
Subject: Need help getting this model into Shape
Posted by [zero_hour](#) on Fri, 09 Nov 2012 05:48:23 GMT
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I have a starship miniature that I REALLY need to get printable right away (I have dozens of customer orders pending).
The model can be downloaded here:

http://www.shapeways.com/model/675476/0_hr__jo_lynn.html

The images there are the first version of the model. I had a Black Detail copy printed without a problem. A customer did likewise. But on the third order, it was flagged with thin walls:

I touched up the model to thicken up parts and make the nooks and crannies much shallower. I uploaded this less-detailed model and ordered another Black Detail copy. This time it was flagged as uncleanable:

"Reason: Can not be cleaned "

My best guess is that this is about the hollow areas inside? The hollow space has two tunnels of sufficient diameter so that shouldn't be an issue, but I can't think of anything else it could be.

My main concern though is how can I get this model to not be rejected? I don't have time to keep fixing things, ordering, and then getting yet another error message. Shapeways won't do a complete check for some reason so I'm really hoping one of you resident experts can take a look and tell me EVERYTHING I need to do in one go.

Subject: Re: Need help getting this model into Shape
Posted by [mkroeker](#) on Fri, 09 Nov 2012 08:42:16 GMT
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Did you change those areas where they put the green crosses between the previous and last attempt ?

When I suggested to make indents shallower, I was referring specifically to the parts on the ladder-like beams that were flagged in the original image.

Subject: Re: Need help getting this model into Shape
Posted by [zero_hour](#) on Fri, 09 Nov 2012 13:22:03 GMT
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No, I didn't make any changes to those areas. It's clear that they bail out at the first issue someone notices and its about a week between tries. That's what has me in this predicament. If they would just do one complete check and tell me the issues, then I could fix them and maybe still salvage this product line in time. ./ (or better yet, if they would just pass it after they have already passed and printed it twice with no problems).

I scaled the ladder indent areas way back. They are extremely shallow now so definitely not a "wall" around there. I also looked for simiar areas elsewhere - like where I had deep recesses for window areas - and made them shallow as well. I think I got most of those types of areas taken care of between the first rejection and the second (though I'm not positive about the round holes in the front of the engines).

Because of the extreme expense, I made the model hollow - though with thick enough walls. I can see where getting the gunk out of the hollow interior would be tough, which is why I have two tunnels going in (one near the front, one near the back). That should let a blast of air clean it out, and really I don't care if the miniature is full of wax inside anyway.

If it comes right down to it, I'll clean the minis myself. I just need these things printed and done but I can't get any meaningful response from Shapeways.

Subject: Re: Need help getting this model into Shape
Posted by [mkroeker](#) on Fri, 09 Nov 2012 13:51:57 GMT
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The problem with "cannot clean" is that it implies "cannot dye it black".
Did you email service directly with your problem ? Perhaps they are able to wave this model through - or at least ascertain what needs to be done.
Maybe with the first, successful print they spent two hours with a toothbrush cleaning that thing and are just not willing nor able to do that on a regular basis.

Subject: Re: Need help getting this model into Shape
Posted by [zero_hour](#) on Fri, 09 Nov 2012 16:02:36 GMT
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I don't think dying is involved with the Black Detail material.

I've been exchanging emails with service (Michon van Tuijl) and have asked for a list of all the problems (rather than one at a time), I just heard back and I think he'll take a look at it.

I've done another (hopefully final) pass at simplifying and solidifying. The new .stl file can be downloaded here:

<http://www.shapeways.com/model/675476/0-hr-clydesdale-class-transport.html>

Subject: Re: Need help getting this model into Shape
Posted by [stannum](#) on Sat, 10 Nov 2012 00:14:26 GMT
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Black Detail is solid black. BSF is dyed WSF.

Subject: Re: Need help getting this model into Shape
Posted by [Fredd](#) on Sat, 10 Nov 2012 03:08:40 GMT
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On the page, it is also not showing a volume which is not good. I tried downloading it, no luck to check on interior volume.

Well I figured how to download it finally, it showed in Blender several internal nonmanifold vertices, about 20. I think when you tried to fix the original problems, more were caused internally. Intersecting faces the probable cause. I am seeing if I can repair it.

I gave up on it, it has 400 shells. Plus other manifold problems. Run it through netfabs cloud service to get it booleaned properly, then submit it again, sheesh. Repair might be a tad easier.

Unhappy Keith

Subject: Re: Need help getting this model into Shape
Posted by [zero_hour](#) on Sat, 10 Nov 2012 07:31:42 GMT
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I appreciate the effort Fredd, though I'm not sure what caused your problems since the STL file WAS run through NetFab and repaired etc. before being uploaded to Shapeways. I don't think their automated checks would have allowed a file with all of the issue you describe.

Regardless, I've uploaded a new version (again run through NetFab and having no manifold issues, holes, or anything else flagged after the automated repair process). The volume is 7.64 cm³.

Subject: Re: Need help getting this model into Shape
Posted by [Fredd](#) on Sun, 11 Nov 2012 00:41:41 GMT
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Be carefull, It had several interior faces around the domes on both ends of the engines. Netfabb basic cannot detect them. Well it uploaded properly after the fix anyway