

Pinball Wizard Actuator Arm Spare Parts Kit 84-860726-000

Packaging

1	Ea.	84-200548-000	Actuator Arm Assembly
1	Ea.	11-530017-001	External Retaining Ring, ½"
1	Ea.	84-200458-005	Connecting Pin
1	Ea.	84-900212-000	Instruction Sheet – Actuator Arm Spare Parts Kit 84-860726-000

Actuator Arm Replacement Instructions

1. Disconnect power from Bumper controller before starting disassembly.
2. Remove division capping and gutter sections necessary to gain access to the Pinball Wizard Actuator Assemblies
3. Disconnect actuator arm from the bumper rail on each side of the lane and **lower the actuator arm.**
4. Remove retaining ring and washer holding old actuator arm in place.
5. With old actuator arm in the horizontal position, slide the arm off the shaft. Refer to *Figure 1*.

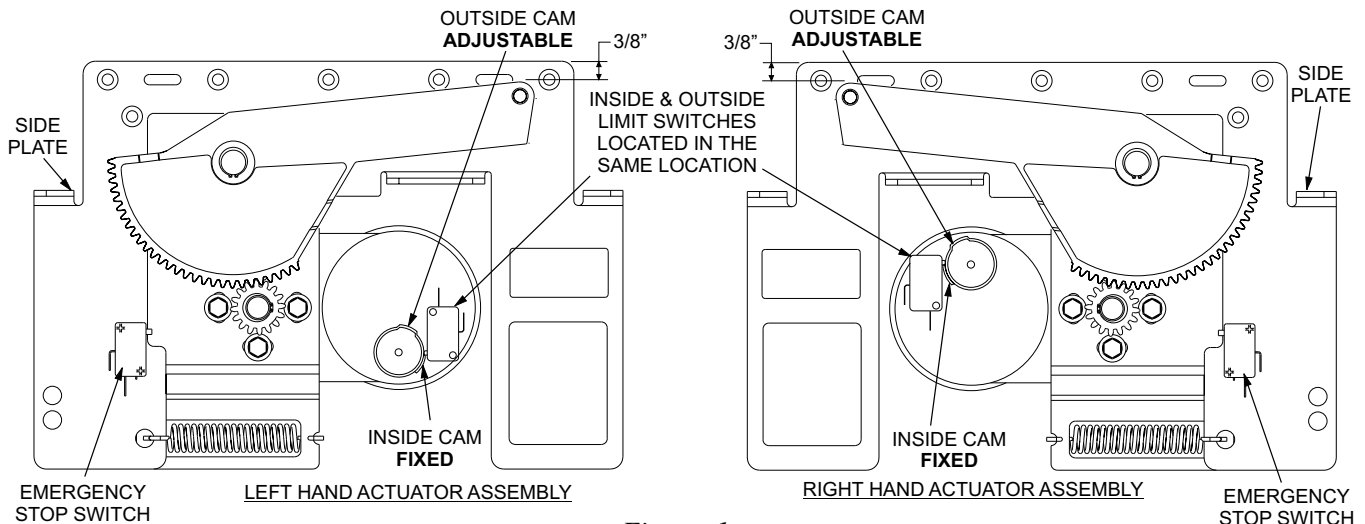


Figure 1

6. Position the new actuator arm in the same horizontal position as the old actuator arm and slide onto shaft.
7. Verify that the limit switches are adjusted properly per the below instructions.

Adjustment for Limit Switches Inside Motor

There are two limit switches within the motor under the black cap. These switches are positioned against white plastic cams. The inner switch and cam is only adjustable by positioning of the motor shaft. **Do not attempt to rotate the lower plastic cam.** The inner switch (or “Down Switch”) determines the position where the motor shuts off while lowering the rails. The outer switch (or “Up Switch”) and cam is adjustable and determines the position where the motor shuts off while raising the rails. Make adjustments per the following:

- a. While the rails are not connected to the arm, lower the actuator by hand. When the top of the actuator arm is about $3/8" \pm 1/8"$ below the upper edge of the side plate, the inside limit switch should click or be actuated by the inside (fixed cam). Refer to *Figure 1*. This can also be verified by powering up the bumper controller and watching the Up/Down LED Indicators.

WARNING! Take caution to avoid contact with any components inside controller while power is supplied. Remove power before replacing bumper controller cover.

- b. If the inside limit switch does not click at this point, remove both actuator arms and motor access cover. Turn the motor output shaft until the inside limit switch is just actuated by the inside cam. Refer to *Figure 1* to verify proper positioning.

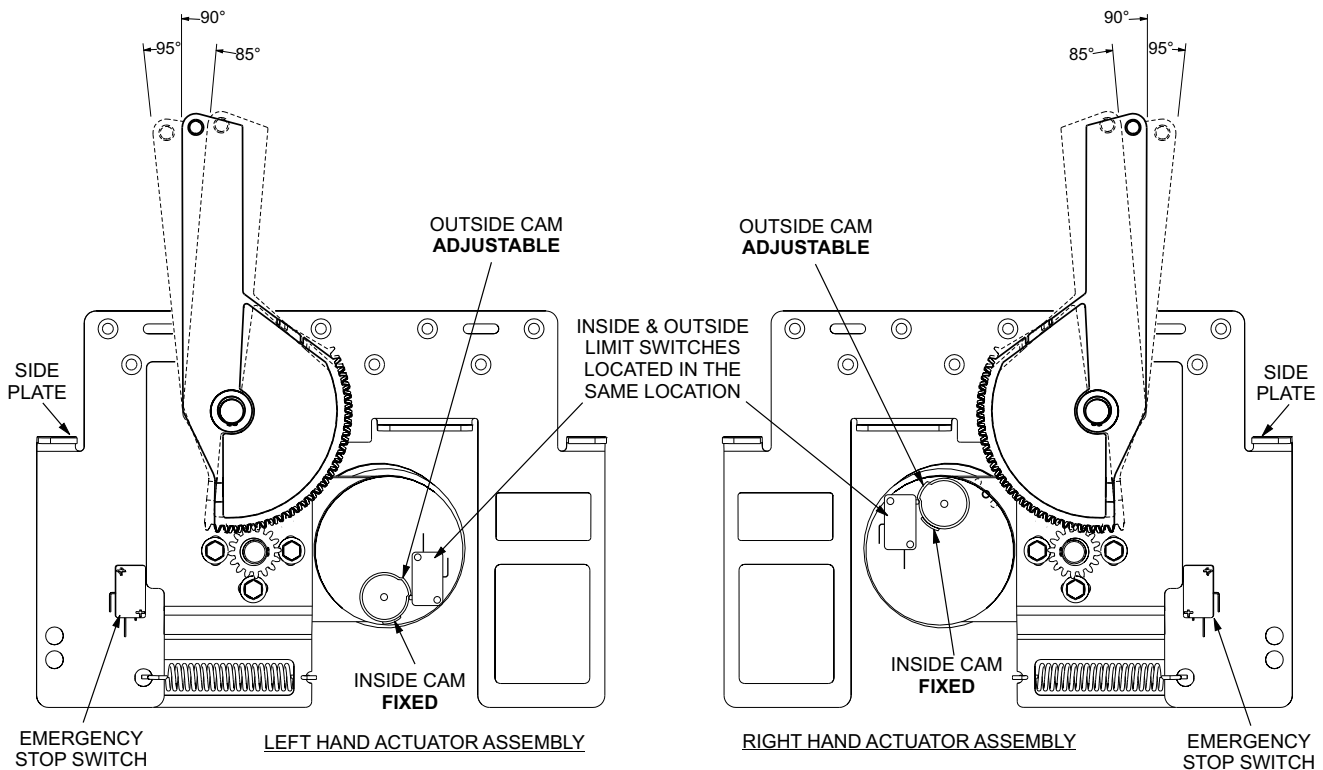


Figure 2

- c. Reinstall the actuator arm by sliding it onto the shaft while holding the top of the actuator arm $3/8"$ below the top of the side plate. Pivot the arm up and down to verify that the inside limit switch clicks at the proper place. If additional adjustment is needed, loosen the four motor attachment screws and pivot the motor as required. Refer to *Figure 1*.
 - d. Once the inside limit (“Down”) switch adjustment is made, verify the outside limit (“Up”) switch adjustment by raising the actuator arm. The actuator arm should be opened between 85 to 95 degrees when the outside limit (“Up”) switch is actuated. Adjust the outside white plastic cam by rotating the outside cam by hand. Refer to *Figure 2*.
8. Reinstall washer and retaining ring to hold actuator arm in place.
 9. Lift actuator arms up verifying that the arms are parallel on each side of the lane.
 10. Insert the pin through the actuator arm and bumper rail using the new pin (part number 84-200458-000).
 11. Reinstall gutter and capping.