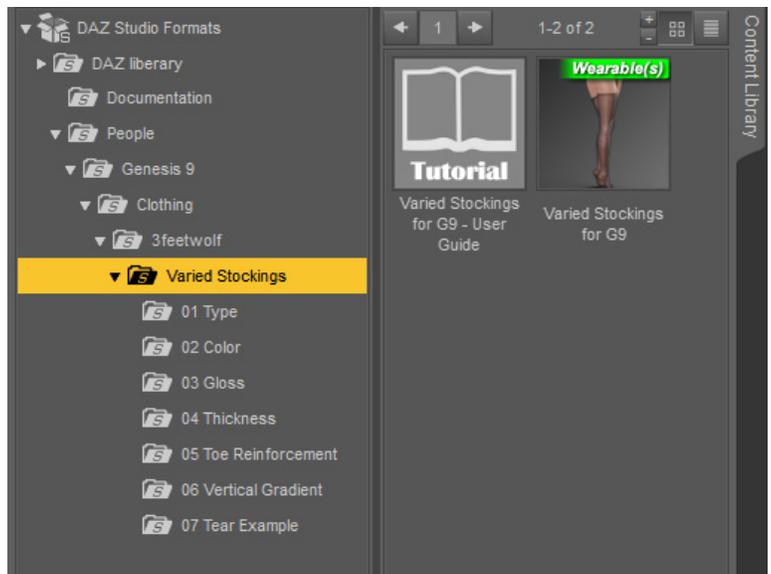

Product Name: Varied Stockings for Genesis 9
Author: 3feetwolf
Copyright July 2023
Email: 1033085906@qq.com

Compatibility:
Only works in Daz Studio 4.20.0.17 Pro(64 bit) or higher

User Guide

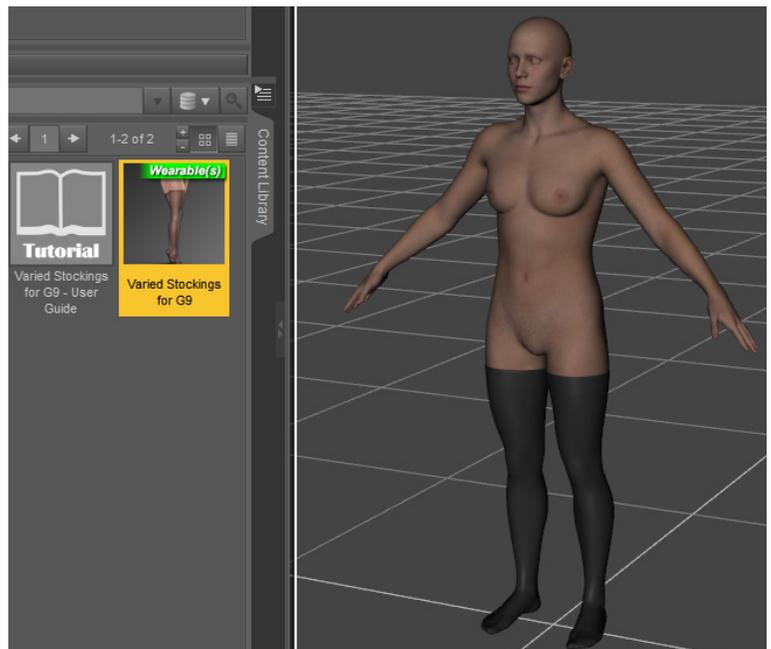
1. Applying the stockings to your character

After installing Varied Stockings for G9, you can see its files and subfolders under 'People > Genesis 9 > Clothing > 3feetwolf > Varied Stockings'.



Select your character and double-click on 'Varied Stockings for G9' icon to apply the stocking to this character.

In the viewport you will see an gray stocking model. This is because the Varied Stockings uses a custom shader, it cannot be fully previewed in the viewport.



At this point you can see what Varied Stockings really looks like by rendering or setting your viewport to Nvidia Iray mode.



2. Eliminating Poke-Through

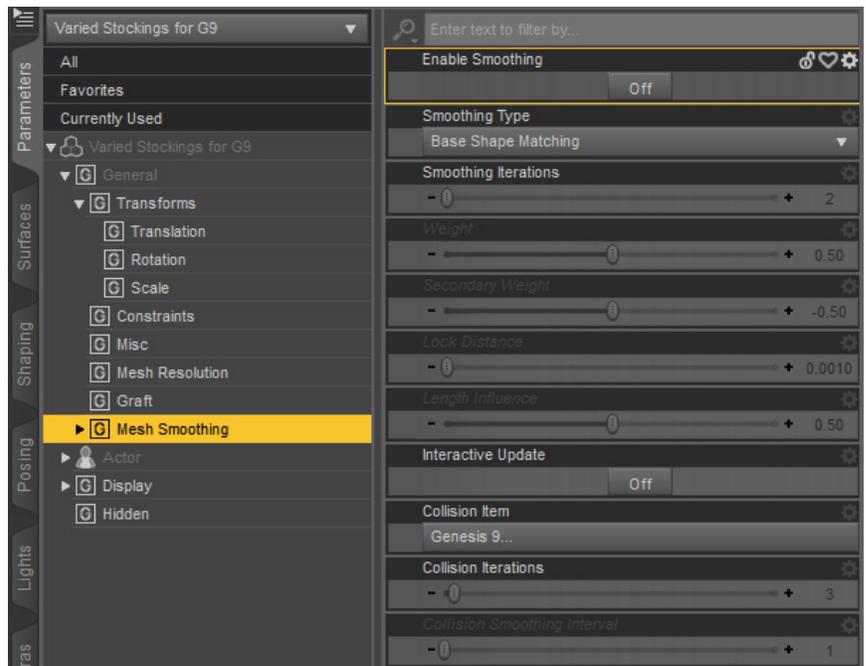
The Varied Stockings provides two ways to help you eliminate the poke-through between the stocking and body.

2.1 Mesh Smoothings Modifier

Select the stocking in Scene pane, then go to Parameters pane.

You can find out the parameters of Mesh Smoothing Modifier under 'Varied Stockings for G9 > General > Mesh Smoothings'.

Setting 'Enable Smoothing' to 'On' and then tweaking the other parameters can make the poke-through go away.

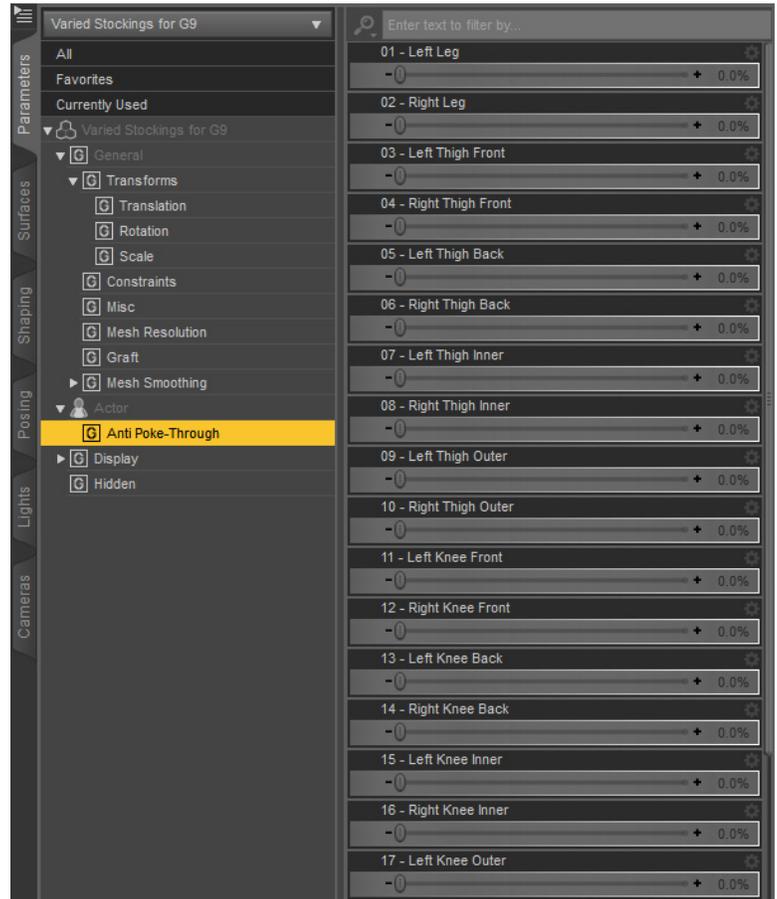


2.2 Anti Poke-Through morphs

Similarly, select the stocking in the Scene pane and then go to the Parameters pane. You can find out the anti poke-through morphs of the Varied Stockings under 'Varied Stockings for G9 > Actor > Anti Poke-Through'.

These morphs are divided according to different body parts.

When you find a poke-through somewhere in the stocking, just find the anti poke-through morph corresponding to this body part and give it an appropriate value.

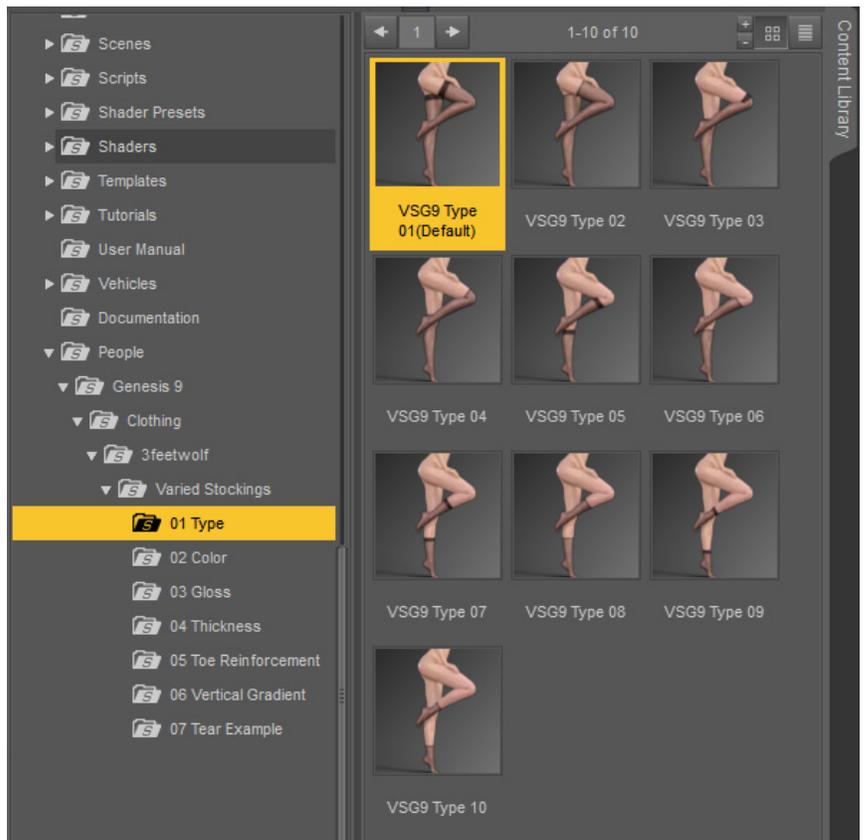


3. Create personalized stocking for your character

3.1 Type

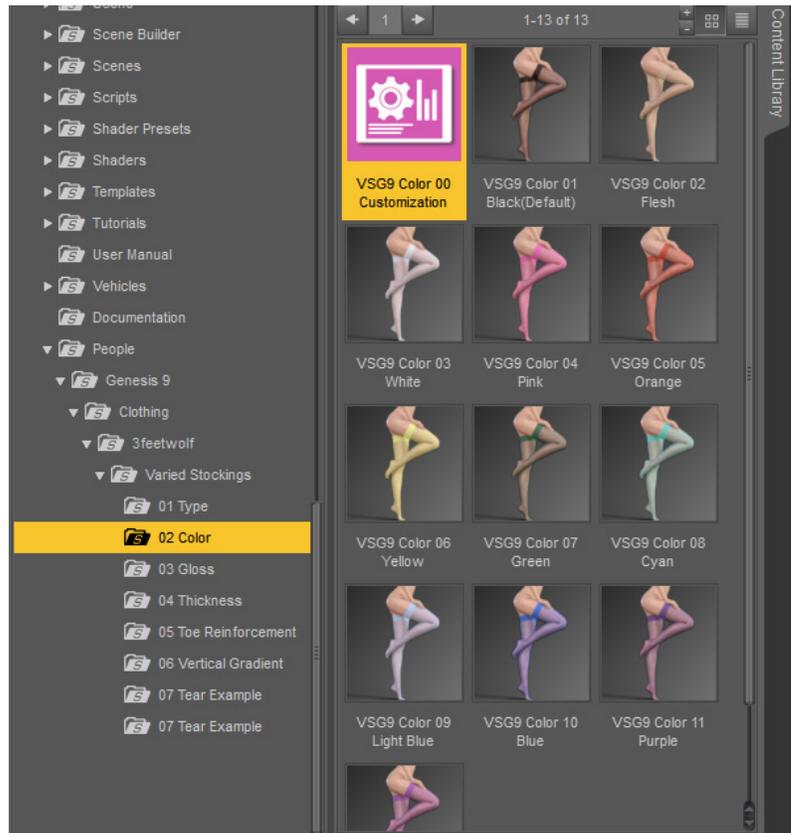
There are 10 type presets for you to choose from in the Type subfolder.

These presets cover ankle socks, crew socks, knee high stockings, over the knee stockings, etc. Their cuffs are also different.



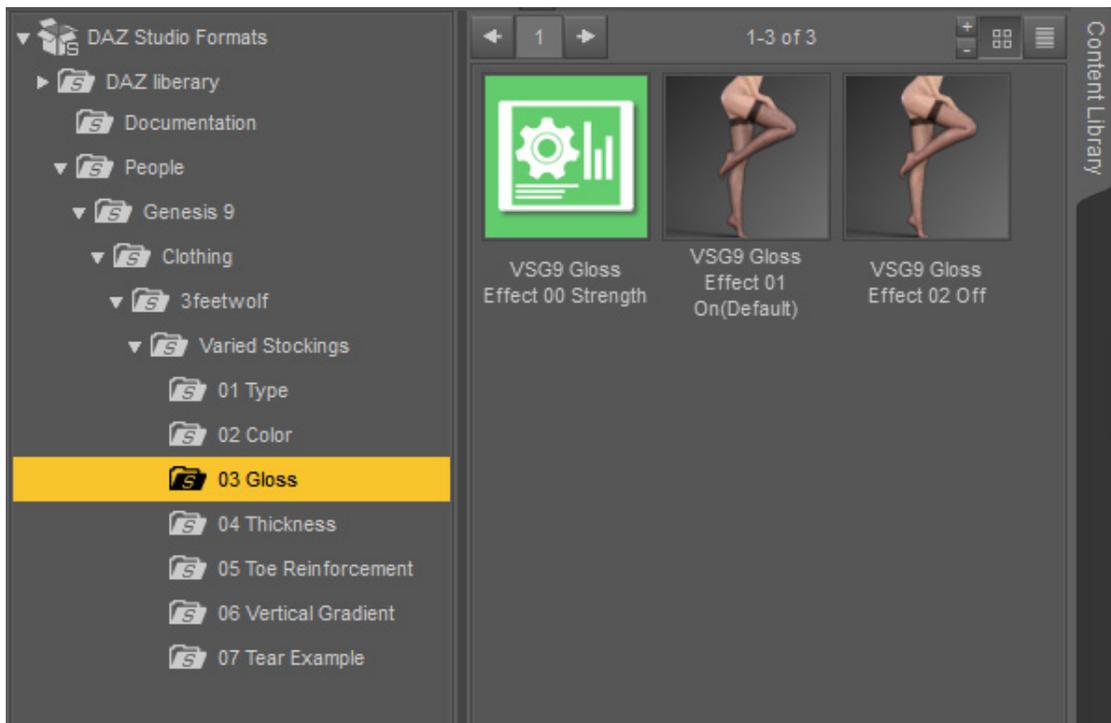
3.2 Color

There are 12 color presets for you to choose from in the Color subfolder. And you can use the 'VSG9 Color 00 Customization' to specify any color for the stocking.



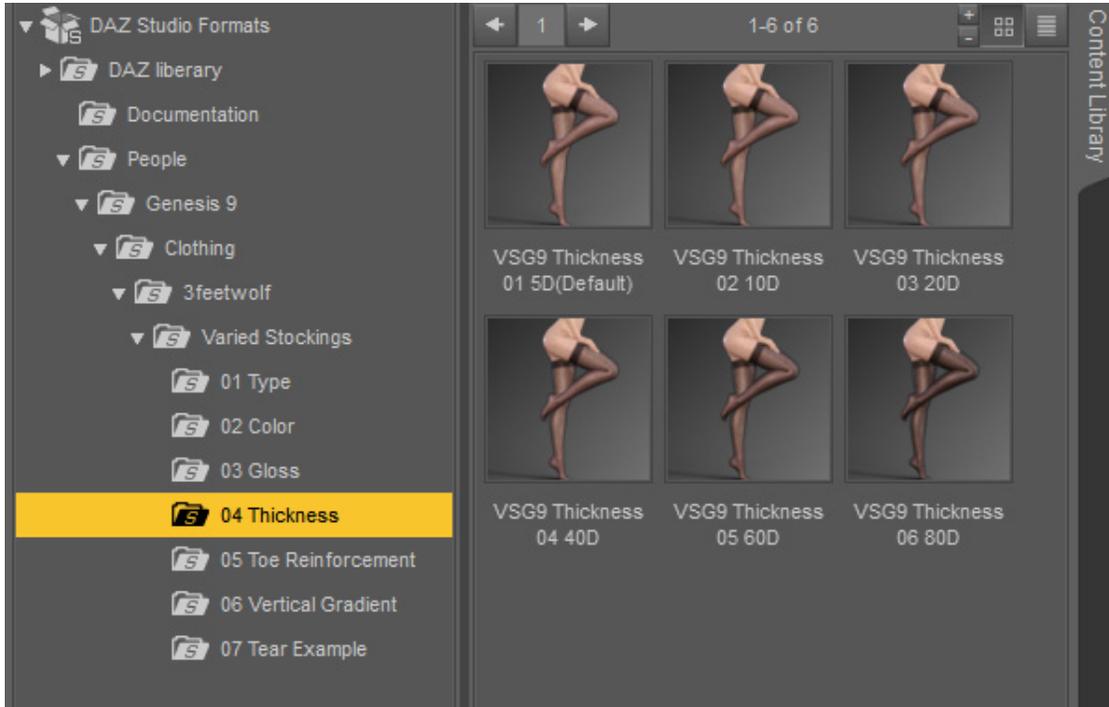
3.3 Gloss

You can turn the stocking gloss on or off, or adjust its gloss intensity as needed through the scripts in the Gloss subfolder.



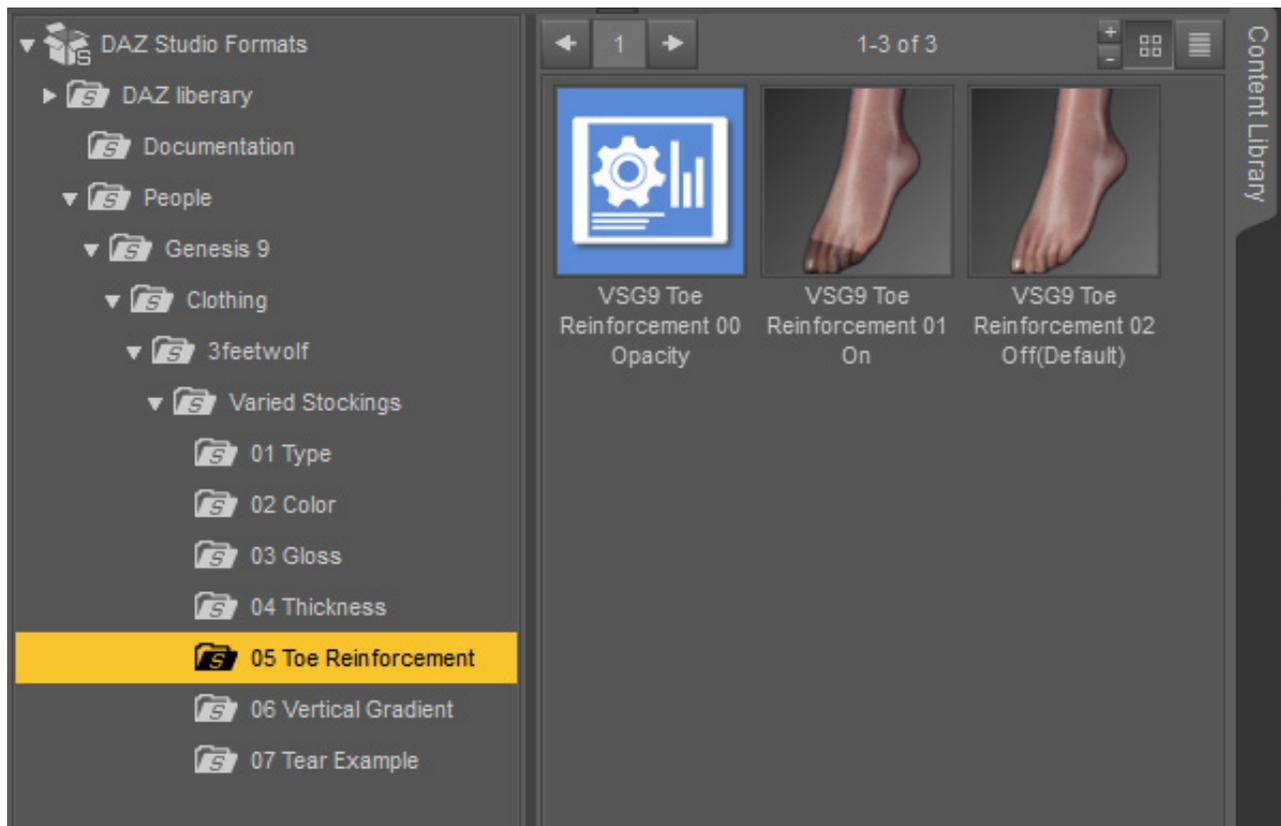
3.4 Thickness

There are 6 thickness presets for you to choose from in the Thickness subfolder.



3.5 Toe Reinforcement

You can turn Toe Reinforcement on or off, or adjust its opacity as needed through the scripts in the Toe Reinforcement subfolder.



3.6 Vertical Gradient

In the real world, some hosiery, usually those that reach thigh height, vary in thickness/opacity with height.

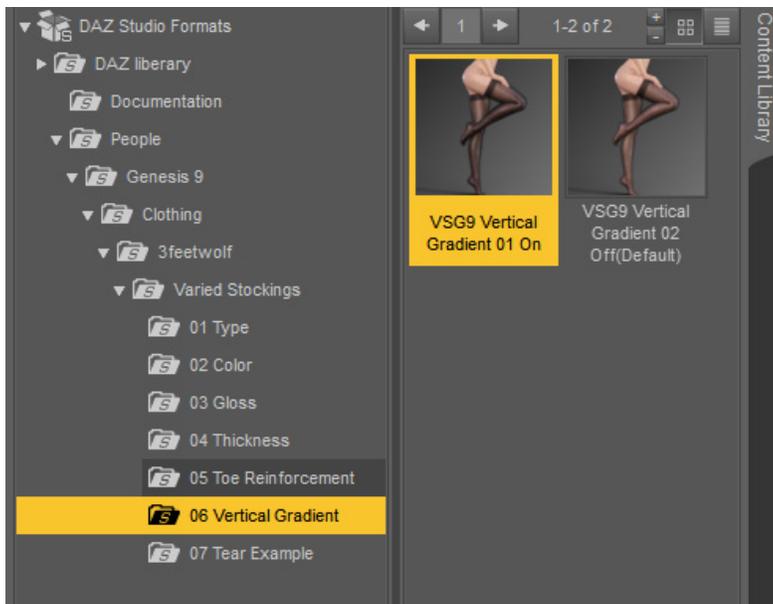
For example, they will be transparent above the knee and completely opaque below the knee.

Vertical Gradient uses a gradient map to simulate this effect.



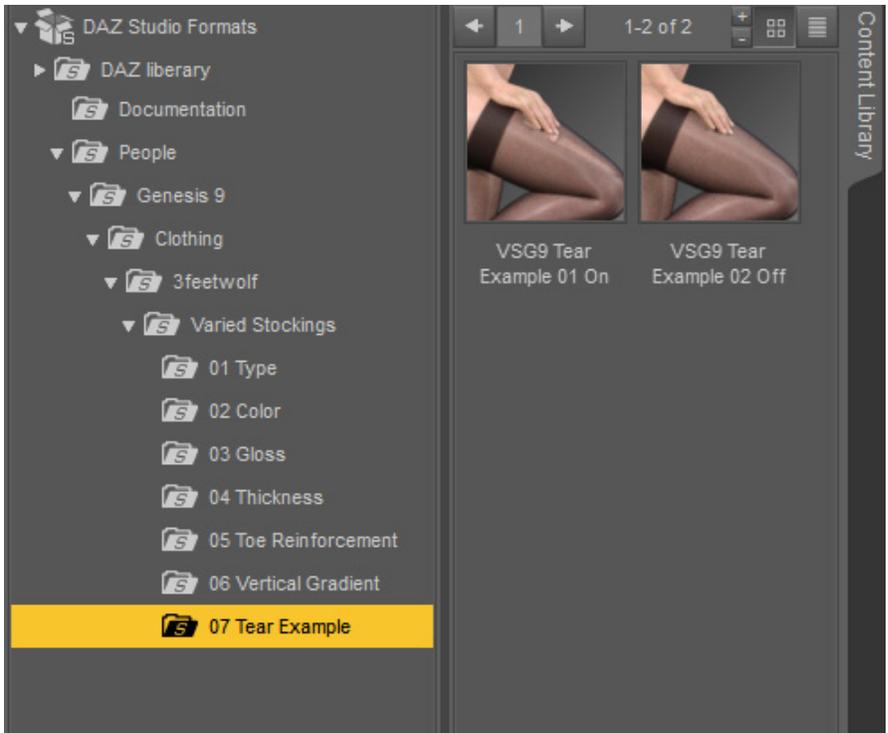
You can turn Vertical Gradient on or off with the scripts in the Vertical Gradient subfolder. Please note that when you enable Vertical Gradient, its effect is only obvious when you set the thickness of the stocking to a relatively high value.

Usually you need to set the thickness of stocking to 40D or higher.



4. Tearing effects

The Varied Stockings allows users to add tearing effects to the stockings using custom textures.



You can turn on or off a tear example through the scripts in the Tear Example subfolder.

Select the 'Varied Stockings' in the Scene pane, double-click on the 'VSG9 Tear Example 01 On' icon, and then perform a test render.

You will see a tear in the stocking on the right thigh.



If you plan to add different tearing effects to your character's stocking, you can create new custom textures yourself. The process of creating them is quite simple and does not require advanced skills and fine craftsmanship. Next I will provide a workflow for creating custom textures. It will tell you what textures should be created, how to create them and how to use them.

4.1 What kind of textures we need to create

This question has to do with the shape of the tears on stockings in the real world. In reality, there are basically three types of tears in stockings: strip, circle, or a mixture of both.



Some strands will remain inside the tear, while broken threads will accumulate at the edge of the tear, making the edge appear darker than the surrounding area.



We just need to draw the key points mentioned above to get the desired textures. It needs to be emphasized again that we don't need to restore the tearing in the reference photo very finely, just roughly match it.

4.2 How to create the desired textures

Let me take the mixture tear shown in the tear example as an example to introduce how to create the required textures.

- a. Open zbrush (or any other software that can draw directly on the model), and then import the base model of Varied Stockings:
`\data\3feetwolf\Varied Stockings for Genesis 9\Stockings\Varied Stockings for G9.OBJ`

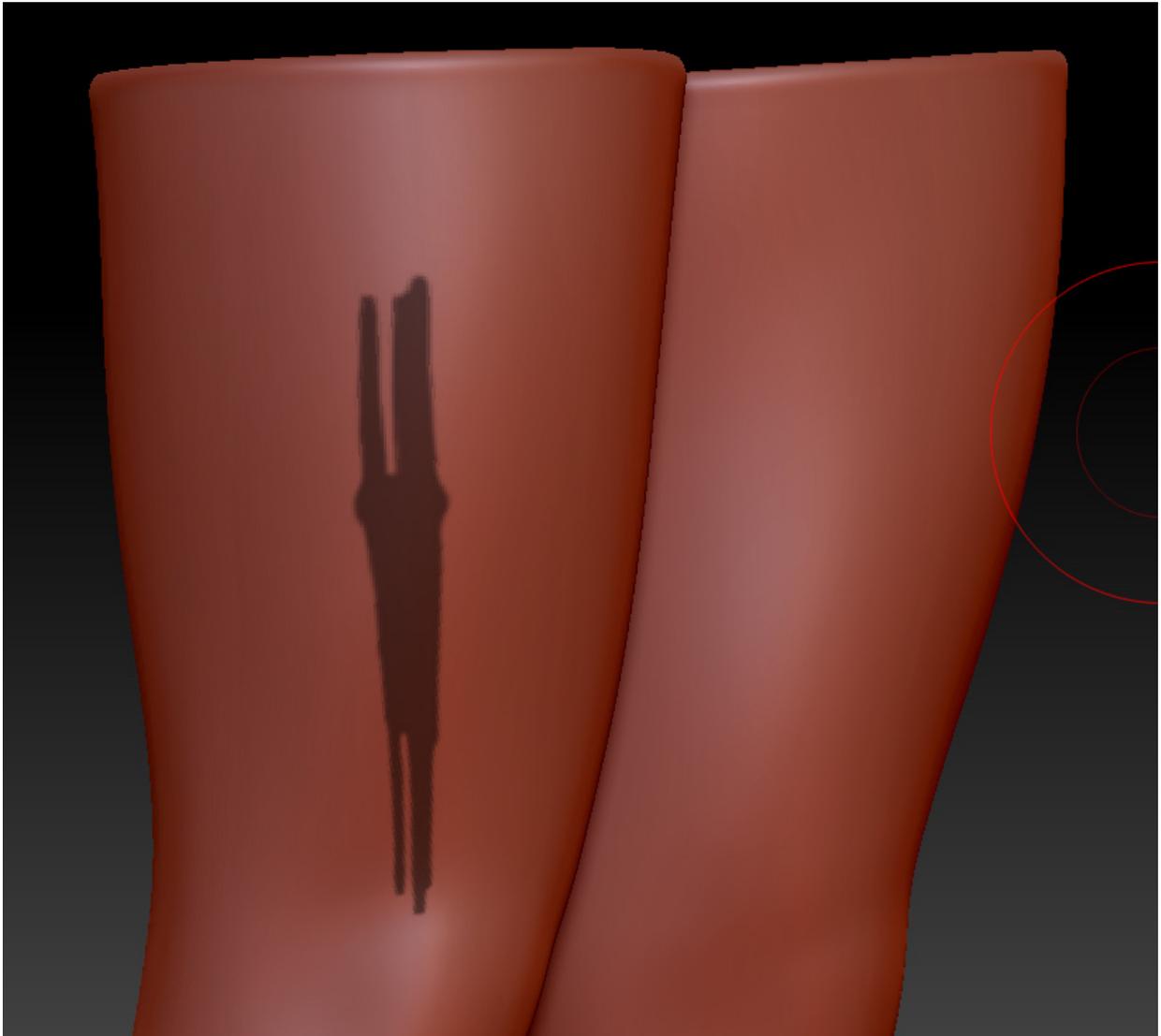


b. If you use zbrush, usually after importing the base model of the Varied Stockings you need to flip its uvs vertically.

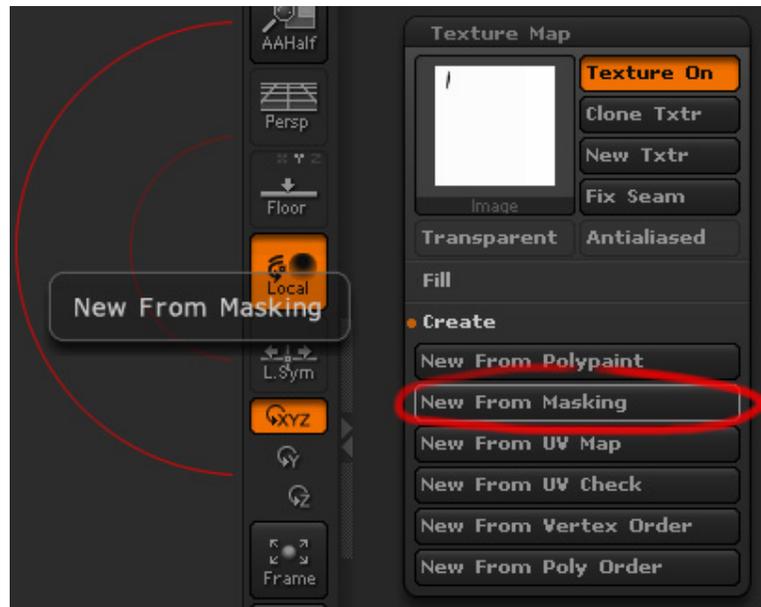


c. Press ctrl+D four times in a row to subdivide the model to level 5, so that the color gradient in the texture exported later has enough precision.

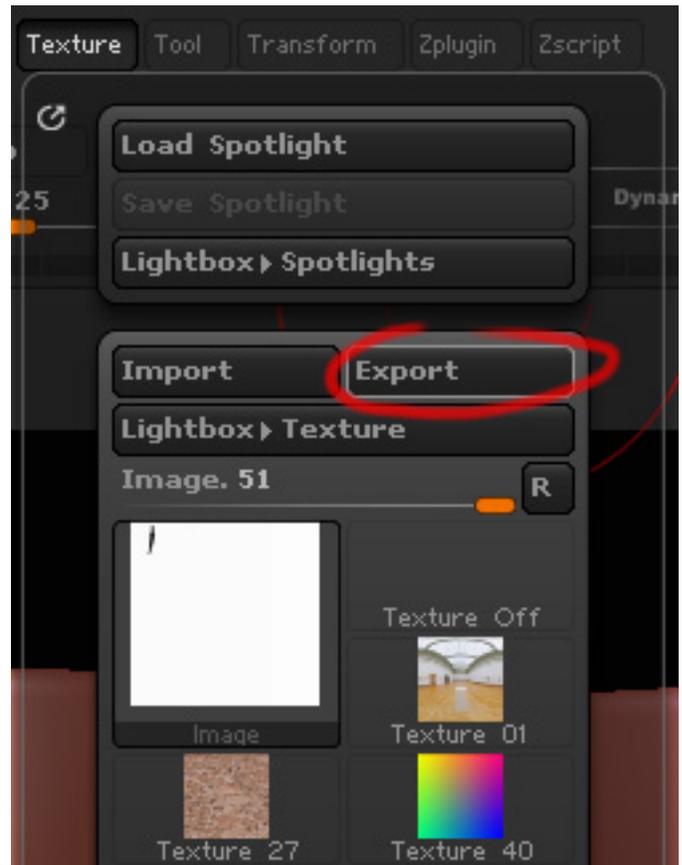
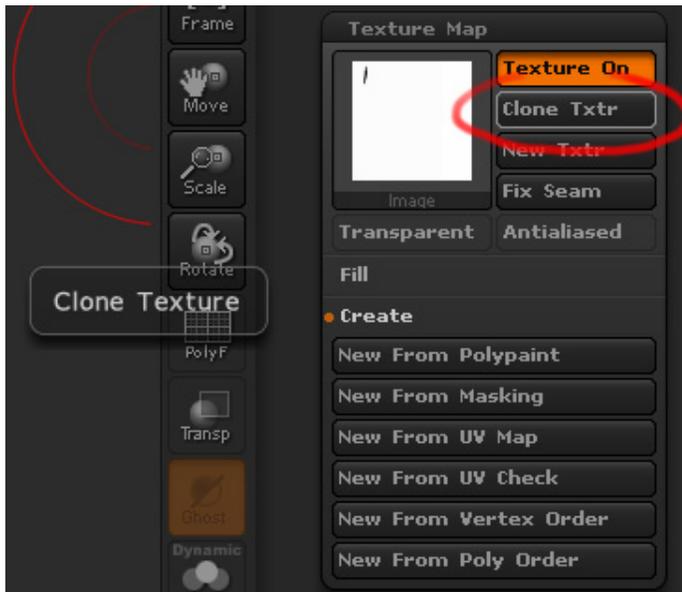
d. According to the reference picture, hold down the ctrl left button to activate the MaskPen, and draw a tear shape on the right thigh.



e. Go to the Texture Map sub-panel in the Tool panel, click 'New From Masking' to convert the mask into a texture.



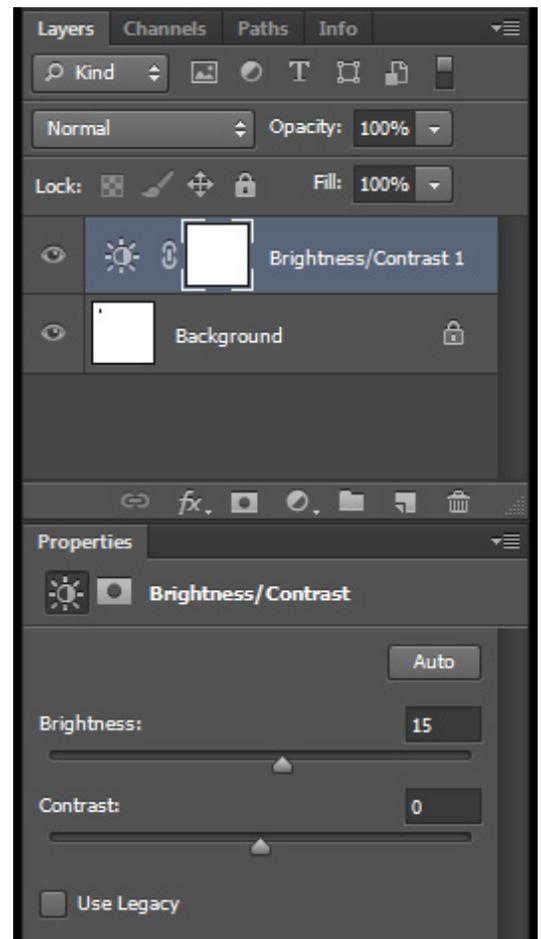
f. Click 'Clone Txtr', and then click 'Texture > Export' in the zbrush main menu to export the converted texture as a psd file.



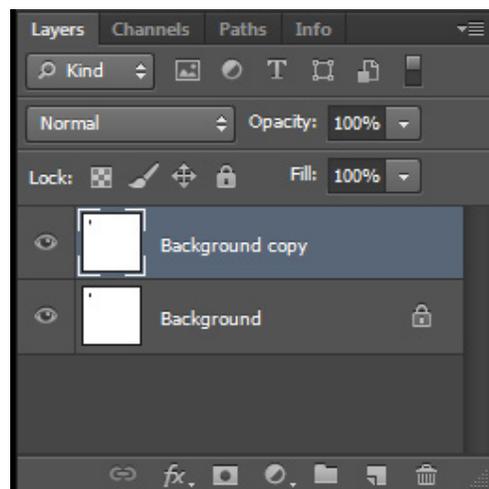
g. Open the psd file just exported from zbrush with photoshop or other image editing tools.



h. Please note that in the texture exported from zbrush, the white you see is not really white, its rgb value is 254,254,254. So we need to add a Brightness/Contrast layer on top of the background layer and set the Brightness to 15.



i. Merge the Brightness/Contrast layer with the background layer, and then create a new layer with the merged layer. We will continue to work on this new layer.



j. Use a hard brush to refine the outline of the tear and add a little detail.



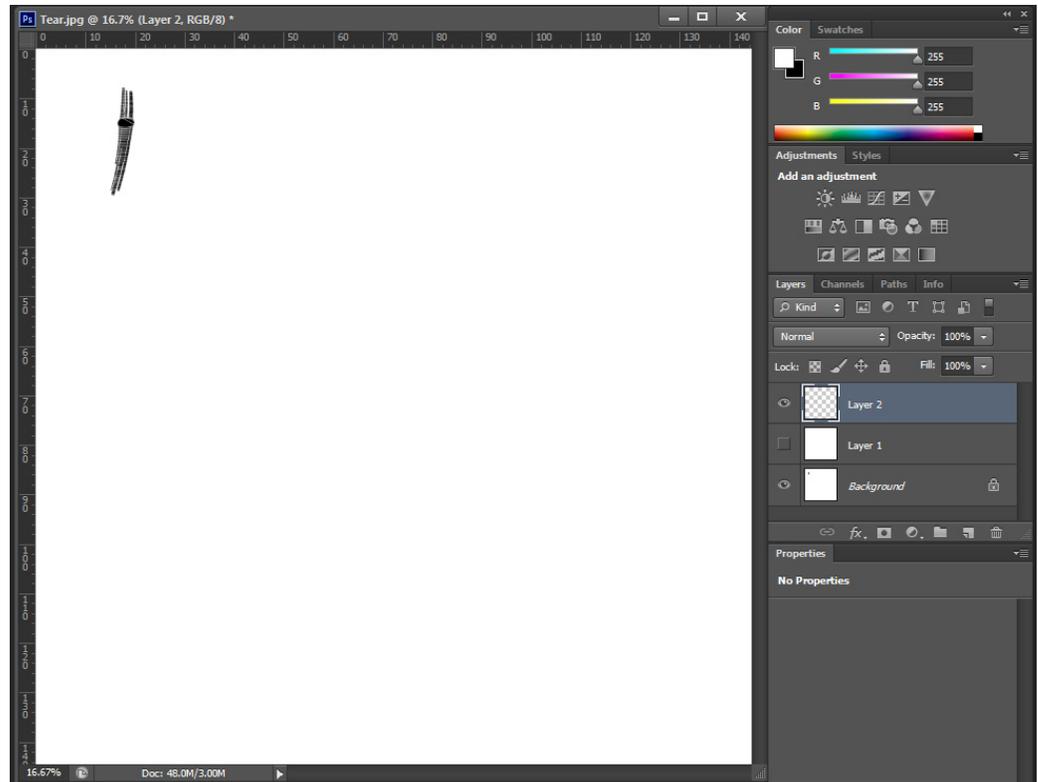
k. Then roughly draw the remaining threads in the tear with white color.



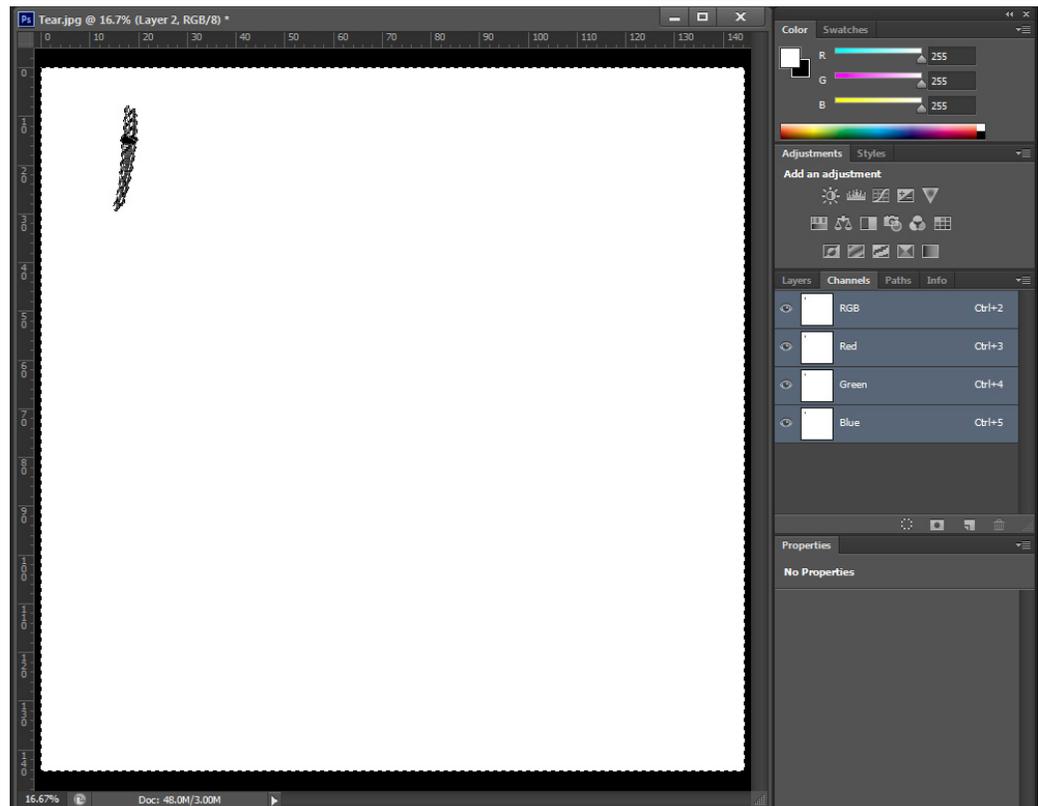
l. At last, save the psd file as a jpg image (you might want to customize the image's name and create a new folder to manage the textures you create). In this way, our first texture, the mask map of the tear, is finished.

A mask map alone is not enough. As I said before, the broken threads will accumulate at the edge of the tear, making the edge appear darker than the surrounding area. So we need to make another map to simulate this phenomenon.

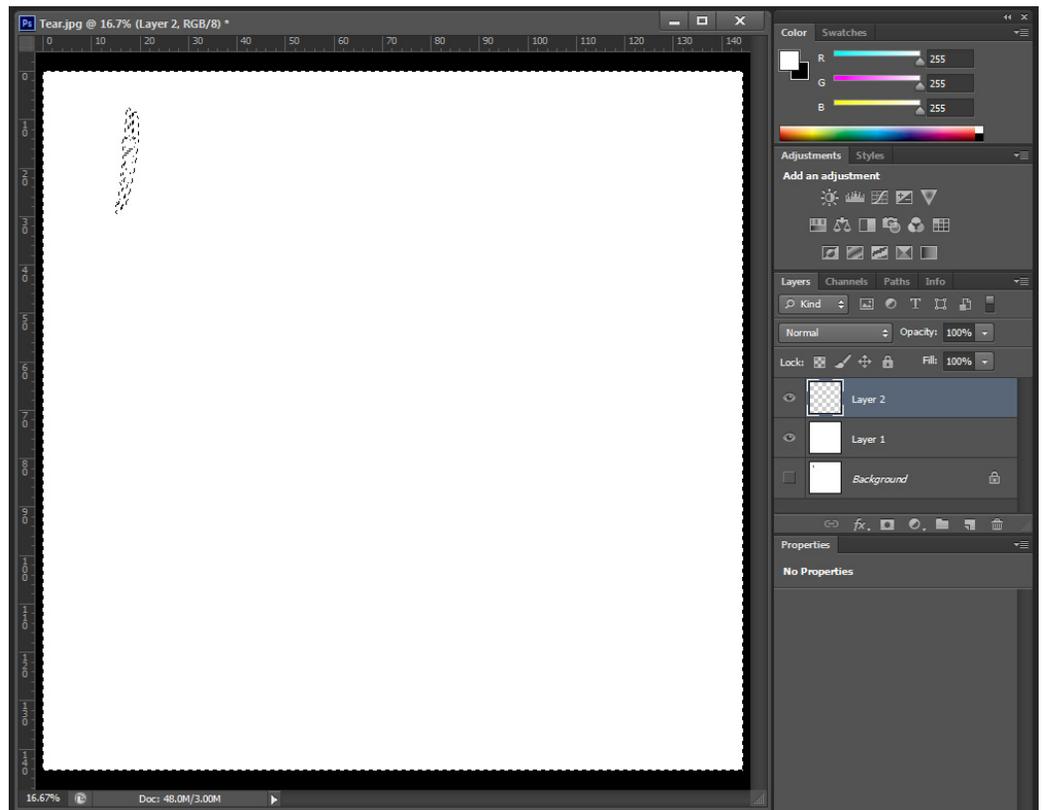
m. Use photoshop to open the mask map just saved, create a blank layer, fill it with white and hide it temporarily, and then create another blank layer.



n. Go to the Channels panel, hold down the left ctrl and click the RGB channel with the left mouse button to select all the white areas.



o. Back to the Layers panel, hide the background layer and make the white layer you just filled visible.



p. Change the brush color to black, choose a soft brush, and paint on the edge of the tear.



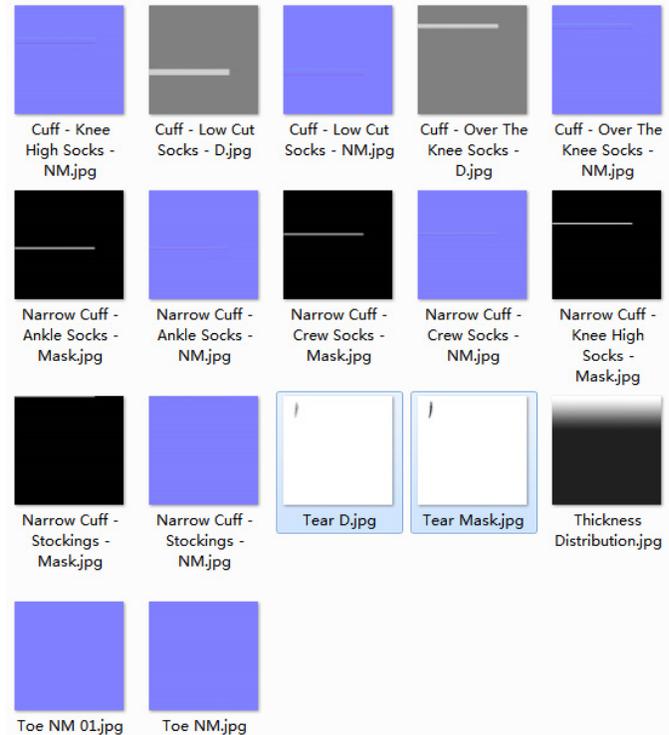
q. Save the psd file as a jpg image and put it together with the mask map. All the textures we need have been created.

4.3 Using the textures just created

There are two ways to use the textures we just created:

4.3.1. There are two jpg files in '\Runtime\Textures\3fewolf\VariedStockings', Tear Mask.jpg and Tear D.jpg.

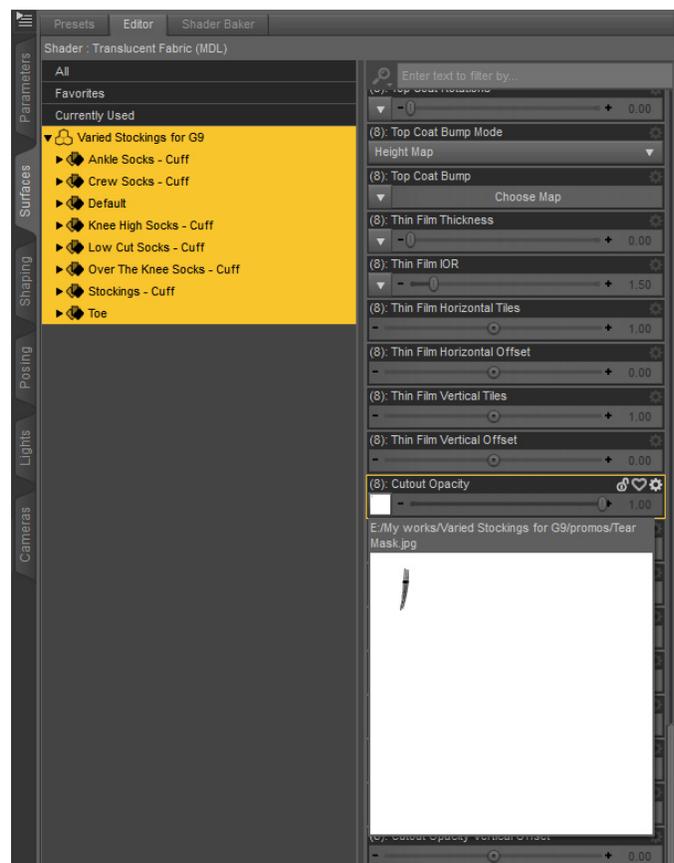
We can rename the first image just created to Tear Mask.jpg and the second one just created to Tear D.jpg, and copy them to this folder to replace the old files. In Daz Studio, select 'Varied Stockings', double-click the icon of 'VSG9 Tear Example 01 On' and render, we can see the tearing effect produced by the new textures.



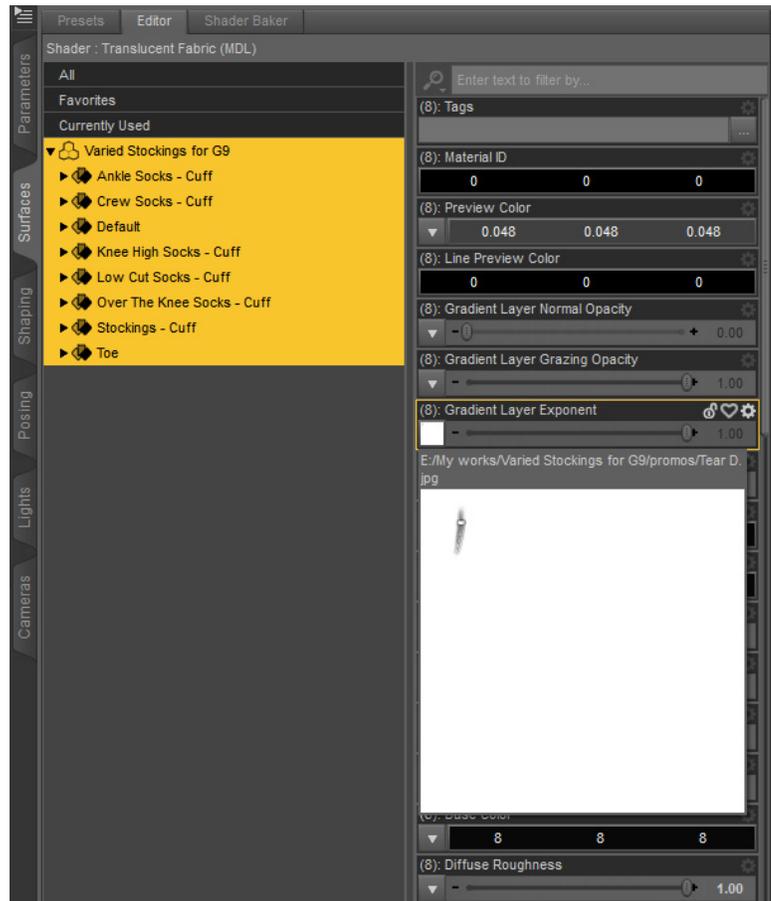
4.3.2. We can also manually assign two new textures to the corresponding material parameters.

Select 'Varied Stockings for G9' in the Scene pane, then go to the Surfaces pane and double click on 'Varied Stockings for G9' to select all its surfaces.

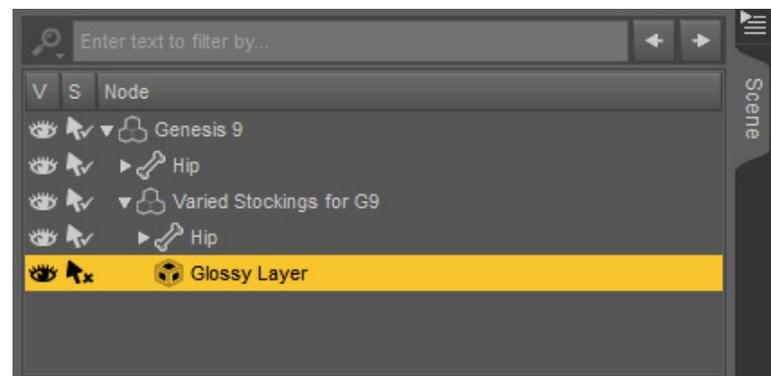
Find 'Cutout Opacity' in the parameter list on the right and assign it the first texture we created.



Find 'Gradient Layer Exponent' in the parameter list on the right, and assign the second texture we created to it.

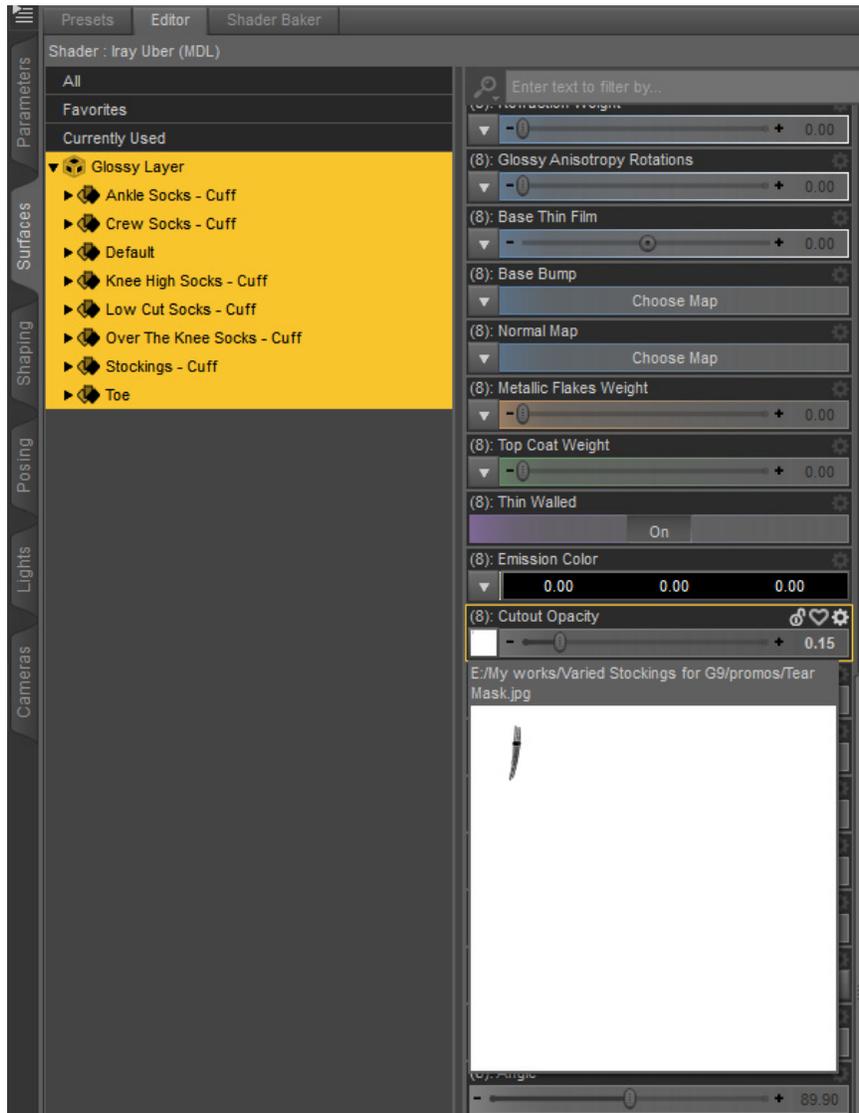


Go back to the Scene pane, double-click 'Varied Stockings for G9', and select its child node 'Glossy Layer'.



Go to the Surfaces pane and double click on the 'Glossy Layer' to select all of its surfaces. Find 'Cutout Opacity' in the parameter list on the right and assign it the first texture we created. In this way, the manual setting of tearing textures is completed.

Perform a test rendering, the result is exactly the same as the first method.



That's all for the user guide about Varied Stockings for G9. Hope this product helps you make great works of art. If you have any questions and suggestions, please send them to my email 1033085906@qq.com, thank you very much.