



## INSTALLATION INSTRUCTIONS

PART NUMBER	153-8017
PART DESCRIPTION	BUFFER BRUSH REPLACEMENT
REV DATE	02/6/2002
MACHINE MODELS	LW / EXCEL / DART / BREEZE



Basic knowledge of the lane machine including mechanical and electrical

### TOOLS NEEDED:

Long Flathead Screwdriver  
5/16 Allen wrench

9/16 wrench

1/8 wrench



### TECHNICAL NOTE

Please thoroughly read the instructions prior to performing the installation of this assembly.

To avoid any potential problems, if at any time during the process you have a question, stop and contact our Tech Support department at the numbers listed below.

Please visit our growing library of videos to see if these instructions are available!



[www.youtube.com/user/KegelBowling81](http://www.youtube.com/user/KegelBowling81)



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1. With the power off, remove the belt from the buffer motor pulley.
2. Raise the machine to the transport or upright position.
3. Begin on the left side (7-pin side) of the machine. Loosen the two set screws that hold the brush shaft into the bearing collar. These will require a 1/8" allen wrench.
4. Move to the 10-pin side of the machine and remove the fasteners holding the other bearing. These bolts require a 3/16" allen wrench on the LaneWalker or a 9/16" wrench for the Excel and Dart/Breeze. Keep track of the spacers on the LaneWalker, they will need to be replaced during assembly.
5. As the bearing becomes loose the right side of the brush will drop down.
6. Pull the other end of the brush out of the left side bearing. If needed, pry between the pulley and the bearing with a long screwdriver to free the brush from the left side.
7. When the brush is out of the machine, pull the right side bearing off the old brush. Slide it on the right side of the new brush.
8. Place the **Belt** around the buffer brush.
9. Slide the new brush all the way into the left bearing collar. Tighten the two small set screws on the left collar.
10. Lift the brush into place and replace the bearing mounting bolts. Don't forget the spacers on the LaneWalker.
11. Place the belt around the buffer motor pulley and check for proper alignment with the brush pulley. If belt is out of alignment, correct the problem by adjusting the brush position in the left side bearing collar. (The pulley should come from the factory as close to the brush fibers as possible.) Roll the belt onto the brush pulley.
12. Tighten the set screws on the right side bearing collar. All fasteners on the brush and bearings should be secure.
13. The brush crush must be adjusted when installing a new brush. The typical amount of crush on the lane should range from **1/8"** to **3/16"**.



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14. Measure the amount of crush to the lane by using a straight edge from the drive wheel across the brush to the LDS wheel (go to the momentary wheel on the Dart/Breeze). The recommended amount of crush to begin with is a 1/8". Too much crush will increase amp draw and may prevent the motor from running. If an amp meter is available, use it to monitor the motor when running the new brush. The typical amp draw of the motor should range from 4 to 6 amps when the brush is running on the lane. Place the amp meter on the 14 AWG red wire to the buffer motor.
15. Adjust the crush to the lane on the LaneWalker and the Excel by moving the LDS blocks on the rear of the machine until 1/8" of the brush fibers extend beyond the straight edge. Move the small wheel housings on the rear panel of the Dart/Breeze to adjust the brush height (make sure the wheels on both sides are level and even). Wheels are adjusted properly when the machine runs straight forward and reverse travel on the lane.
16. Make sure the LDS blocks are level after any adjustments to the LaneWalker or the Excel. The counter shaft must spin freely for proper machine operation. Tighten the outside two blocks and spin shaft before locking down the center pillow block. (It is a good idea to check the end play of the counter shaft, making sure it is about 1/16".)
17. Check the brush adjustment to the transfer roller. Examine the amount of gap that the transfer roller leaves in the brush fibers as the brush is turned against it. This gap should range from 3/16" to 1/8". This is another adjustment area to check if the amp draw on the buffer motor is excessive. If a change is made to the transfer roller be sure the final adjustment is parallel to the brush and square in the machine. The wicks should pull away from the transfer roller only about 1/8".
18. Run several lanes with the machine, allowing the new brush to break-in before beginning your regular conditioning run.
19. Listen to the buffer motor as the machine travels down the lane. Clicking noises from the buffer motor indicates excessive amp draw. If the buffer motor wants to stall out or is noisy, re-check the adjustments in steps 14 – 17. The goal of these adjustments is to get the best pattern on the lane without creating too much of a load on the motor.



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