Crab Conundrum Puzzle

Crab

VIEW IN BROWSER

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Summary

A great gift! Can you remove the bars from the ring?

Toys & Games > Puzzles & Brain-teasers

Tags: puzzle brainteaser crabconundrum

The **Crab Conundrum** is a 3D model of a puzzle that goes by many other names. Shaking it reveals pins that are contained inside. You must manipulate the puzzle in order to separate the two bars from the ring.

Update: Nov 26 '23: Ring is thinner on bottom to make spinning more reliable.

This puzzle requires the following hardware to be inserted during the printing process.

1. 4 x M3-35mm pins (stainless or steel)
2. 4 x M4B6L5 heat insets (any steel pin that is 6mm Dia and 5mm High is fine)

I printed this in PETG, but PLA is fine. I recommend 0.2mm layer, 3 perimeters, 3 top/bottom walls. I printed the ring with enough perimeters to make solid.

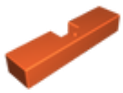
You insert the hardware just before the 20mm layer is printed. I used a filament change in PrusaSlicer and included the 3mf file of the bar so you can see where the printer will pause. If you have open access to the printer (MK3S), you can actually insert (carefully, and on-the-fly) the cylinders at about 18mm and then insert the pins at about 19.6mm) At the first filament change, you can first insert the two 6mmx5mm cylinders. Then insert the 2 metal rods. You can cut your own pins from a 150mm M3 rod. Cut long and file down to within 0.2mm of 35mm. You can purchase M3 35mm pins and the M4B6L5 heat insets from AliExpress cheaply.

The bars purposely fit a bit loose so that the puzzle solver can look between the joints to see the silver pins. If they spin the bars, then they should see the pins disappear across the joint. This gives a clue as to the solution.

There is a second filament change in the 3mf file if you wish to print the text in a contrasting color.

The video below shows how to set up and solve the puzzle.

Model files

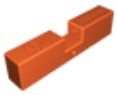


ccbar.stl

print two pieces 0.2mm layer

ccring.stl

0.2 layer 5 perimeters solid



ccbar.3mf

Displays the filament changes that allow the hardware to be inserted.

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