Kodak

Automatic Pallet Loader

Adjusting the Picker Gantry belts

Document Number
719-00996A-A

29 Apr 2008

Copyright 2008 Kodak. All rights reserved.

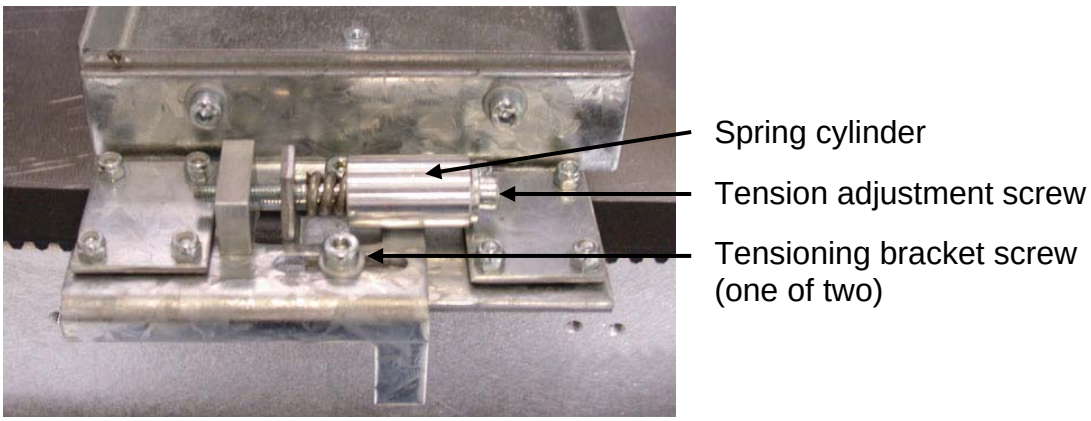
1. OVERVIEW

The picker/pusher gantry is driven by two belts—one on either side of the gantry. If the belts have been temporarily removed for shipping or have been replaced, then the belt tension must be adjusted. Also, if either or both belts have been replaced or removed, then the belts must be synchronized after they have been tensioned to ensure that the picker and pusher are square with each other.

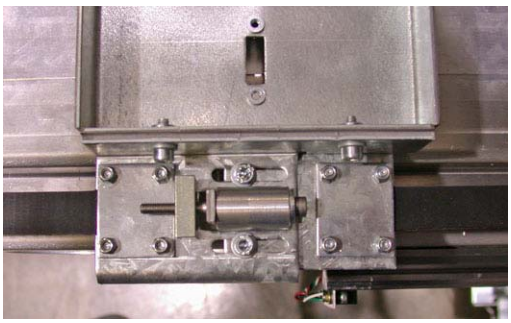
2. ADJUSTING THE BELTS

The procedure for adjusting the tension of the two belts is identical. This procedure will describe adjusting the one side only.

1. If the belt was temporarily removed from the gantry extension pulleys for shipping purposes, then uncoil it from the shipping position and install it over the pulley—you may need to loosen the two tensioning bracket screws on the bracket to get the belt over the pulley.



2. With the tensioning bracket screws loose, tighten the tension adjustment screw until the spring is compressed inside the spring cylinder. There should only be enough friction on the spring cylinder so that the cylinder can still be turned using your fingers.



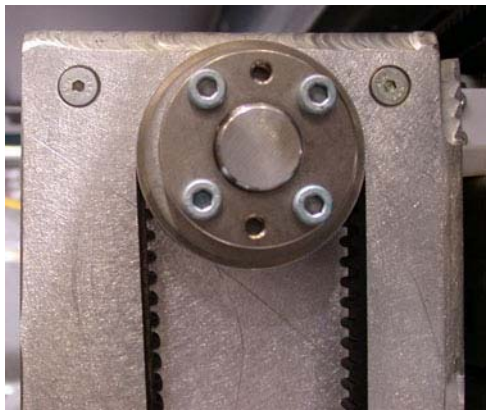
3. Tighten the two tensioning bracket screws.
4. Install and adjust the belt on the opposite side if necessary.

3. SYNCHRONIZING THE BELTS

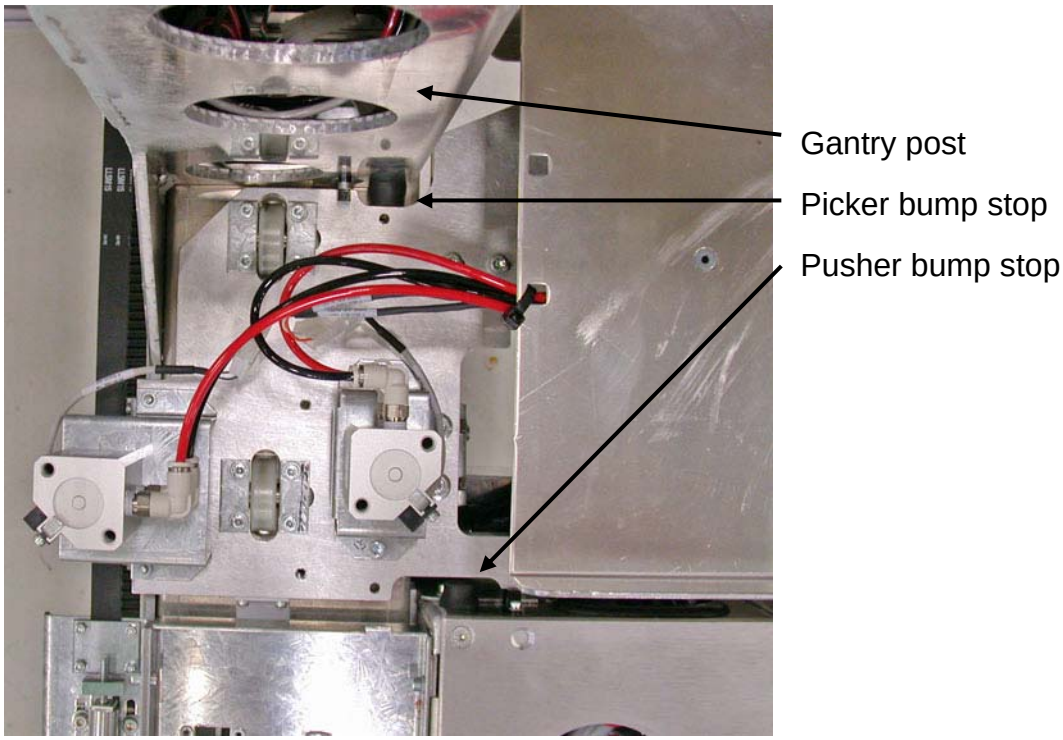
After adjusting the two picker gantry belts, the belts must be synchronized to ensure smooth movement of the gantry and to ensure that the picker and gantry are square to each other. To do this:

1. Loosen, but do not remove, the four pulley shaft coupling screws on the eject side of the gantry (top pulley). This will allow the pulley to rotate on the shaft.





2. Push the picker to the front of the APL until the two picker bump stops are up against the picker gantry posts—there is one bumper on either side (the eject side bump stop is shown below).



3. Similarly, push the pusher to the front of the APL until the two pusher bump stops are up against the picker.
4. On one side of the picker gantry, remove the two screws on the gantry that secure the pusher safe zone strip (directly behind the tensioner bracket). Lay one of the alignment jigs on top of the safe zone strip with the angled part of the jig against the tensioner bracket. Insert the two fastening screws but do not tighten them yet.



5. Apply pressure to the jig/pusher with your thumb to ensure that the bump stops are tight and tighten the screws to secure the jig in place.
6. Similarly, install the alignment jig on the other side of the gantry.
7. With both jigs installed, clamp the vertical portion of the pusher belt together so that the belt teeth facing each other mesh to lock the belt in place.
   This is important to avoid belt stretch when tightening the shaft coupling.
   Note: Do not over-tighten the clamp (if using a C-clamp for example) to avoid damaging the belt.



8. Tighten the four pulley shaft coupling screws in a star pattern (similar to the method used for vehicle tires). Do not over tighten the screws.

9. Remove the belt clamp.
10. Remove the two alignment jigs and return the two screws in place on both sides of the gantry.
11. Move the picker and pusher forwards and backwards a few times and check that they still aligned. Realign if necessary.

The belt synchronization is complete.