



*it's a whole new game!*

## Switch test FAQ

### **Caution:**

If you are not comfortable working on pinball hardware and/or high voltage electronics, please get professional support for this. In general: use your common sense. Don't experiment. Don't be a nihilist. Only skilled and trained people are allowed to open this system. The manufacturer accepts no responsibility for injuries caused by unauthorized operation. Keep long hair, fingers, jewelry, etc. away from turning parts of the system.

One of the most important test in the TBL is the switch test.

How do you do this?

First you need to open the coindoor and understand the controls you will see fitted in the coindoor

## Coin Door buttons

### Normal function

With the coin door buttons (located at the inner side of the coin door to the left), you can make all game adjustments you desire as well as carry out tests if needed.

In normal use, the two inner buttons function as volume up (+) or down (-). The most left button functions as Escape and the most right as Enter button. As there are two coindoor styles there are two appearances of the coindoor buttons, both are here displayed

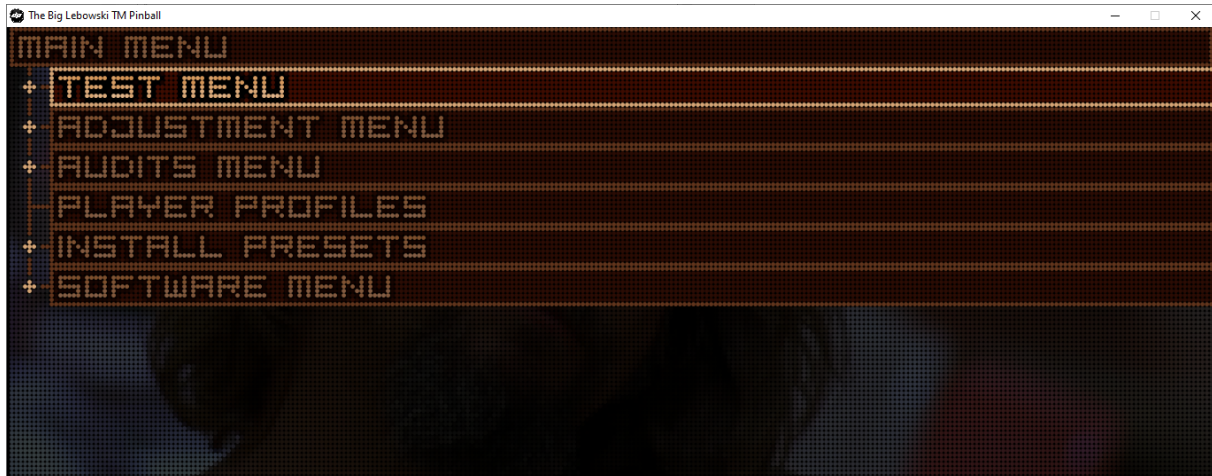


## Menu function

Push the Enter button to open the Main menu. In the Main menu, you have submenus which will lead you to subsections with a variety of possibilities:

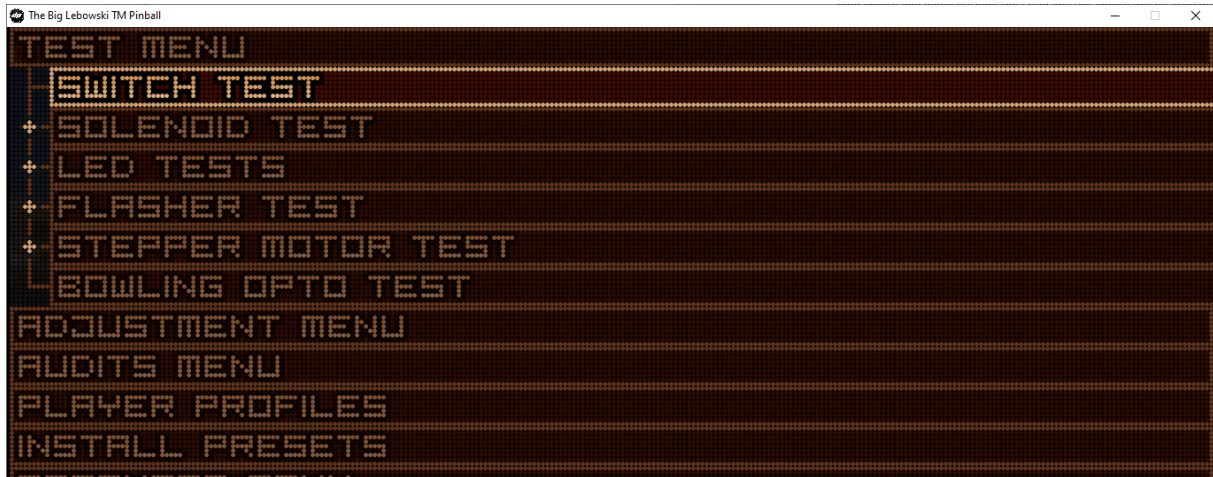
- Test menu. You can carry out any test you desire to check if something is working properly.
- Adjustment menu. You can adjust settings or customize gameplay to your needs.
- Audits menu. Here you see what the earnings are, how many times a flipper was activated, etc.
- Player profiles. With the TBL, you can give players a profile. If they select this profile when playing a game, they can see their statistics later, such as high score, average score, ball times, etc.
- Install presets. Here you can set a pre-defined set of adjustments.
- Software menu. Here you can find software related [options](#), such as version check & select, and update.

You can use the + - keys to select the item of your choice and when pressing the Enter key, this choice will be activated. The Escape key will return you to your previous choice or close the test menu.



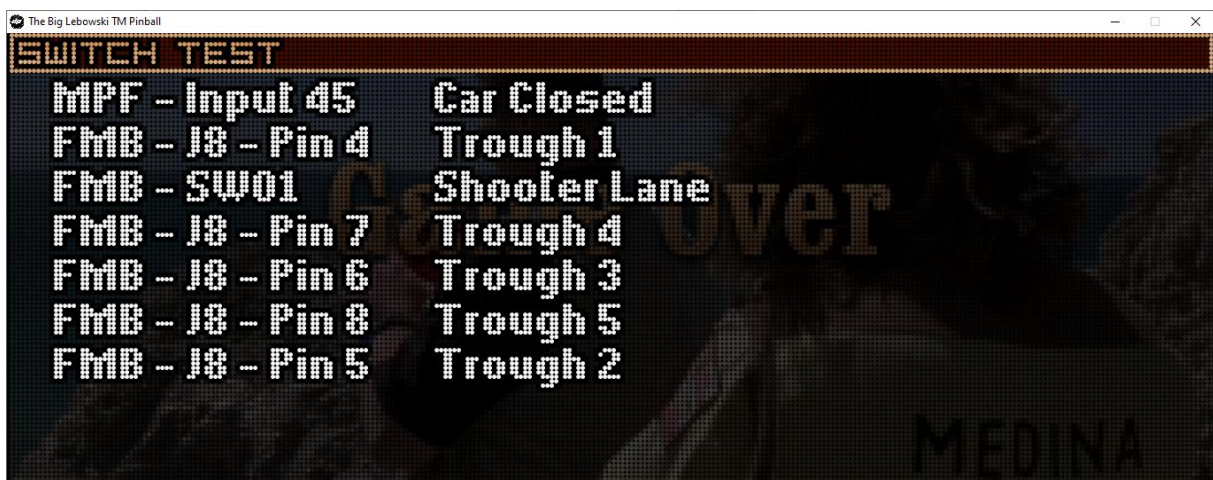
## Test Menu

In this menu, you can carry out any test you desire to check if something is working properly.



## Switch test

If you activate this test, it will display all switches which are active at that moment.

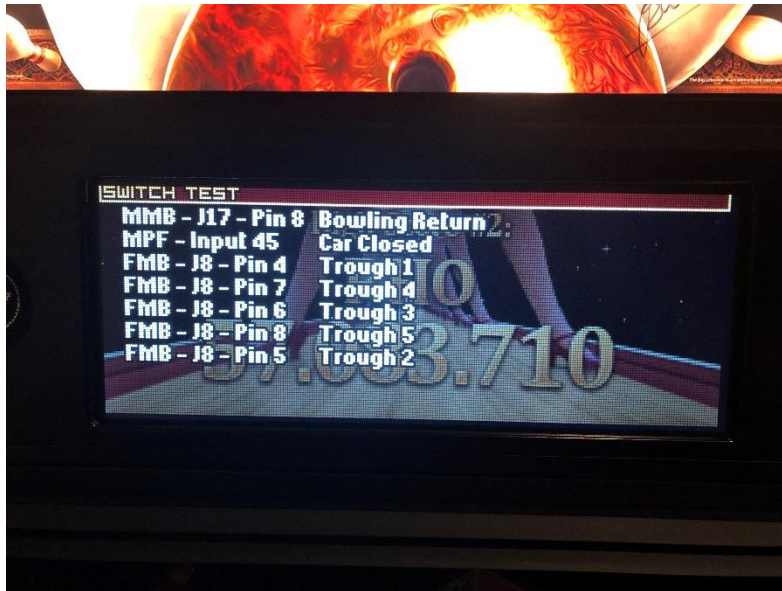


If you have doubts about a certain switch, you can check the correct working here. Push the switch, or even better, roll a ball over it, and see if this switch pops up on the display here. Also, a sound can be heard when a switch is activated and you can also see if there are no switches active when they should not be.

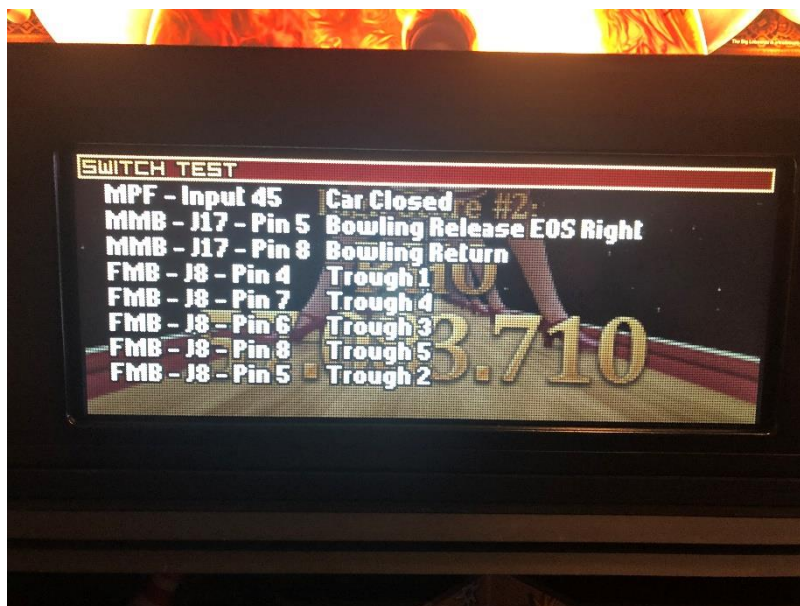
The displayed screen is a typical example without a game started. You will always see Car Closed plus the balls in the ball trough 1-2-3-4-5. Shooter lane will only be active when a ball is present in the shooter lane.

Which switches are expected to be Active with NO game started?

Most likely it is :

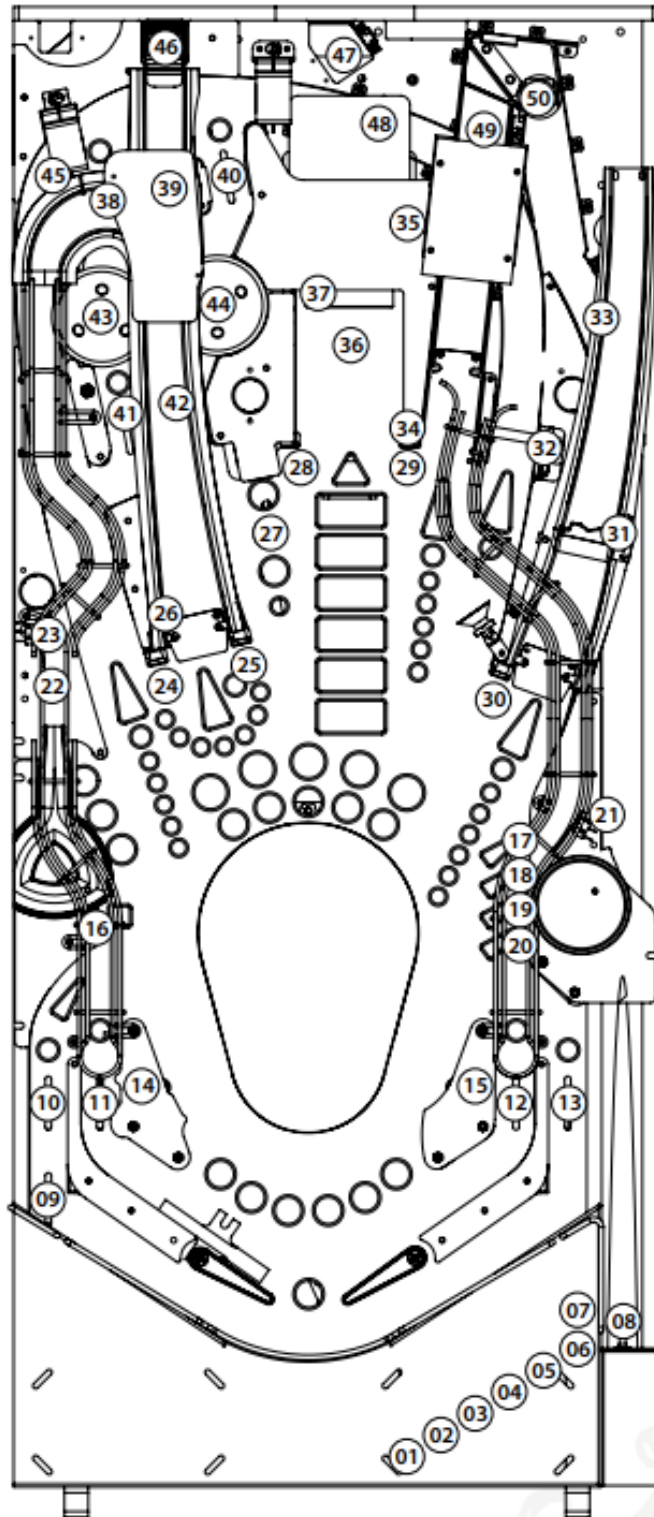


And depending on the exact position of the Bowling launcher it can also be this



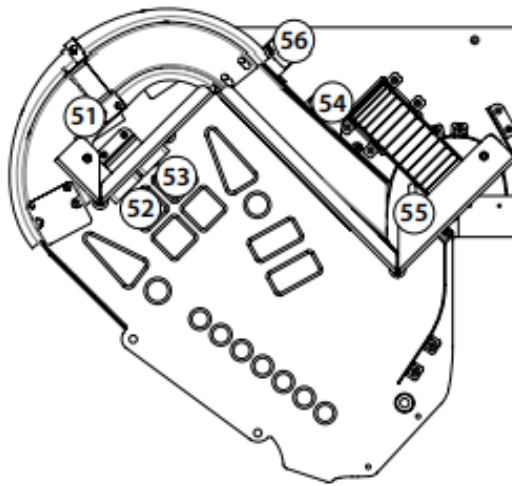
If you see any other switches Active this is most likely a stuck switch and needs to be fixed prior to further diagnosis.

## Switch Overview Main Playfield



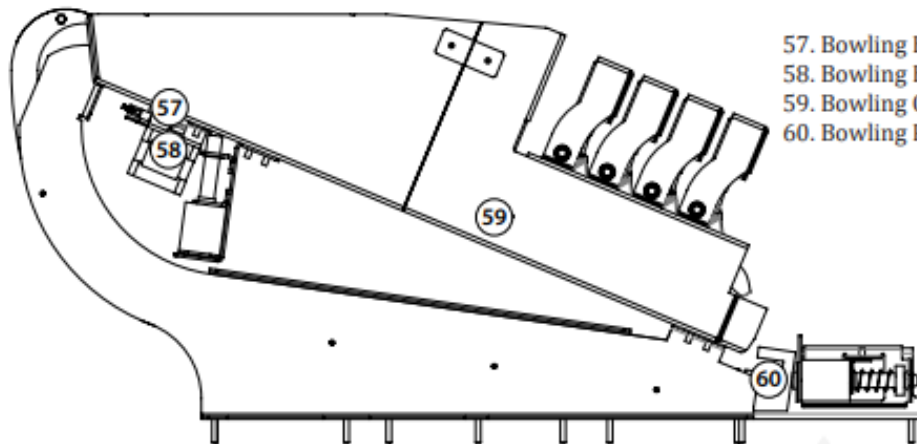
- |                         |             |
|-------------------------|-------------|
| 01. Balltrough 1        | Opto        |
| 02. Balltrough 2        | Opto        |
| 03. Balltrough 3        | Opto        |
| 04. Balltrough 4        | Opto        |
| 05. Balltrough 5        | Opto        |
| 06. Balltrough 6        | Opto        |
| 07. Balltrough Jam      | Opto        |
| 08. Shooter Lane        | Rollover    |
| 09. Kickback            | Rollover    |
| 10. Left Outlane        | Rollover    |
| 11. Left Inlane         | Rollover    |
| 12. Right Inlane        | Rollover    |
| 13. Right Outlane       | Rollover    |
| 14. Left Slingshot      | Leaf        |
| 15. Right Slingshot     | Leaf        |
| 16. Light Kickback      | Target      |
| 17. White Russian 1     | Target      |
| 18. White Russian 2     | Target      |
| 19. White Russian 3     | Target      |
| 20. White Russian 4     | Target      |
| 21. Mini Playfield Exit | Microswitch |
| 22. Saucer              | Microswitch |
| 23. Left Ramp Made      | Microswitch |
| 24. Left Light Lock     | Target      |
| 25. Right Light Lock    | Target      |
| 26. leftRampEnter       | Opto        |
| 27. Scoop               | Microswitch |
| 28. Left Nihilist       | Target      |
| 29. Center Nihilist     | Target      |
| 30. Right Nihilist      | Target      |
| 31. Right Ramp Enter    | Microswitch |
| 32. Spinner             | Microswitch |
| 33. Shooter Lane Exit   | Opto        |
| 34. Rug EOS Front       | Microswitch |
| 35. Rug EOS Back        | Microswitch |
| 36. Rug Hit             | Microswitch |
| 37. Rug Made            | Opto        |
| 38. Maude1 M            | Rollover    |
| 39. Maude2 A            | Rollover    |
| 40. Maude3 U            | Rollover    |
| 41. Maude4 D            | Rollover    |
| 42. Maude5 E            | Rollover    |
| 43. Left Jet            | Leaf        |
| 44. Right Jet           | Leaf        |
| 45. Left Loop           | Rollover    |
| 46. Left Ramp Lock      | Opto        |
| 47. Mini PF Scoop       | Opto        |
| 48. Loop Top            | Opto        |
| 49. Center Ramp         | Opto        |
| 50. Vertical Upkicker   | Leaf        |

## Switch Overview Mini Playfield



- |                        |             |
|------------------------|-------------|
| 51. Mini PF Ramp Enter | Microswitch |
| 52. Left Parking       | Target      |
| 53. Right Parking      | Target      |
| 54. Car Close          | Microswitch |
| 55. Right Ramp Made    | Rollover    |
| 56. Mini PF RampMade   | Rollover    |

## Switch Overview Bowling Alley



- |                    |             |
|--------------------|-------------|
| 57. Bowling EOS R  | Microswitch |
| 58. Bowling EOS L  | Microswitch |
| 59. Bowling Opto   | Opto        |
| 60. Bowling Return | Rollover    |

## Switch Overview Cabinet

These switches are all connected to the Switch Board (SW-16) in the front left side of the cabinet.

J2, Pin 1 Flipper Up R	Opto	J6, Pin 1 Menu 1	Button switch
J2, Pin 3 Flipper Lw R	Opto	J6, Pin 2 Credit 2	N/A
J2, Pin 4 Launch Button	Button switch	J6, Pin 4 Credit 1	N/A
J2, Pin 5 Flipper Lw L	Opto	J6, Pin 5 Slam Tilt	Leaf
J2, Pin 6 Start Button	Button switch	J6, Pin 6 Menu 4	Button switch
J2, Pin 7 Tilt	Tilt	J6, Pin 7 Menu 3	Button switch
J2, Pin 8 Coin Door	Interlock switch	J6, Pin 8 Menu 2	Button switch
J2, Pin 9 Credit 3	N/A	J6, Pin 9 Credit 4	N/A