

# Rick and Morty | Ship Dangler

## (Installation and Removal)

First, thank you for buying my mod. It is cool to know that I am able to help people keep their machines in great condition!

### Installation:

The dangler is designed to entirely replace the factory “plastic spring” which ships with the machine. The solution consists of three parts, funnel, spring lock, and wiggler.

Funnel: Designed to emulate the stock ship spring holder. On the bottom of the funnel you will see a recessed portion designed to connect with the wiggler.

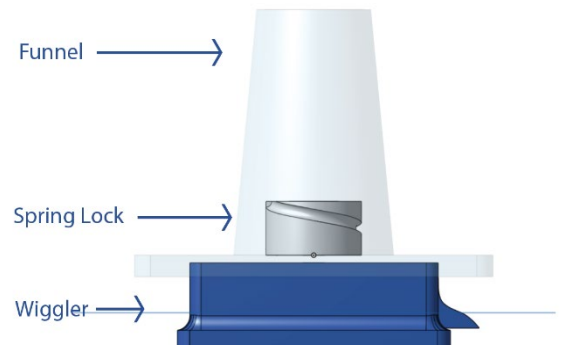
Spring Lock: Designed to replace the factory hot glue solution. The idea is the the lock is threaded to match the pitch of the spring which allows for the spring to bite into the lock and ultimately screw into place rather than require hot glue.

Wiggler: The wiggler is designed to replace the factory “plastic spring”. The concept is simply that the TPU material can intercept the impact from the piston allowing it to pop up and down without putting stress on any particular plastic. Additionally you will notice the extended lip to the side of the wiggler. This ensures that the ship shakes in a right to left motion exactly like the factory “plastic spring”.

### Prep:

Start by pulling the playfield out into the service position. Be careful with this game as you cannot pull it that far out without hitting playfield mechs. Remove both ramps and set them aside. It is not required that you unhook the wires from the ramps if you are careful. Unplug the ship (attached at the rear of the playfield). Remove the “ball shield” (over the house) and the house. Lastly remove the entire horseshoe plastic with the existing ship and plastic spring attached.

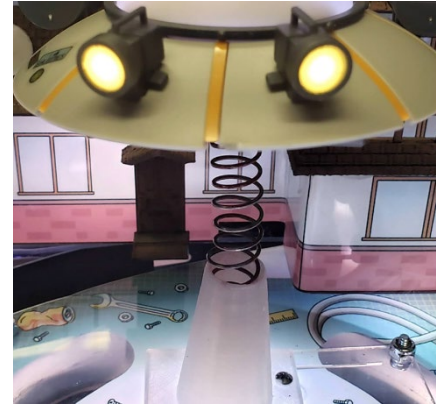
From this point you will want to break down the center plastic and remove the plastic spring and ship. This should leave you with six screws and six lock washers (circled in red). You will use one of the smaller screws and lock washers later, so set that aside.



(I used green TPU for the following sections as I felt it was easier to see in the pictures. Your parts should be clear)

### Step 1:

Remove the hot glued spring from the factory spooky funnel. My original one simply pulled out with a little bit of force. If necessary, you could use a heatgun to loosen the glue, but I would recommend attempting to release it without heat at first. Try to ensure you do not bend the spring. The spring is very strong and will hold its shape under quite a bit of pressure, but you don't want to kink or damage it by pulling with tools or pulling too hard.



### Step 2:

Remove any residual hot glue from the bottom of the spring. It doesn't need to be perfect, but you should do your best to remove the clumps as we'll be fitting this spring into the lock.

### Step 3:

Fit the spring lock into the spring. This can be difficult. Essentially, you're trying to get that little lock wedged right into the center of the spring using the groves cut into the lock to stabilize it. I used needle nose pliers to squish the lock into place. **PRO TIP:** You cannot damage the spring lock. Unless you use something sharp, it isn't going to rip. So go ahead and squish it as needed to thread it into place. The finished result should look fairly centered in the middle of the spring. As you can see from my picture, it doesn't need to be perfect, just close enough that the screw can thread up through the middle.



### Step 4:

Place the lock nut into the spring lock. This is the hardest step. Basically, you need to take one of the two smaller lock washers from the disassembly and line it up with the groove cut into the spring lock. Once aligned, squeeze down on the lock nut using a pair of pliers. The goal is to seat the nut firmly into the spring lock. As mentioned above, you can apply a lot of force if needed.



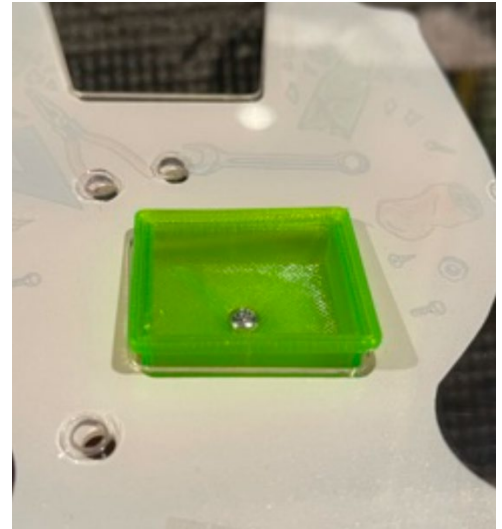
### Step 5:

Now it is time to bring everything together. Start by sliding your newly assembled spring/spring lock into the funnel. Go over to your horseshoe plastic and feed the wiggler through the cut hole in the plastic. It should only install one way, but in the event you are a square peg in a round hole kid, please make sure the pronounced lip is oriented on the "right" side if the plastic were facing forward. As pictured, I usually flip the entire set of plastics and mod parts upside-down to ensure everything is aligned correctly.



**Step 6:**

For the last step, you want to screw the matching screw all the way through the mod and into the lock nut you seated in step 4. It is important that you don't force the screw as that will result in pushing the lock nut out of the spring lock. By gently turning the screw, you should catch onto the TPU parts and find your way into the lock nut. It would help significantly if you could find a table with a slot in it such that you don't have to hold all of this stuff with one hand while you screw with the other.

**Removal:**

All of this can be removed by reversing the steps. Should you destroy your factory funnel while pulling the glued spring out, you can drill two small holes in the new funnel and reassemble using this version.

**Contact:**

If anything goes wrong feel free to reach out to [support@ninjacamp.com](mailto:support@ninjacamp.com) or @aniraf on Pinside. I will respond as quickly as possible.