

ibb & obb World Record Glitch Overview

Carry Glitch

The carry glitch abuses the fact that while one player pauses the game, the other can continue playing. When one player is on top of another, the game remembers this and places them back on top of the other player when unpausing.

The carry jump is a variation of this where the carrying player goes through a portal to drop the other player, then jumps on top of them to go on top of the portal. When positioning oneself next to a wall when the other player unpauses, they seemingly clip into the wall, leading to a glitchy jump that is higher than intended.

Hook Glitch

The hook is a variation of the reverse carry glitch, whereby one player jumps off a ledge and immediately pauses. Their body continues falling in the other player's game, however, and they can climb atop it. When unpausing, the other player gets teleported upward to the player's current position, who then goes backward to avoid falling off the cliff.

The hook jump is a variation of this where the hook is combined with a boost jump, thereby allowing both players to quickly scale a tall wall.

Highway Skip

When one player dies, the other automatically dies too after one second, and they respawn. The respawning happens in two steps: The players get put a fixed distance into the chunk, and then they teleport to the last checkpoint they activated. However, it is possible to unload the chunk one's checkpoint is in, effectively skipping the second step. The game's code is a bit peculiar though, as the position it sets the player to when respawning is only the chunk's X coordinate along with an offset. This value gets assigned to both the player's X AND Y coordinate, placing them under the level. The more levels are played, the higher the current chunk's X coordinate is, placing the players lower under the level. Because there is a terminal velocity in this game, this allows you to fall toward the floor for up to several minutes, allowing you to skip everything in your path when moving forward.

The game only keeps three chunks loaded at a time: The current one, the previous one, and the next one. The current chunk is the one the camera is centered on. The challenge now is centering the camera onto the next chunk, while keeping your checkpoint in the previous chunk. Checkpoints only get activated when both players are to their right, which is something that neatly ties in with the next glitch:

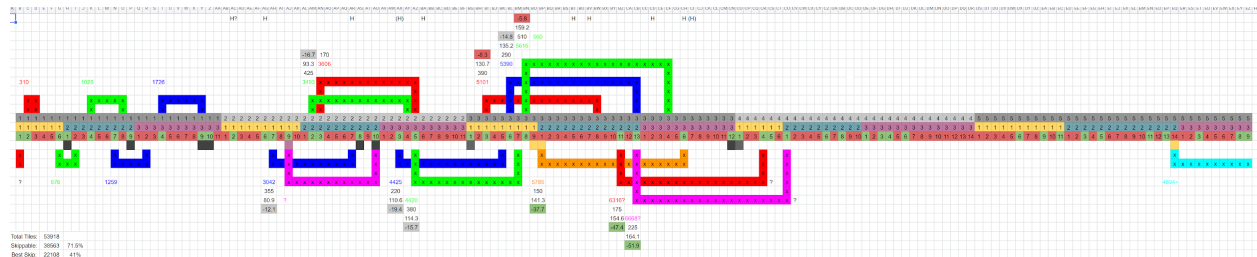
Death Pausing

Many scripts in this game are only executed when the host (ibb) has not paused the game. If ibb dies and immediately pauses the game, obb can stay alive indefinitely. During this time, obb can't activate any checkpoints, as only one player exists right now. The camera also focuses obb (both on ibb's and obb's screen), allowing obb to simply walk into the next chunk. When ibb unpauses, the camera focuses obb, thereby centering the new screen, and after the remainder of the one second has passed, both players respawn under the effects of the highway glitch.

Highway Routing

Due to respawning putting both players into the chunk at a given offset (120 tiles to be exact), any checkpoints before this point get activated. Therefore, highway skips are only possible in levels where there are no checkpoints before X coordinate 120. Additionally, the conditions to execute a highway skip cannot be fulfilled in every chunk, there aren't always enemies to die with, for example. Due to this and the fact that a highway skip places you at a specific position and allows you to reach one other specific location by continuously moving forward, the resulting map looks relatively messy. Because the routing ends up being choosing the routes that go from A to B, I decided to call such a route a "highway".

Below is a map that doesn't contain all possible highways, but all relevant ones for Any% speedruns. The gap between levels 4.2 and 5.2 is due to those levels containing walls that extend infinitely below the level, making highways not viable.



Highway Shortening

Because the length of a highway depends on your current X coordinate, which steadily increases over a run, shortening a highway can be done by going back to limbo and entering a level. In our run we only do this after we reach the end of the level. This unlocks the next level in limbo, making this a valid run strategy, as it would still work if you did not have any save data. We do this so we don't overshoot the final boss, allowing us to skip the entire last level and kill the boss instantly.