## SMW "Kill Bowser" RLX Route

By SethBling

#### Introduction

This document describes the procedure to warp to Bowser in a way that will trigger the credits upon his defeat. It uses a technique called the RLX Item Swap, which is described in more detail here.

**Technical Description:** <a href="https://pastebin.com/hUUyjtHH">https://pastebin.com/hUUyjtHH</a> **Video:** <a href="https://www.youtube.com/watch?v=YZZhbTtsTts">https://www.youtube.com/watch?v=YZZhbTtsTts</a>

Alternate Shell Spits (Fast) Video: <a href="https://www.twitch.tv/videos/243699342?t=37s">https://www.twitch.tv/videos/243699342?t=37s</a>

### Setup

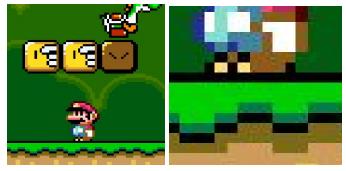
- USA or J SMW Cartridge
- Two multitaps in 5P mode, each with two controllers plugged into the first two slots.
  - Port 1 Controller 1: Gameplay controller
  - o Port 2 Controller 1: 20 E2 = L+B+Y+Select+Left
  - o Port 1 Controller 2: 00 82 = B+Left
  - Port 2 Controller 2: A0 98 = A+L+B+Start+Up
- If you're using the Bizhawk emulator, you must use the SNES->Controller Configuration menu to enable multitaps in both ports. Then:
  - Player 1 = Port 1 Controller 1
  - Player 2 = Port 1 Controller 2
  - Player 5 = Port 2 Controller 1
  - Player 6 = Port 2 Controller 2

#### Instructions

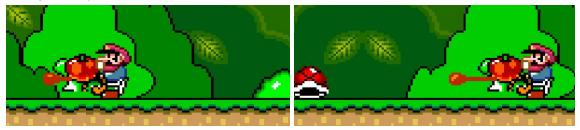
- 1. Enter Yoshi's Island 2
- 2. Run right, picking up the red shell on the ground.
  - a. If you're using the **alternate shell spits**, make sure to knock a naked koopa out of the 4th walking koopa to the right so that it despawns at an x-coordinate of \$FC (address \$E4). To do so, perform a full jump when the front of Mario's feet are in this area and land on the left side of the 4th koopa. This exact technique is also used in the current credits warp WR route.



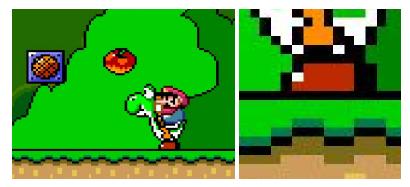
- 3. Toss the shell over the yoshi block and **scroll all the way left** while it's in air.
- 4. Duplicate the Yoshi block to the right, or diagonally up and right.
- 5. Dismiss the red shell by kicking it off screen to the left.
  - a. Unless you're using the alternate shell spits.
- 6. Stand at this pixel.



- 7. Hold **down**, then **left** and run (**X/Y**), then hold **B**. This will despawn the Yoshi egg shell fragments at the correct velocities. Don't let go of **left** or **B** until you come to a stop.
  - a. If you're using the <u>alternate shell spits</u>, spin jump on the red shell after the top right egg fragment has despawned.
- 8. Go right and glitch the two berries at Yoshi's mouth level. Glitch the left berry first, then the right berry. Also kill the naked red koopa.



- 9. Eat the left of the two glitched berries.
- 10. Stand at this pixel or up to a couple pixels left of it, then press and hold **Y** and **B** on the same frame. Let go of both buttons after a few frames. If you held down **B** for the right duration, this will eat the berry at y-coordinate \$42 (see also: \$41 Berry later in the doc).



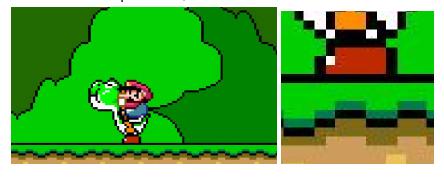
- 11. Run left past the ledge full of walking koopas (or refer to the **alternate shell spits**).
- 12. In Yoshi's mouth, pick up the red shell on the ground at the beginning of the level. Stand here and spit it out. \$FC



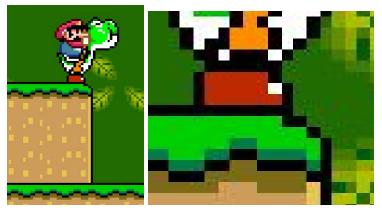
13. Reload all the koopas on the ledge, then grab the rightmost koopa in Yoshi's mouth. Stand here and spit it out. \$6A



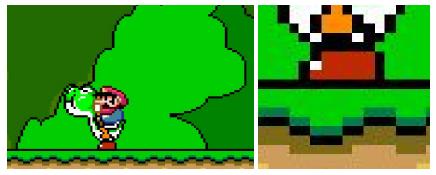
14. Reload all the koopas on the ledge, then grab the leftmost koopa in Yoshi's mouth. Stand here and spit it out. \$A2



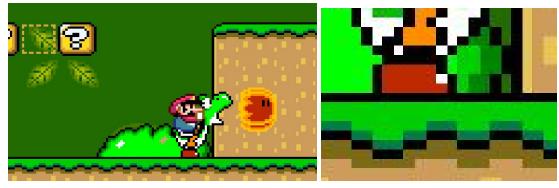
15. Reload all the koopas on the ledge, then grab the rightmost koopa in Yoshi's mouth. Stand here and spit it out. \$31



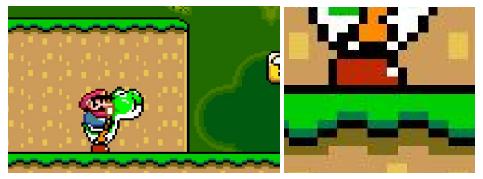
16. Reload all the koopas on the ledge, then grab the leftmost koopa in Yoshi's mouth. Stand here and spit it out. \$8E



17. Reload all the koopas on the ledge, then grab the rightmost koopa in Yoshi's mouth. Stand here and spit it out. \$BF



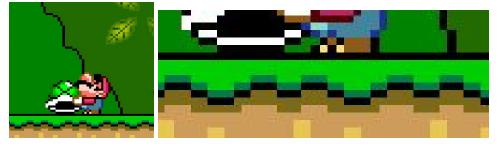
18. Reload all the koopas on the ledge, then grab the leftmost koopa in Yoshi's mouth. Go to the right, stand here and spit it out. \$13



- 19. Run right, dismount Yoshi after unloading the message box.
- 20. Run to the right, past the green shell, and unload both the shell and naked koopa. Then run back left, reloading them. Kill the naked koopa.
- 21. Grab the green shell. While moving left, tap **right** then hold **left** again. This will set the Turnaround value (memory address \$300 becomes \$80). Don't go too far left. You shouldn't turn around while holding a shell after this point (it will overwrite the value).
- 22. Standing here, drop the green shell and scroll all the way right.



23. Move slightly left to this pixel (don't overshoot) and kick the green shell up (address \$2F4 becomes \$18 and address \$EB becomes \$60).



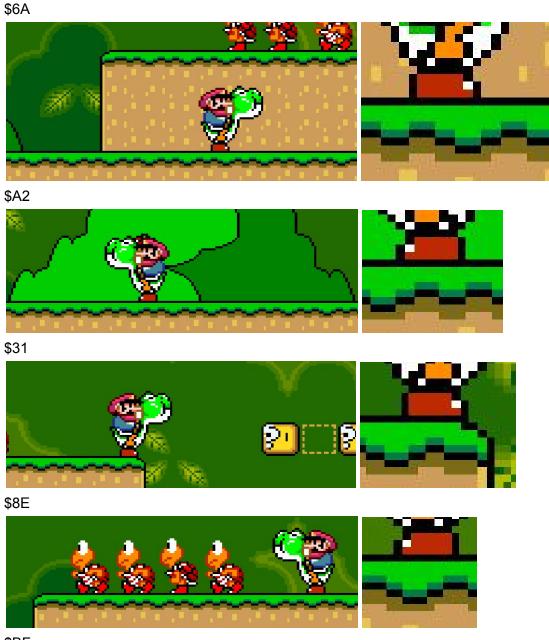
- 24. Go back left and get on Yoshi. Pick up the red shell with Yoshi without loading the message box.
- 25. Run right. Jump and spit out the red shell before loading the green shell.
- 26. Perform the RLX item swap without bonking the chuck.
- 27. Kill Mario.
- 28. Cloud fight Bowser.

# **ACE Memory Requirements**

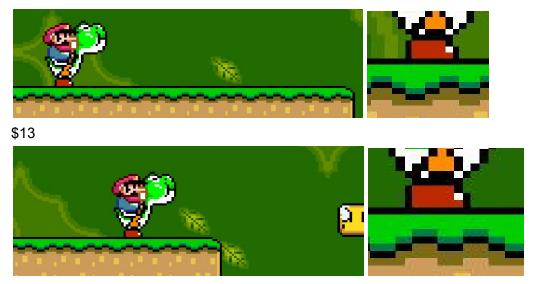
Address	Value(s)	Description
0300	30/70/80/90/D0	Turnaround while holding an item
02F4	18	White Splat
1829	421A	Yoshi egg fragment despawn velocities
1A06	03	Yoshi block duplicated right
0017	70	Holding RLX
E2	6A	Shell code (ROR)
E3	34/ <b>42</b> /43/45/50 /51/56/57/64	Shell code (2 byte no-op)
E4	FC	Open bus (JSR x,ind)
E5	6A	Shell code (ROR)
E6	A2	Shell code (LDX imm)
E7	31	Shell code (#\$31)
E8	8E	Shell code (STX abs)
E9	BF	Shell code (Translevel low byte)
EA	13	Shell code (Translevel high byte)
EB	60	Shell code (RTS)
421A	20	Port 2 Controller 1 AXLR
421B	E2	Port 2 Controller 1 BYET UDLR
421C	00	Port 1 Controller 2 AXLR
421D	82	Port 1 Controller 2 BYET UDLR
421E	A0	Port 2 Controller 2 AXLR
421F	98	Port 2 Controller 2 BYET UDLR

## Alternate Shell Spits

This section assumes that you did the koopa jump at the beginning to set the sprite 0 x-coordinate to \$FC. Make sure that you're grabbing the highest-sprite-slot koopa with each successive spit.



\$BF



After this continue to the right to do green shell shenanigans.

## \$41 Berry And Alternate Spit

Instead of getting a berry coordinate of \$42, you can go for a berry y-coordinate of \$41, and change the first red shell spit location to somewhere a bit more convenient. To get a berry y-coordinate of \$41, you can just hold jump a bit longer, nothing else about the setup changes. Then, the first red shell spit becomes \$2A rather than \$6A, and can be done by standing on this pixel:

\$2A



This brings the shell/berry code to: 6A 41 FC 2A A2 31 8E BF 13 60