
Subject: Turn Apart by OSKAR

Posted by [Oskar_van_Deventer](#) on Sat, 03 Oct 2009 11:04:08 GMT

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Hi Shapeways fans,

Turn Apart is similar to a 2x2x2 Rubik's Cube. However, its faces are connected by dovetail connections. On the one hand, this blocks some types of movements. On the other hand, it enables the puzzle to be taken apart, as there is a majority of female dovetails.

See the YouTube video:

<http://www.youtube.com/watch?v=AUUNw1pzU5Y>

Buy the puzzle:

http://www.shapeways.com/model/47522/turn_apart.html

Watch the photos below.

Enjoy!

Oskar

File Attachments

- 1) [TurnApart v5 - step 03.jpg](#), downloaded 385 times
 - 2) [TurnApart v5 - step 18.jpg](#), downloaded 385 times
 - 3) [TurnApart v5 - step 21.jpg](#), downloaded 370 times
 - 4) [TurnApart v5 - inside look.jpg](#), downloaded 381 times
 - 5) [TurnApart v5 - stickered pieces.jpg](#), downloaded 381 times
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Subject: Re: Turn Apart

Posted by [gibell](#) on Sat, 03 Oct 2009 14:35:04 GMT

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Very nice Oskar! In the video, it looks like you have made it as difficult as possible to disassemble (13 moves?). But one could also put the stickers on so that the first piece comes out when the colors are aligned! If one then scrambled it from here, solving the colors would also lead to mechanical disassembly.

Subject: Re: Turn Apart

Posted by [BAROBA](#) on Sat, 03 Oct 2009 14:50:37 GMT

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[gibell](#) wrote on Sat, 03 October 2009 14:35: Very nice Oskar! But one could also put the stickers on so that the first piece comes out when the colors are aligned! If one then scrambled it from here, solving the colors would also lead to mechanical disassembly.

Wouldn't this cause one piece to be loose all the time? You can see the part to drop out as soon as he turns the right sequence. 1 turn would be better..

I think Oskar is right, you need to find the right sequence in order to get the first piece loose. Like with a Burr-puzzle. My father-in-law loves his collections of Burrs. Some are crazy hard

Succes met je puzzels, het is altijd heel leuk om te zien wat je hebt bedacht.

Groeten,

Rob

Subject: Re: Turn Apart

Posted by [Oskar_van_Deventer](#) on Sat, 03 Oct 2009 14:52:18 GMT

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George,

You are completely in free to sticker the Turn Apart sample that you buy in any way that you want!

Greetings,

Oskar

Subject: Re: Turn Apart

Posted by [gibell](#) on Sat, 03 Oct 2009 15:12:08 GMT

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BAROBA wrote on Sat, 03 October 2009 14:50: Wouldn't this cause one piece to be loose all the time? You can see the part to drop out as soon as he turns the right sequence. 1 turn would be better..

I think Oskar is right, you need to find the right sequence in order to get the first piece loose. Like with a Burr-puzzle. My father-in-law loves his collections of Burrs. Some are crazy hard

It would certainly make it a whole lot easier to solve! You're right, it is basically a burr puzzle, and the colors are irrelevant as far as disassembly goes. They can be made to help you, or not.

It looks to me like one can recognize the first piece to come out when it is in the assembled state. If one can also figure out which 3 pieces it needs to be connected to (to come out), one can then basically solve for this state using 2x2x2 moves, ignoring the colors. Sounds pretty tough!

Subject: Re: Turn Apart

Posted by [gibell](#) on Sat, 03 Oct 2009 15:21:42 GMT

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Oskar, has anyone figured out how many of the 3,674,160 possible positions of a normal 2x2x2 are possible for this cube? Given the "blocked moves", I assume it is less.
