We are pleased to announce the following improvements for the Authority 22 Lane Machine.

The front transition roller shaft and bracket which could spin and was not adjustable, refer to Figure 1, now locks in place and offers some height adjustment, refer to Figure 2.

**Old Assembly**
- Shaft is not fixed and spins
- Bracket is fixed and not adjustable

**New Assembly**
- Shaft locks into bracket, doesn’t spin
- Bracket has shim plate for adjusting

Please refer to the attached Authority22 Transition Roller Upgrade Instruction Sheet, part number 14-900041-000, for more information.

If you have questions regarding the information contained in this Service Bulletin, please contact Brunswick Technical Support at 1-800-937-2695 or 231-725-4966, FAX 231-725-4667, or Email techsupport@brunbowl.com  Visit http://www.brunswickbowling.com/service-support/tech-support/ for electronic files of this and other Service Bulletins.

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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
- 3/8", 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.

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.
6. Using a 3/32” Allen wrench and a 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.

7. Using a 3/8” wrench, remove the bolt that secures the front support rail to the 7pin side of the machine. Refer to Figure 7.

8. Lift the support rail away from the side frame and insert the four 1/4-20 T-nuts from the kit into the channel, as shown. Refer to Figure 8.

9. Slide two of the T-nuts to the 10pin side of the support rail. Refer to 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.

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.

**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.
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.

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.
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.

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