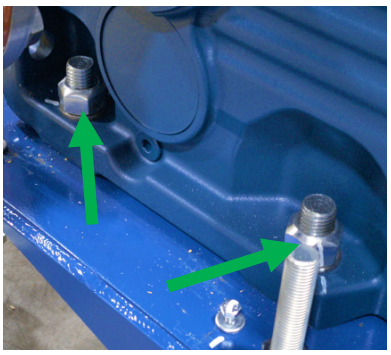
3 Disconnect the gearmotor cabling.



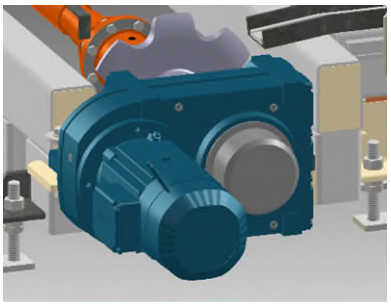
4 Loosen the lock nuts and set screws from the gearmotor shaft.



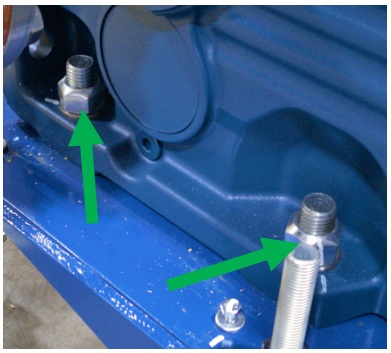
5 Remove the M24 bolts (4) securing the gearmotor to the base plate.



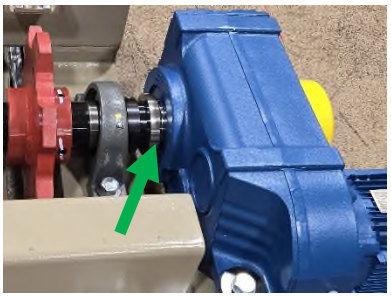
6 Inspect gearmotor shaft and key to confirm they are still serviceable. Replace the original gearmotor with a new gearmotor.



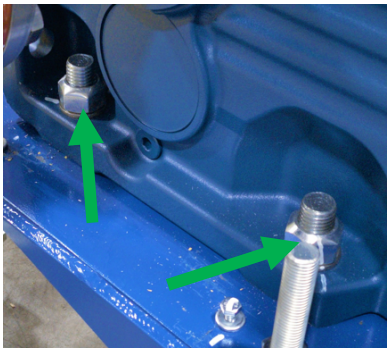
7 Hand-tighten the M24 bolts (4) at the gearmotor base.



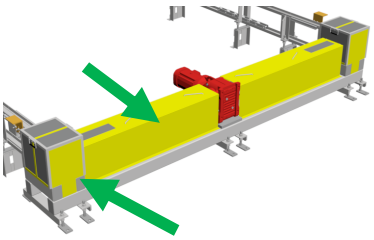
10 Secure the lock nuts and set screws back on the gearmotor shaft.



11 Torque the M24 bolts (4) securing the gearmotor to the base plate.



12 Reconnect wiring to gearmotor and return the cover guards over gearmotor and the cardan shaft.



13 Restore power to the system and test for proper operation.