

Williams®

A-8762 Retrofit Kit BLACK KNIGHT Playfield

GENERAL

This kit replaces locking mechanisms and ball ramp switches with microswitches. The microswitches should provide reliable, adjustment-free operation.

KIT COMPLEMENT

Part No.	Description	Qty.
B-8744	Microswitches and Bracket	1
A-5844-45	Wireform and Bracket	1
A-8659	Microswitch and Bracket	2
B-8644	Microswitches and Bracket	1
A-8695	Wireform and Bracket	1

MATERIAL REQUIRED

#6 x 3/8" Woodscrews, Qty. 14

PROCEDURES

Turn the game OFF, remove the playfield glass, raise the playfield, and carefully support it against the backbox. Proceed as follows:

Upper Playfield (Refer to Template 1)

1. Locate the locking mechanism mounting bracket on the upper playfield and note the approximate positioning of the two screws securing the bracket and standoffs to the playfield. Mark these positions on Template 1 in the ovals at the upper left and lower right of the bracket.
2. Locate the bottom lock-up switch (two Green-Blue, and two White-Brown wires are connected to it). Disconnect the four wires and remove the switch from the playfield.
3. On the bracket, disconnect Yellow jumper, two Green-Blue, and two White-Orange wires from one switch; disconnect two Green-Blue and White-Red wires from the other switch.
4. Remove the bracket from the playfield. Retain the screws and standoffs.
5. Position Template 1 on the playfield, aligning the marks made in step 1 with the screw holes where the old bracket was secured. Tape the template in position.
6. Using a center punch, mark pilot holes for mounting screw locations for the wireform and microswitch brackets. Remove Template 1.
7. Secure the new bracket (gold in color and stamped "1") in position, using the two screws and standoffs obtained in removing the old bracket.
8. Position the A-5844-45 wireform and bracket (shorter wireform) over pilot holes marked in step 6 and secure to the playfield using two #6 x 3/8" woodscrews.
9. Position one of the A-8659 microswitches over the pilot holes marked in step 6 and secure with two #6 x 3/8" woodscrews.



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10. Solder the two White-Brown wires disconnected in step 2 to the solder lug-diode connection on the A-8659 microswitch as indicated. Solder the two Green-Blue wires disconnected in step 2 to the common terminal of the switch.
11. Referring to Template 1, solder two Green-Blue wires to the common terminal of each switch on the bracket. Solder two White-Orange and two White-Red wires to the solder lugs as indicated.
12. Secure the three solder lugs to the playfield using #6 x 3/8" woodscrews.

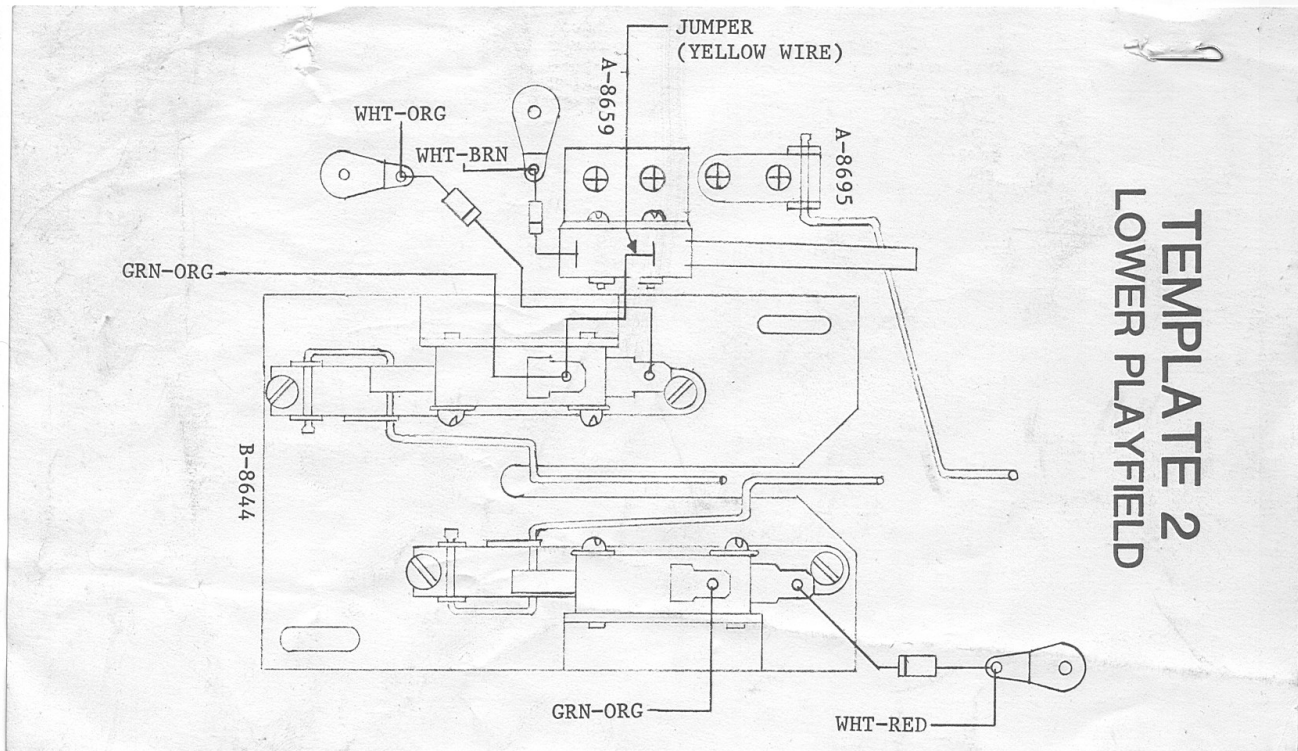
Lower Playfield (Refer to Template 2)

1. Locate the ball ramp switch mounting bracket on the lower playfield and note the approximate positioning of the two screws securing the bracket to the playfield. Mark these positions on Template 2 in the ovals at the upper left and lower right of the bracket.
2. Locate the right ball ramp switch (one Yellow jumper wire, and two White-Brown wires are connected to it). Disconnect the three wires and remove the switch from the playfield.
3. Disconnect the four Green-Orange, two White-Orange, and two White-Red wires from the switches mounted on the bracket. Disconnect and retain the Yellow jumper wire.
4. Remove the bracket from the playfield. Retain the screws.
5. Position Template 2 on the playfield, aligning the marks made in step 1 with the screw holes where the old bracket was secured. Tape the template in position.
6. Using a center punch, mark pilot holes for mounting screw locations for the wireform and microswitch brackets. Remove Template 2.
7. Secure the new bracket in position using the two screws obtained in removing the first bracket.
8. Position the A-5844 wireform and bracket over the pilot holes marked in step 6 and secure to the playfield using two #6 x 3/8" woodscrews.
9. Position the other A-8659 microswitch over the pilot holes marked in step 6 and secure with two #6 x 3/8" woodscrews.
10. Solder the two White-Brown wires disconnected in step 2 to the solder lug-diode connection on the A-8659 microswitch as indicated. Solder one end of the Yellow jumper wire to the common terminal of the switch.
11. Referring to Template 2, solder two Green-Orange wires and the other end of the Yellow jumper wire to the common terminal of one switch and two Green-Orange wires to the common terminal of the other. Solder two White-Orange and two White-Red wires to the solder lugs as indicated.
12. Secure the three solder lugs to the playfield using #6 x 3/8" woodscrews.

Verification

1. Visually check operation of the switches, making sure that wireform and switch arm movement is not obstructed. Check for solder shorts and splashes.
2. Perform the switch test in accordance with procedures provided in the game Instruction Booklet.

TEMPLATE 2 LOWER PLAYFIELD



TEMPLATE 1 UPPER PLAYFIELD.

