

Authority22 Transition Roller for Existing Machines

Upgrade Packaging

1 per Authority22

14-860241-000

Package – Transition Roller Upgrade Kit



NOTE: Due to installation requirements, the parts will be packaged unassembled.

Overview

These instructions will provide a step-by-step process for replacing the existing transition rollers with the new fixed shaft transition rollers for better performance and maintenance.

Process Requirements

- Removal of both side panels
- Removal of existing transition rollers
- Disconnecting the front support rail from the frame
- Installation of the new transition roller brackets and hardware
- Reassembly of the front support rail and side covers

Tools Required

- 3/32", 1/8", 5/32" Allen wrenches
- 3/8", 11/32", 7/16" combination wrenches or sockets

1. Start with the machine in the Transport position and remove the 7pin side transition roller shaft assembly using a 5/32" Allen wrench. Refer to *Figure 1*.

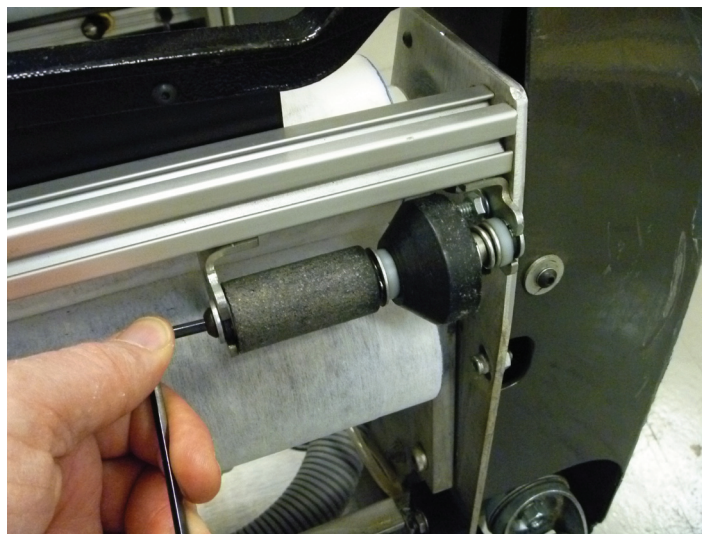


Figure 1

2. Using a 3/8" wrench, remove the two upper bolts in the old bracket. Refer to *Figure 2*.
3. Using a 1/8" Allen wrench, remove the 7pin side cover. Refer to *Figure 3*.

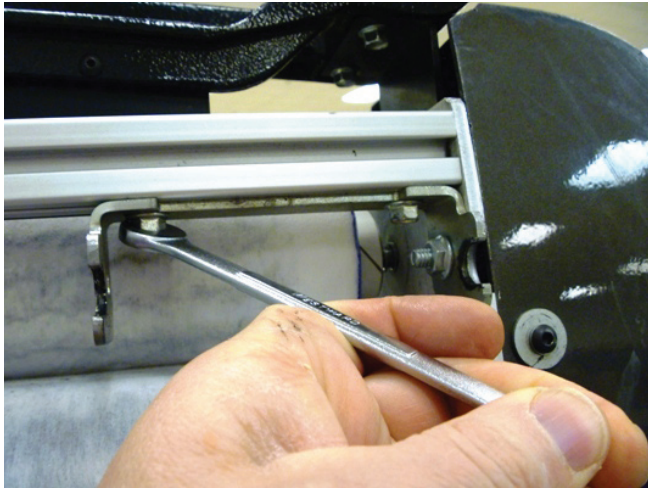


Figure 2

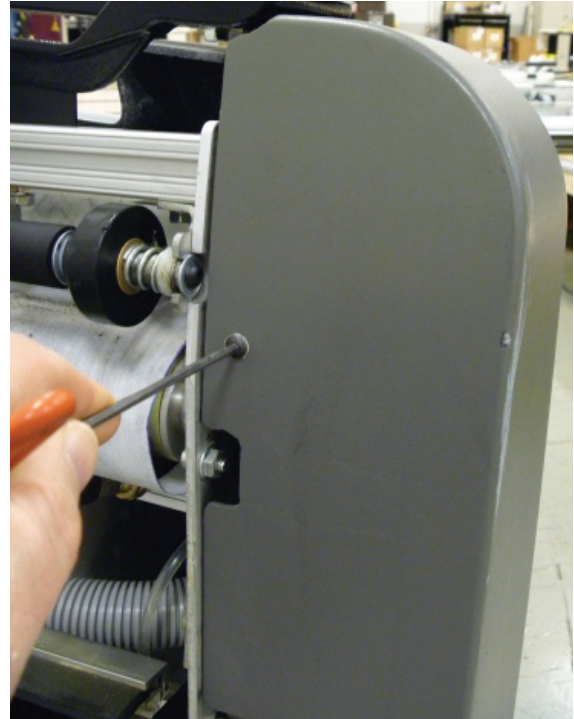


Figure 3

4. Using a 3/8" and a 7/16" wrench, finish removing the old bracket. Refer to *Figure 4*.
5. Remove the take up roll of the duster cloth and lower it out of the way. Refer to *Figure 5*.

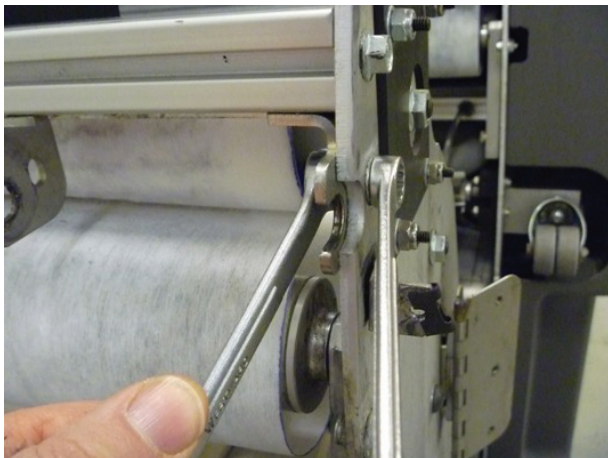


Figure 4



Figure 5

- Using a $\frac{3}{32}$ " Allen wrench and a $\frac{11}{32}$ " socket, remove the four bolts that secure the front bumper side plate to the 7pin side of the machine. Refer to *Figure 6*.
- Using a $\frac{3}{8}$ " wrench, remove the bolt that secures the front support rail to the 7pin side of the machine. Refer to *Figure 7*.

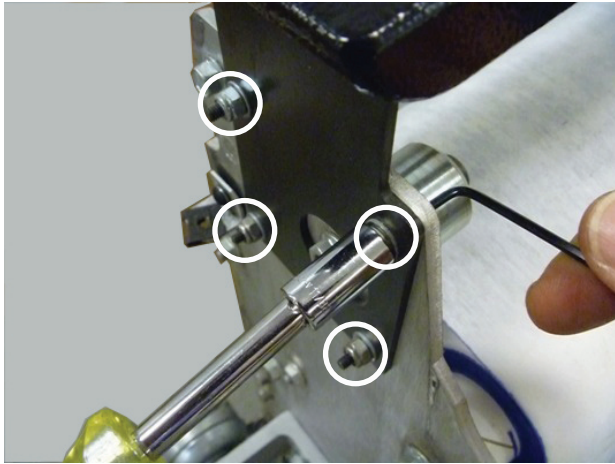


Figure 6

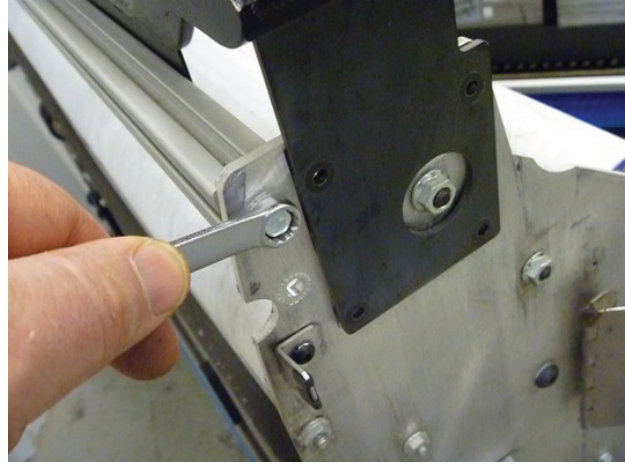


Figure 7

- Lift the support rail away from the side frame and insert the four $\frac{1}{4}$ -20 T-nuts from the kit into the channel, as shown. Refer to *Figure 8*.
- Slide two of the T-nuts to the 10pin side of the support rail. Refer to *Figure 9*.

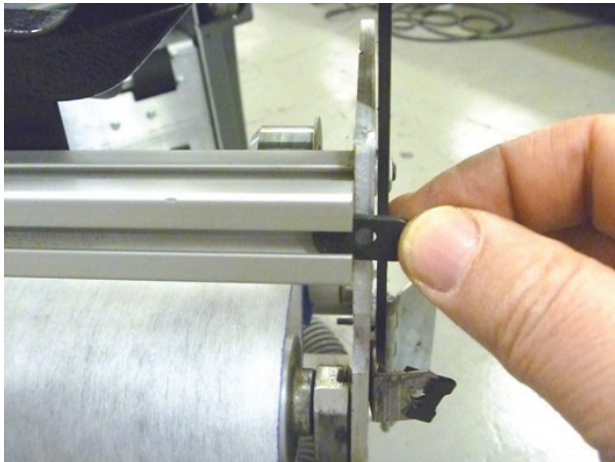


Figure 8

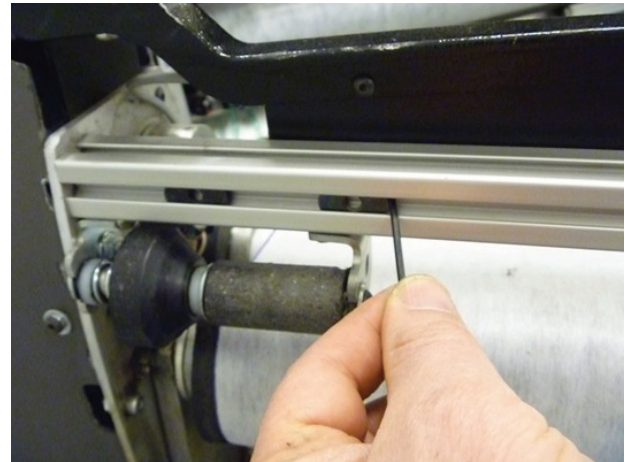


Figure 9

10. Reattach the front support rail to the 7pin side frame of the machine. Refer to *Figure 10*.
11. Reattach the four bolts to the front bumper side plate. Refer to *Figure 11*.

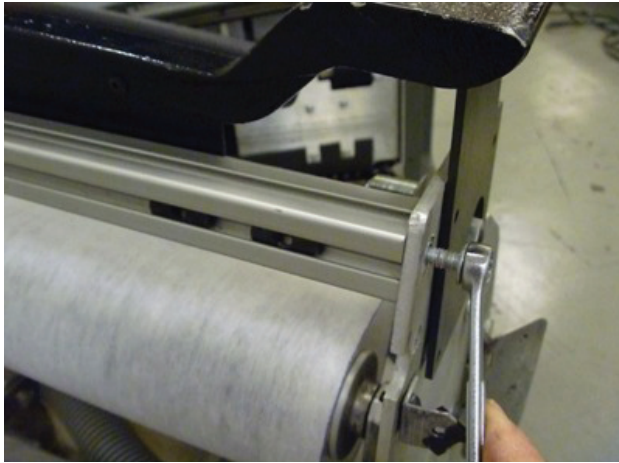


Figure 10

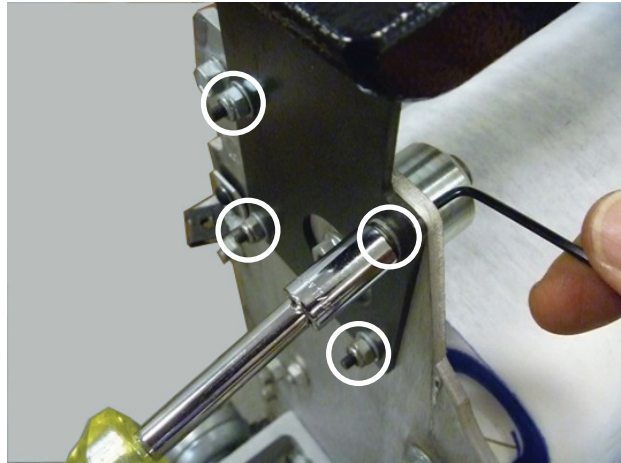


Figure 11

12. With the new bracket flush against the side frame, install the two NEW, replacement, 1/4-20 x 3/8" button head cap screws into the original T-nuts from the old bracket. Do NOT tighten completely at this point. Notice that the side of the bracket with the round hole and the second hole for the side mounting bolt, should be against the frame. Refer to *Figure 12*.
13. Insert the shim plate behind the tab on the new bracket. Refer to *Figure 13*.

i **NOTE:** The shim plate can be placed on the opposite (outside) surface of the tab on the new bracket shown in *Figure 13*, if a height adjustment is needed. This should be done **ONLY** if the lane machine drive wheels lose traction because unlevel lanes or pin decks contact the transition wheels.



CAUTION! When making this height adjustment, the lane machine drive wheels may contact the approach just in front of the foul line and leave an oil film which must be wiped off.

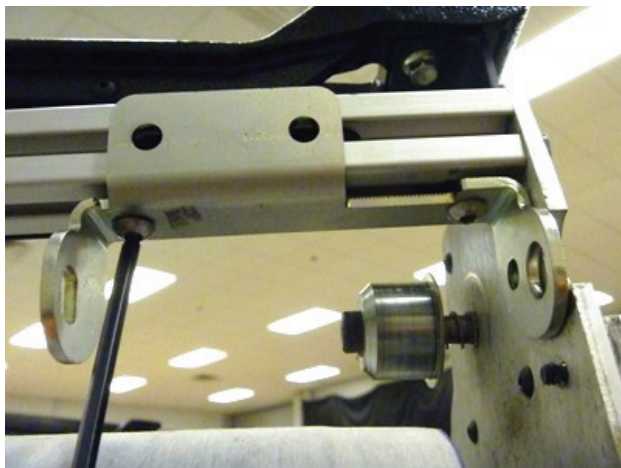


Figure 12

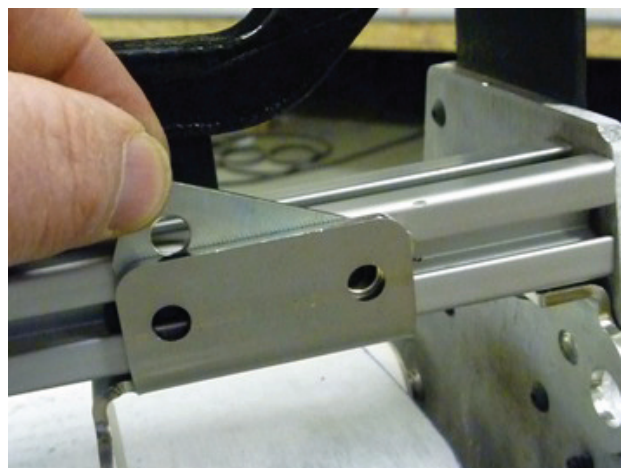


Figure 13

14. Locate the two new T-nuts and install the two new 1/4-20 x 5/8" button head cap screws as shown. Tighten all four (upper and lower) screws. Refer to *Figure 14*.
15. Reattach the original bracket side frame bolt as shown. Refer to *Figure 15*.

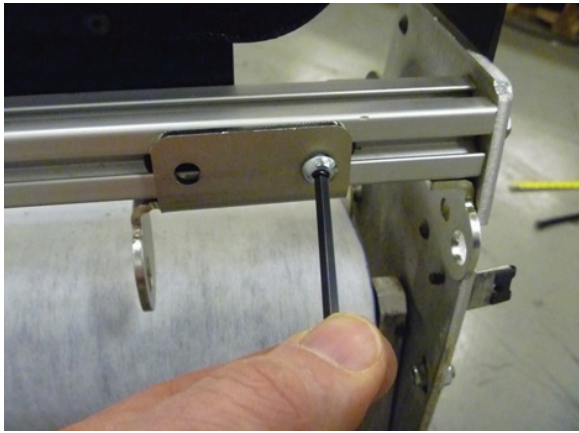


Figure 14

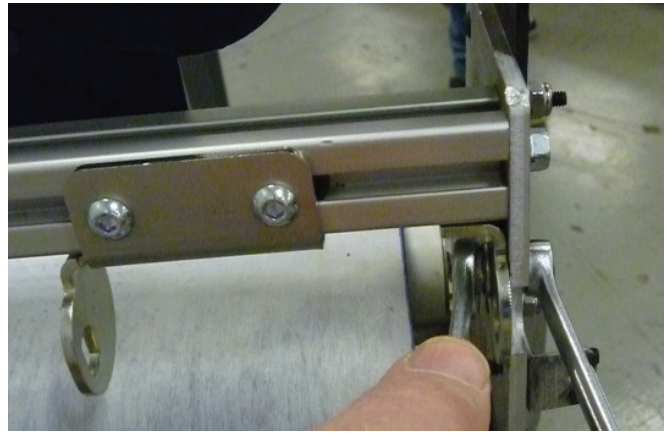


Figure 15

16. Insert the new shaft with the cut out as shown. Refer to *Figure 16*.
17. Install all shaft components as shown. Refer to *Figure 17*.

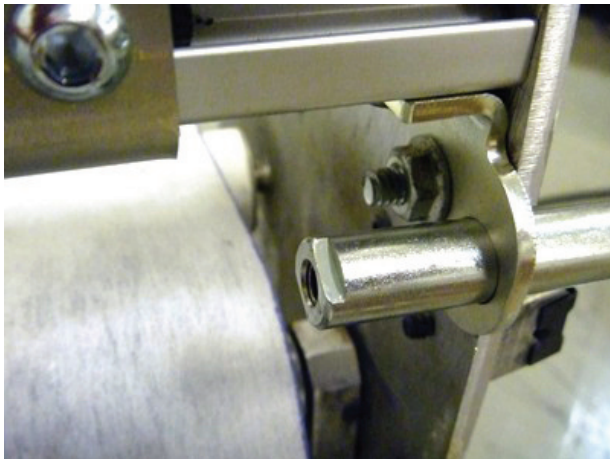


Figure 16

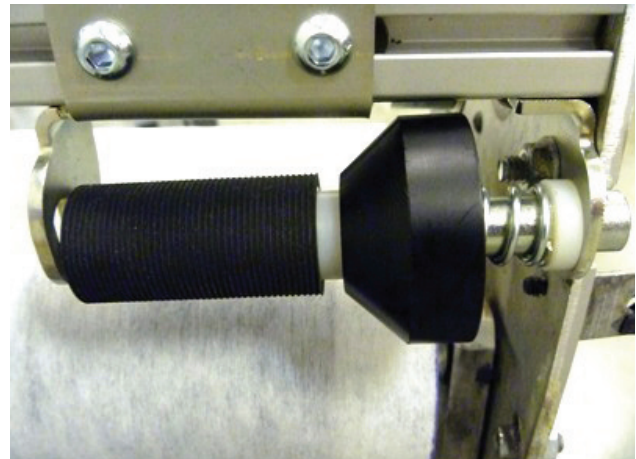


Figure 17

18. Insert the 1/32" nylon washer as shown. Be sure that the washer is on the shaft and does not get pinched between the shaft and the bracket. Refer to *Figure 18*.
19. Insert the end of the shaft into the cutout of the bracket. Refer to *Figure 19*.

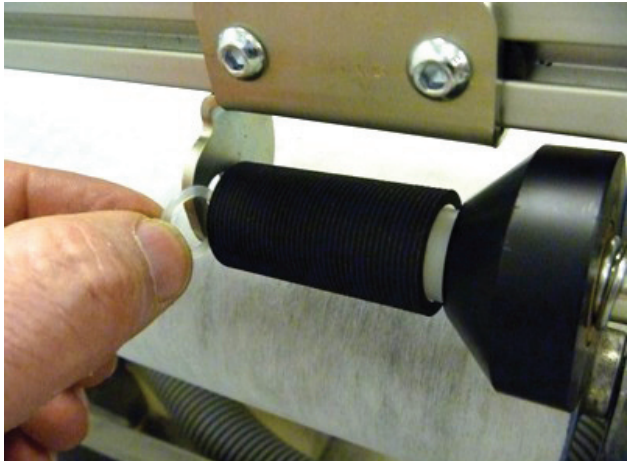


Figure 18



Figure 19

20. Install the 1/4-28 x 1/2" button head screw, internal lockwasher and washer as shown. Refer to *Figure 20*.

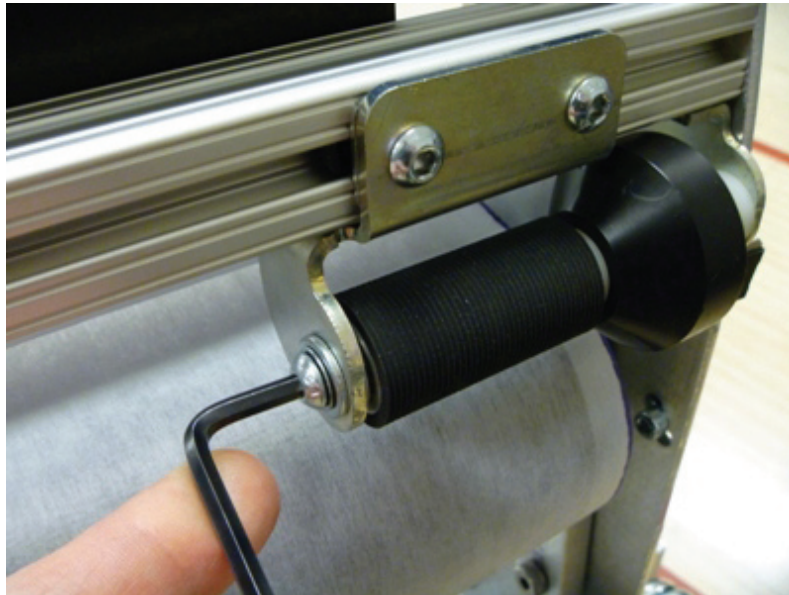


Figure 20

21. Replace the duster take up roll to its original position.
22. Reattach the 7pin side cover.
23. Repeat steps 1-5 and 13-22 for the 10pin side transition roller.
24. Run the machine on several lanes to verify proper operation.