

SERVICE BULLETIN

Subject: GS-X Tower-Down Pivot Bearings

Date: 12/1/00

Distribution: Select GS-X Pinsetter Customers

Letter No. CEB00-6

Recently, Brunswick has received reports that the table drive chain pivot bearing (Part # 47-075352-004) has been breaking. If this occurs, the setting table can drop to the pin deck, possibly damaging the stroke limiter assembly, the pin deck, or the setting table itself.

In response to these reports, Brunswick has redesigned the pivot bearing. This new bearing incorporates a metal sleeve around the bearing to increase its reliability.

To prevent any possible problems with your pinsetters, the newly designed pivot bearings will be sent to your center at no cost.

Attached is an instruction sheet detailing the procedure to replace the pivot bearings. Please note that only the bearings on the setting table drive chain should be replaced. The original pivot bearings for the sweep release chain are not at risk and will continue to function as expected.

As a Brunswick customer, we value your business and hope this has not inconvenienced you. If you have further questions, please contact the Customer Response Center at 1-800-323-8141.



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Service Product Engineer



David E. Rice

Director of Service and Installation

Replacing the Setting Table Chain Pivot Bearing

Note: When replacing the pivot bearing make sure that all weight is removed from the table drive chain. Also make sure that the drive chain is installed on the new bearing using the same hole position that was used on the old bearing. Failure to use the same hole position can result in pin handling problems.

1. Turn off the main power switch on the High Voltage box or NexGen Controller and disconnect the incoming 3 phase power.
2. Remove all pins from the pin deck.
3. Lower the sweep to its guarding position.

CAUTION: *Never remove the V-belt with table in highest position or in a partially lowered position. The setting table uses the motor brake and V-belt for position holding. Table will fall to lowest position if belt is removed.*

4. **Firmly grip** the top of the large table V-belt pulley. Use your other hand to lift the motor while carefully rotating the pulley. Watch the V-belt in the motor pulley. The belt must stay seated in both pulleys. **Always lower the motor** so it brakes (stops) the table drive shaft **before** releasing the pulley grip. Refer to Figure 1.

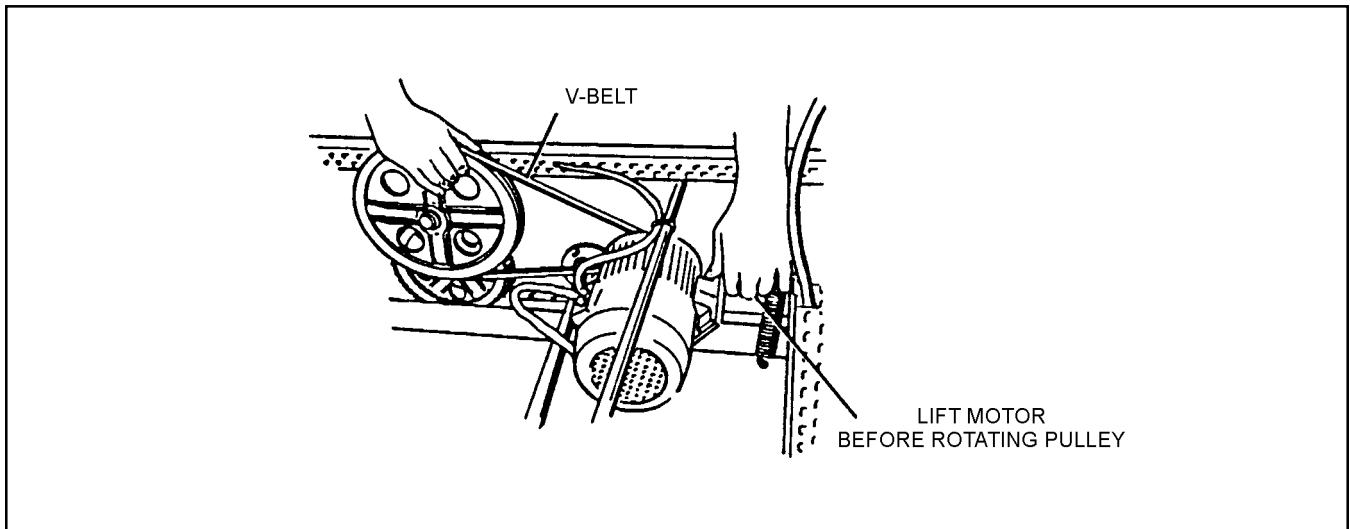


Figure 1. Manually Raising or Lowering the Setting Table.

5. Repeat step 4 until the T-Stop on the left table tube rack is resting **fully** on the stroke limiter plate and there is slack in the table lift chain.
6. Remove the slip pin and outside flat washer from the crank arm shaft and remove the pivot bearing. Refer to Figure 2.
7. Place a small screwdriver through the chain link near the top of the table guide tube. This will prevent the chain from accidentally falling into the tube after the pivot bearing is removed from the chain.
8. Remove the chain from the pivot bearing by removing the chain master link.
9. Install the new pivot bearing on the chain using the same hole location used for the old bearing. Reinstall the master link clip.
10. Remove the screwdriver from the chain link if it was used in step 7.
11. Install the new bearing onto the crank arm. Verify that the inside flat washer is still in place.

12. Install the outside flat washer and slip pin.
13. Repeat the pivot bearing installation for the opposite pinsetter.
14. Connect the incoming 3 phase power and turn on the main power switch on the High Voltage box or NexGen Controller.
15. Run both pinsetters in cycle diagnostics to check proper operation.

Note: If pin loading or pin setting problems occur check the table height adjustment as described in the GS-Series Pinsetter Operation and Service Manual, 47-902735-000.

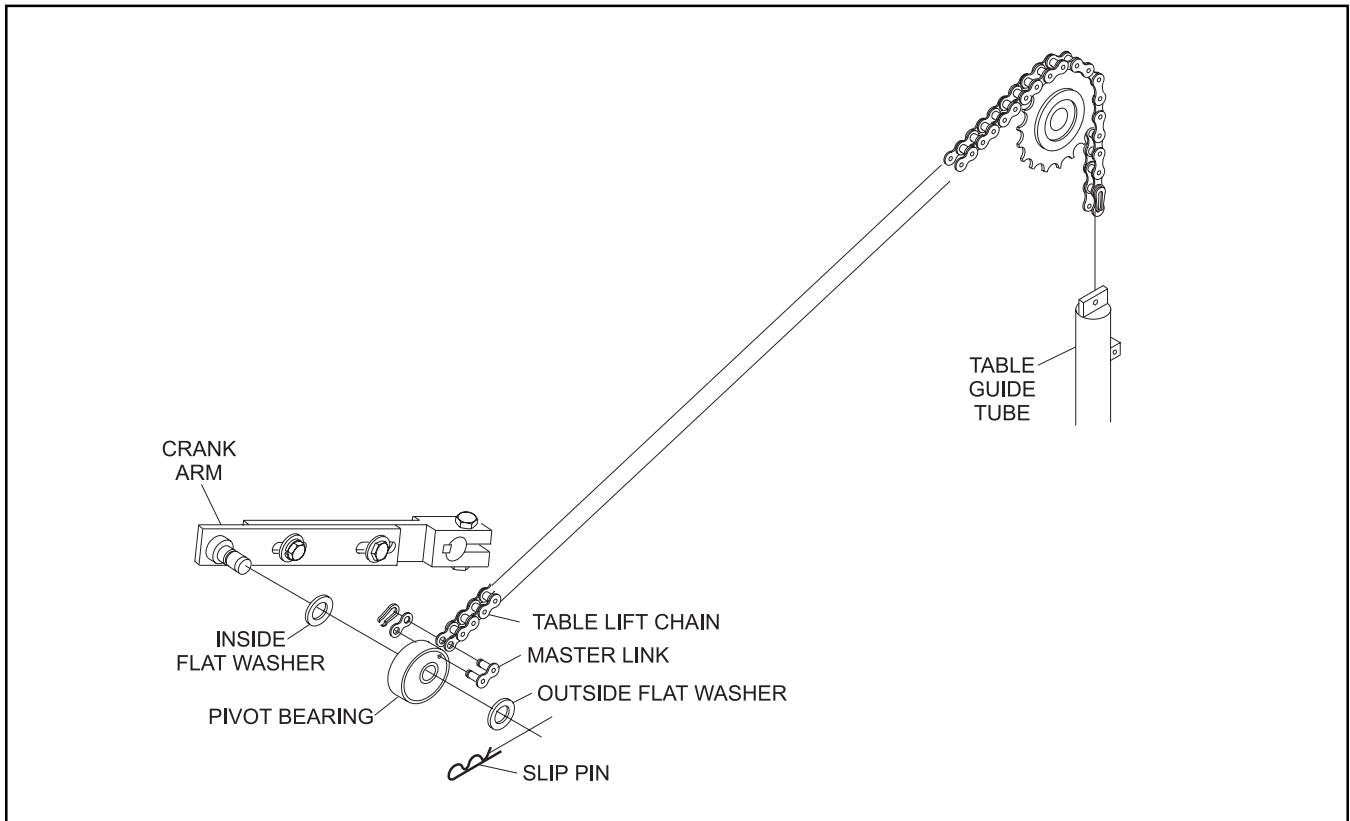


Figure 2. Table Crank Arm and Chain Assembly.