Create a Male Genital Material for Genesis 3 Male or Female.

By Windamyre.

Disclaimer: While this tutorial is not explicit, it does reference male anatomy and may not be suitable for all audiences. Also, I am using Daz Studio 4.9 and windows 10. Your millage may vary.

This tutorial will step you through the process of creating a Genital Material for G3F GenderMix models that use a traditional G3F Material. This can also be applied to any Genesis 3 (male or female) with Male Genitals that might not have come with an existing Genital Material.   I chose to do it for G3F with GenderMix as it involves more steps and the tutorial was inspired by a question specifically for this. The other processes are a sub-set of this one. If you are doing this for a G3M character, skip to step 7.

What you'll need:

- Genesis 3 Female (or Male) and a set of male Gentials. You can use the Anatomical Elements from Michael 7 Pro pack, or any of the third party products that use the same UV maps. See Links/Sources for a few.

- Genesis-3-UV-Swap-Male-and-Female-Base (If you're using a Female Material)

- G3M Genital Texture Helper from Renderotica. It's a freebie

- Any G3M Material package that has a genital material, but the closer the skin-tone is to your source the better. Use a Merchant Resource though if you're planning on redistributing your work. If you don't have one, you can also use the original torso images, though this may limit your ability to distribute the Genital Material.

- Graphics software with layers, such as Photoshop, or my favorite, Gimp ('cause I'm cheap).

- Genesis 3 Male Genitalia Templates. Not 'required' but handy. Particularly if you're using the torso to fill out the image map.

Overview:

Basically the trick is getting the genital materials to line up with the torso of the character and avoid the ugly seam. To do this we're going to have to create a new set of images for the Genitals that line up correctly with the existing torso. Since the Source images don't have all the 'geometry' we will blend that into an existing texture and match the colors.

Conventions:

I'll be using *Materials* to refer to the saved presets for a character. These include colors, shaders, and file names used to load all the character's surface settings. *Images* are the files used by the Materials. *Texture* will only be used where it was mentioned by the software.

Source will refer to the materials and images applied to the G3F character. *Existing* materials and images are taken from another product, in this case a G3M character with a genital material.

<u>Step by step:</u>

Creating the intermediate torso image

1. Load G3F in Daz and apply the Source material.

2. Select Genesis 3 Female. Under the Surface tab, select Map Transfer to bring up the dialog.

3. Right click in the left-hand Listbox and Create New Template. Drag the Torso over from the right-hand list box and drop on the Template1.

4. Click on Torso. Change the Target UV Map to Genesis 3 Base Male.

5. Click on Template1 and adjust the Baking Quality, File Type and Save Converted Textures To: settings. I recommend '10' for Baking Quality, '.png' for File Type. For Save Converted Textures, just don't use the default as it get's cleared every time you restart Daz Studio. Save it somewhere permanent, but avoid using the same folder as the original material as the names are the same and you might overwrite something. Using a new sub-folder in that location can make some of the next steps easier.

6. Open the output Folder from Step 5 in Explorer and rename the files. I'd recommend appending 'Male' to the end as it will make it easier to find later. This will also avoid the files being overwritten in Step 14 below. These are Intermediate files and can be deleted once the whole process is complete.

7. Click Accept. Wait. Dialog will disappear. In the folder you set, there will be a few (or more) images. These are intermediate step files that we'll be using since the next step requires images that use G3M UV maps.

Creating the connecting genital images

8. Load Genital Texture Helper. It's a prop and should not be attached to Genesis 3. You can move it aside, if you want to. The location isn't important.

9. Apply the Source Material to the prop. This ensures that the shaders are set up correctly in the Surfaces tab. It it doesn't take, copy the Torso surface from Genesis 3 to the Genital Texture Helper. See Copying Surfaces at the end for step-by-step.

10. Select the Genital Texture Helper and go through the Surfaces tab and identify every parameter where an image is present. For an Iray surface this will often include Base Color, Glossy Color, Base Bump, etc. For each one replace the current image with the new one created with the Map Transfer tool. For some sets, there is can be very minor differences between the Bump and Spec and SSS images. When in doubt, follow the file name. Some of the files are used more than once. (This step does not apply if using Genesis 3 Male)

11. Check to make sure the UV Set of the Genital Texture Helper is set to Base Male.

12. With the Genital Texture Helper still elected return to the Map Transfer Tool.

13. Right click in the left-hand Listbox and Create New Template. Drag the Torso over from the right-hand list box and drop on the Template1.

14. Click on Torso. Change the Target UV Map to Genital UV. Click on Template1 and adjust the Baking Quality, File Type and Save Converted Textures To: settings. I recommend '10' for Baking Quality, '.png' for File Type. For Save Converted Textures, just don't use the default as it get's cleared every time you restart Daz Studio. Save it somewhere permanent, but avoid using the same folder as the Source Material, as the names may be the same and you might overwrite something. Using a new sub-folder in that location can make some of the next steps easier.

15. Open the output Folder from Step 14 in Explorer and rename the files. I'd recommend appending 'GenBase' to the end as it will make it easier to find later. This will also avoid the files being overwritten in Step 22 below. These are Intermediate files and can be deleted once the whole process is complete.

16. Click Accept. Wait. Dialog will disappear. In the folder you set, there will be more files. These will be the 'top' part of the Genital maps, the part that comes in contact with the Genesis 3. Because there is no source for the rest of the image, we'll have to create it.

Filling in the Genital images

17. Leave Daz running or Save the file. Open your graphics software and load in the files you created in the second Map Transfer. I load them all in as layers and hide the ones I'm not using, but you can open each one in a separate file if you choose.

18. Load the Existing Genesis 3 Male genital images as new layers. If you don't have any, open the Torso images from the Source Material. These layers should go under the images we loaded in step 17. For the next steps, I'll discuss working on the Base Color map. Any other maps follow a similar idea and are usually easier as they tend to be grayscale images.

19. Adjust for scale issues on the existing layer. For Existing images, the file might be 4,000 x 4,000 instead of 4,096 x 4,096 or vice-versa. If you're using the torso images, you'll want to make sure the skin covers the area used by the Genitals. Open the Genesis 3 Male Genitalia Templates as an additional layer to help.

20. Use the color tools of your software to tweak the color of the G3M textures (Don't make any changes to the textures we created using the Map Transfer at this time). Each software is different, but in Gimp I use Hue/Saturation the most. Color Balance after that and Brightness/Contrast for the Greyscale images.

21. When it's as good as you can get it, select your eraser and carefully erase the edges of the Transferred Texture to blend the two layers together. Don't erase deeply into the Transferred Texture as it will create artifacts where it meets G3F's torso. I usually use a medium sized .25 hardness eraser as it makes blending easier for me.

22. You may need to adjust color of some parts of the Genitals to correct for changes you made above if it's washed out.

23. When it looks good, export it a folder. I recommend putting it inside the original model's texture folder as it'll be easy to find later. Name it something like 'ModelName_Gens_color.png' or something close. Where ever you store it, this location will be referenced by Daz once you save it as a preset, so you'll probably want it inside the Textures folder at least.

24. Repeat each step with every image created from the Map Transfer. For the other images, you may have some work to tweak the contrast and brightness. You want to try and maintain a consistent look between the Transferred images and your Existing images.

25. Save your work in the software's native format and exit. You won't be using it in Daz, but you might want to tweak something later and there's no need to repeat everything you did to get here.

Test and save results

26. Return to Daz Studio, reloading your file if needed.

27. Apply the Genitals to the Genesis 3 model. We need to set the materials up for Genitals so they match the torso. You can try applying the Source Material to the Genitals, but it may not take. If it doesn't, copy the Torso surface from Genesis 3 to the Genital. See Copying Surfaces at the end for step-by-step.

28. Under the Genitals, replace all of the torso image with the ones you created in your graphics software. Remember that some files are used more than once.

29. Give it a test render. You may have to go back to the graphics software and tweak some things.

30. If it's good, Save it as a Hierarchical Material(s) Preset.

31. That's it. You're done! At this point you can delete or at least relocate the files you created with the Map Transfer tool. I'd recommend keeping the ones from Step 15 in a seperate folder as you might find a better Existing material to use later on.

Copying Surfaces

1. Select your source object in the Scene tab or Viewport.

2. Switch to to the Surfaces tab and find the surface you want to copy. Avoid using other groupings such as Default Templates, Skin, etc.

3. Right click on the surface and select Copy Selected Surface(s)

4. Select your destination object in the Scene tab or Viewport.

5. If you are using an Iray shader, you have to apply the !Iray Uber Base shader. If you are doing this to the genitals, make sure the Genitals are selected in the Scene tab, and not the Genesis character. It won't work otherwise. The !Iray Uber Base shader can be found under the Surfaces tab presets or in the Content Library tab under My Library\Shader Presets\Iray\Daz Uber

6. Return to the Surfaces tab and right click on the destination surface. Select Paste to Selected Surface(s).

Links/Sources:

Genesis-3-UV-Swap-Male-and-Female-Base: http://www.daz3d.com/genesis-3-uv-swap-male-and-female-base

Gender Mix For G3F. Put's a Male Genital on a G3F.
https://www.renderotica.com/store/sku/52299_Gender-Mix-For-G3F

OMGDK3.0 https://www.renderotica.com/store/cat/287_Male-Genitalia/sku/54637_OMGDK3-0-For-G3M

Gential Texture Helper: http://www.renderotica.com/community/forums.aspx?g=posts&m=122013

Genesis 3 Male Genitalia Templates. Only place I've seen them is under my Product Library. Search for 'Elements' as it's listed under Genesis 3 male Anatomical Elements. There's a manual download available there.

My Deviant Art page: http://windamyre.deviantart.com/