
Subject: Question regarding little tiny ball joints...
Posted by [Tresob](#) on Tue, 15 Jan 2013 00:07:16 GMT
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Hey, fellow Shapeways enthusiasts,

For kicks, I'm trying to work on a mini-figure model that would be compatible with Hasbro's Kre-o line. The parts I've designed are mostly complete, but I'm having a little anxiety about the ball joints on the shoulders and hips.

Has anyone here worked with similar joints?

I've intersected the spheres from the limbs and created little ports on the way to the hollowed out socket, but I'm not sure how wide a path I need to clear so that the joint can be pushed into place. I'm also trying to figure out if I should slope the pathway in one direction or another (like a ramp leading to the hollowed socket).

I hope that makes sense...I'm still just learning how to speak in 3D.

Any recommendations are much appreciated!

Thanks!

T.

Subject: Re: Question regarding little tiny ball joints...
Posted by [stop4stuff](#) on Tue, 15 Jan 2013 09:21:45 GMT
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The post [Creating balljoints in SketchUp](#)
by [Drawn-Steel Hero](#) might help you out.

Paul

[stop4stuff](#) Modeller for hire [Shapeways Shop](#) - [Controller Pendant](#) [Twitter](#) [YouTube](#)

Subject: Re: Question regarding little tiny ball joints...
Posted by [Tresob](#) on Tue, 15 Jan 2013 13:40:16 GMT
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Thanks for the link. I'm checking it out. He's working on a much larger scale, so I wonder if that changes things.

Right now, I have it set up so that I'm going to be trying to push a 3.3mm sphere through a 2.8mm wide/.5mm thick aperture leading to hollowed out socket. I made the socket at 3.5mm (.2mm wider than the sphere joint), just in case it ends up tighter than intended in the printing process.

I guess my question is whether the plastics have enough give, or if I should widen/narrow that aperture.

But before I drop my seven bucks on seeing if this works, I thought I'd seek the wisdom of the masters.

Subject: Re: Question regarding little tiny ball joints...
Posted by [tmr5555](#) on Tue, 15 Jan 2013 13:54:14 GMT
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I'd say do a trial run with different tolerances to see what works.
But if you don't want to do that make the parts as snugly fitting as possible, you can file down tight parts.
There's no remedy for loose parts though.
