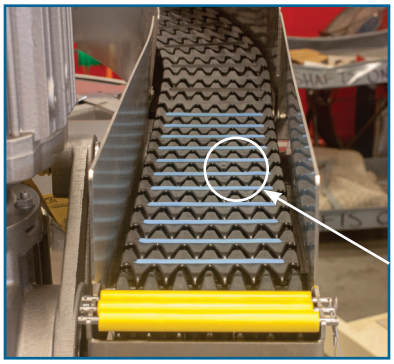
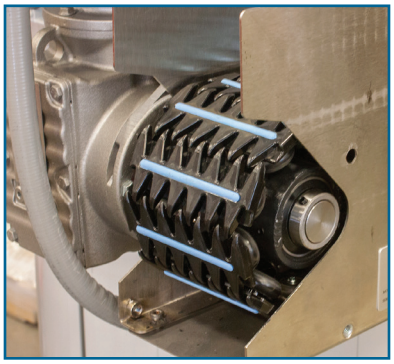
Shortening the Spiral Chain.

It is important to keep the chain in tension at all times. Failure to do so will cause damage to slats and carriers. A chain tensioner is provided to take up the slack as the chain stretches, but the chain must be shortened when the chain stretches beyond the tensioner's capacity to compensate. The chain needs to be shortened when the gas spring is extended more than 170 mm. This normally happens during the first 200 hours of operation and may be required several times during the first year of operation, depending on the length of chain, load weight and chain speed. Shortening of the chain can only take place at the in or outfeed sprockets and can be done most conveniently at the low level. The following outlines the procedure for the shortening the chain:



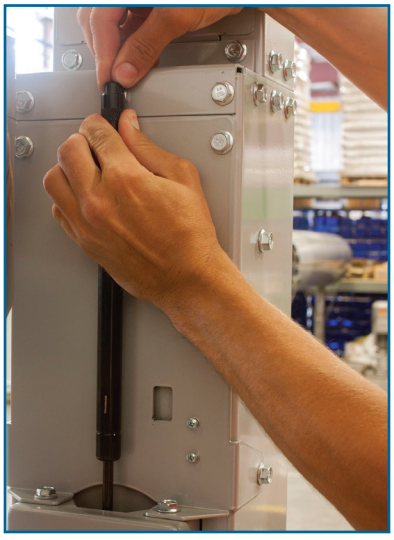
Find Master Link

Locate master links by the blue friction insert. Several master links are provided in a row to make shortening fast and easy. Position slats with master links over the end sprocket. Remove transition roller and assembly



Lock out / Tag Out (LOTO)

Follow established plant LOTO procedures for all energy sources to the spiral.

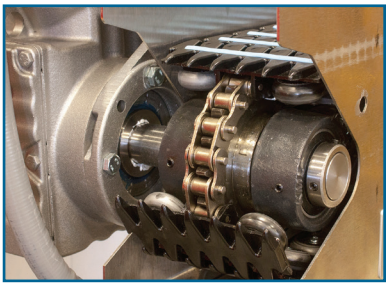


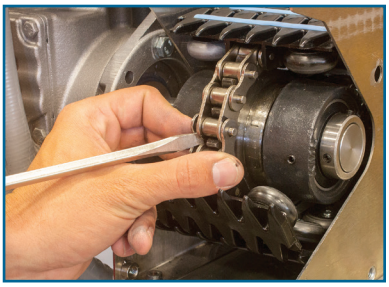
Release Chain Tensioner

Rotate the quick disconnect on the top of the gas spring to release it from the support pin. Lift the gas spring assembly up and secure and this will lift the tensioning bar to achieve maximum chain slack.

Remove slats

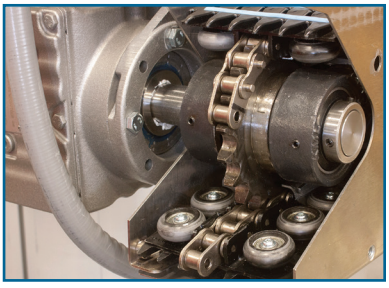
The slats are a one piece design with the carrier bearings attached. Use a flat head screwdriver to slightly pry the slat away from the chain pins, and remove the slat. You will need to remove at least 2 slats to remove 1 chain link.

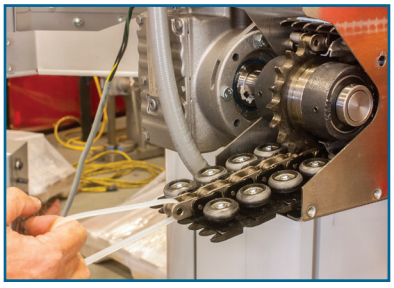


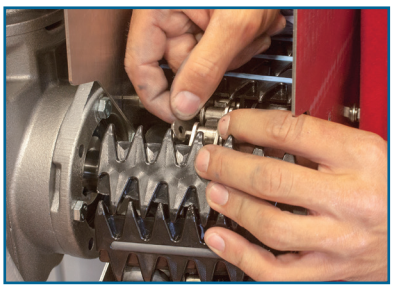


Remove Chain Link

Follow the same procedure to remove one or more slats and corresponding chain links.





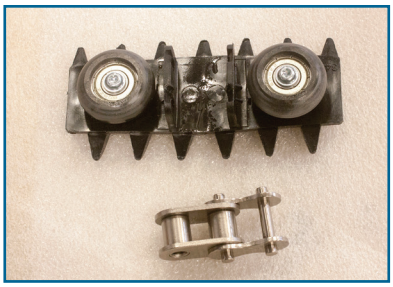


Reconnect chain

Pull chain end to end over the sprocket as indicated in picture.

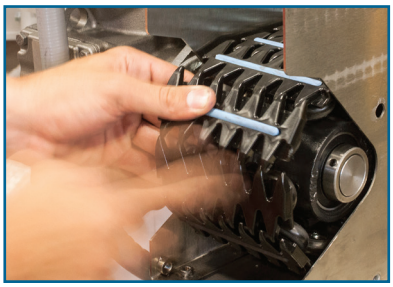
Secure master link

Put the master link back in place.



Count removed parts

If 1 link has been removed, you should have loose 1 slat, 1 link and 1 master link connector as shown in the picture. Always make sure that you have not left any parts inside the spiral before reinstalling the slat assembly.



Reinstall slats

The slats lock over the chain pins. Make sure the lock tab is not damaged and replace slat if necessary. The tab will assure that the slat is locked in place. Make sure that the slat is in the proper orientation for correct slat nesting. The slat will snap into place over the chain pins with either hitting it your hand or a rubber mallet.

Reinstall end cover and transition rollers

Reconnect the gas spring to the support pin.

RYSON