Michael 4 UV Mapping for Genesis 2 Male Genitalia

by Slosh

27 JAN 2014

First, let me say thank-you for purchasing Michael 4 for Genesis 2 Male. A lot of work was put into this to make it a great product. The newest addition is the Michael 4 UV's for the Genesis 2 Male Genitalia. The reason this has been so difficult in the past, as with Genesis, is because the Michael 4 Gens is a prop that attaches over the hip/pubic bone area of Michael 4, whereas the Genesis and Genesis 2 Gens are geografted onto the hip area. Geografting involves replacing geometry on the figure with another piece of geometry, in this case it is the genital figure. On Michael 4 Gens, part of the pubic area above the genital was made transparent, allowing for the torso and hip texture to show through and blend in with the genital texture. To recreate that for Genesis 2 on a geografted figure was quite a challenge. I took the pubic/hip texture straight from the torso map on Michael 4, and took the genital texture from the Michael 4 genital map. The genital map is much larger than the matching area on the torso map, so making them match detail for detail seems impossible. So, to hide the seam between the two areas, I created a SeamCover prop, which is parented and fit to Genesis 2 Male and draws its texture from the torso map. A transparency map is then used to blend the edges of the SeamCover so that Genesis 2 Male Genitalia's hip and genital skin maps can show through partially. This results in a pleasing blend that is virtually undetectable (except maybe in extreme closeups and odd angles). It is not perfect, but is certainly a very acceptable substitute to not being able to use Michael 4 genital textures at all.

Unfortunately, this is not a "one-click" solution, and there are some steps involved to make it work, but I am hoping that is something you, the user, will be willing to accept for the convenience of having Michael 4's genital textures available.

To use the Michael 4 UV's and the SeamCover, follow the steps below in order:

1. Load Genesis 2 Male, Genesis 2 Male Genitalia, and SeamCover into your scene. The SeamCover loads the same color as the Genitalia, so you might not see it very easily. Just check your Scene Tab to make sure it loaded.

- 2. Select all three items in the Scene Tab. Apply the body texture of your choice, for example "! All_Natural" from the Michael 4 Texture set (see *** at the bottom of this document). This will apply the full body texture to Genesis 2 Male, and it will apply the hip texture to both the genitalia and the SeamCover. At first, the genitalia will look wrong, most likely showing Michael 4's ears on a plain background. The penis itself will not be textured yet. The Seam cover will have a copy of the hip texture, but will not have transparency yet. Please see ### at bottom of document for important information regarding HumanSurfaceShader.
- 3. With Genesis 2 Male selected, apply the Michael 4 UV's. You can either do this manually through the Surfaces Tab, or you can use the provided "Set M4 UV" preset located in the People:Genesis 2 Male:Materials folder or in Smart Content, it should appear under Materials/Masculine/Michael 4 for Genesis 2 Male
- 4. Select the Genesis 2 Male Genitalia in your Surfaces Tab and scroll through the list on the right until you find UV Set. In the drop-down box, you will see "M4Mapped". Select this and you will see the genitalia hip area correct itself in the viewport. Make sure you have applied the M4Mapped UV's to both the "Genitalia" and "Hips" material zones for Genesis 2 Male Genitalia in the Surfaces Tab.
- 5. Almost done! Select the SeamCover in your Scene Tab, or by right clicking on it in the viewport and choosing Select "SeamCover". Apply the Transparency preset located in either People:Genesis 2 Male:Anatomy or in Smart Content, it should appear under Materials/Skin.
- 6. The final step is to apply the genital texture to the Genesis 2 Male Genitalia figure. There are two ways that I can suggest to do this. I prefer the second method, since it is fewer steps and will allow me to change textures as often as I want after doing the first step. The first method is rather involved and personally not my favorite.

Method One:

1. Select the Hips surface of the Genitalia figure in the Surfaces Tab. Right-click on it and select "Copy Selected Surface(s)". Now select the Genitalia surface, right-click and select "Paste to

Selected Surface(s)". This will paste the hip texture to the genitals and will not look correct at first.

2. If the shader on the hip surface is not the same as the Genitalia surface, it will not paste the shader. You will have to do that manually to the Genitalia surface first, then paste the hip

texture on.

- 3. Remove the transparency map from the Opacity Strength field. This is very important because your figure will not look right in the viewport nor when rendered.
- 4. Manually change the diffuse, bump, and specular textures of the Genitalia surface to the correct genital textures. There may be more than these 3 textures, including Displacement, Subsurface,

Translucency, etc. The must all be changed.

5. This should be the end. I recommend saving this material setup for the genitals so you don't have to do it again next time you use this character's textures.

Method Two (preferred):

- 1. The following method will make applying the genitalia textures and shaders much easier, but must be done at each session because you don't want to save these changes permanently.
- 2. Select Genesis 2 Male Genitalia in the Scene Tab. From the Tools Menu, select Polygon Group Editor. Open the Tool Settings Tab (if it is not open already, you can select it from the Window Menu,

under Window/Panes(Tabs)/Tool Settings).

- 3. In the Tool Settings Tab, expand the Surfaces group and you will see Genitalia listed as a surface. Double click on the word Genitalia and rename it Gen_Skin (make sure you use the underscore).
- 4. You can now click on any Genital texture preset and it will apply the correct shader and texture to the genitals.
- 5. Remove the transparency map from the Opacity Strength field. This is very important because your figure will not look right in the viewport nor when rendered.
- 6. You can save the material setup for use again later in another session, but you will need to do Steps 1-3 again before applying the saved preset.

For some reason, textures that use the HumanSurfaceShader do not automatically work correctly with the SeamCover. It will render darker than the other materials, like it has a shadow. I have found that I need to apply the hip material, then change the shader to DAZ Default, then change it back to HumanSurfaceShader and that makes it work correctly. Don't know why, it just is that way.

*** Note that all texture presets must be in .duf format in order to apply them to Genesis 2 Male or Genesis 2 Male Genitalia. A script is available at the DAZ Store by DraagonStorm called "M4 Skins AutoConverter". This will allow you to select M4 Textures that are saved in .pz2, .mc6, and .dsa formats. You can also do this manually by applying your textures to Michael 4, then saving as a .duf file, but it is more time consuming.