How to: Cross Gender/Race Face Ports

How to: Asym Vanilla & Characterstocking.shpk

a cool tutorial by izzy @thanc.red

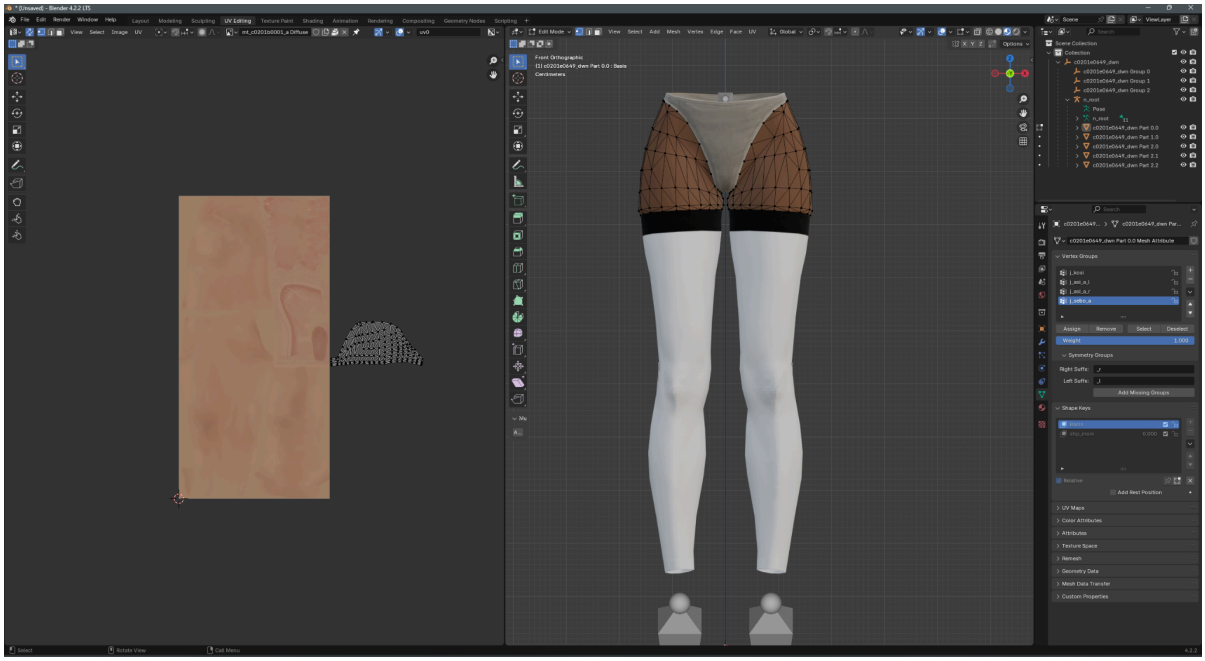
Overview: Introduction and Basics

Do you use asymmetrical skin textures like bibo or TBSE? Do you want these to show up on your vanilla mashups without having to refit to a modded body base? This is going to be a real quick and simple tutorial on how to asymmetrize your vanilla UV models.

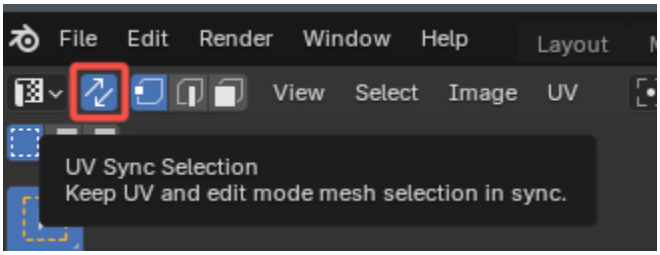
I'm also going to show you how to get your asymmetrical textures to show up on gear that uses the characterstocking.shpk shader. Up until recently, it wasn't actually possible to show modded skin on anything that used the stocking shader! A recent update to Penumbra made it possible to swap out what skin material is displayed, so this will only work if you load this model through Penumbra.

Step One: Asym Skin

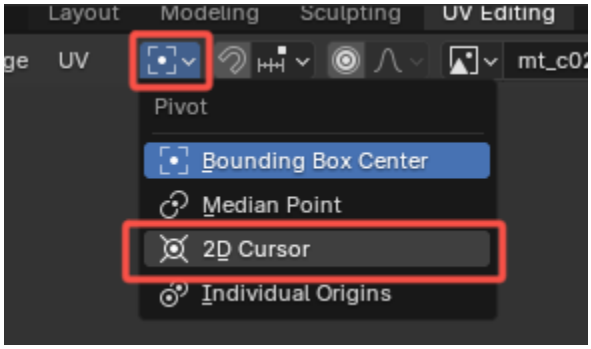
I'm going to be making the 2B tights asymmetrical today! The regular skin parts will display correctly but the parts that use characterstocking will be solid white. We're going to make the skin asymmetrical first, so select all the skin parts and change to the UV Editing tab!



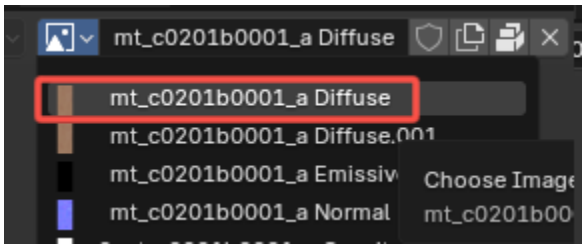
You can check this button here, **UV Sync Selection**, in order to see all the vertices in the lefthand UV window regardless of what you have selected in the edit mode window on the righthand side. It just makes it easier to see what's what!



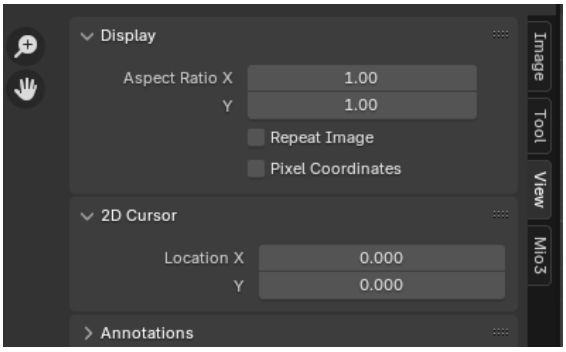
You're also gonna want to click this little icon and change your pivot point from Bounding Box Center to **2D Cursor** like so:



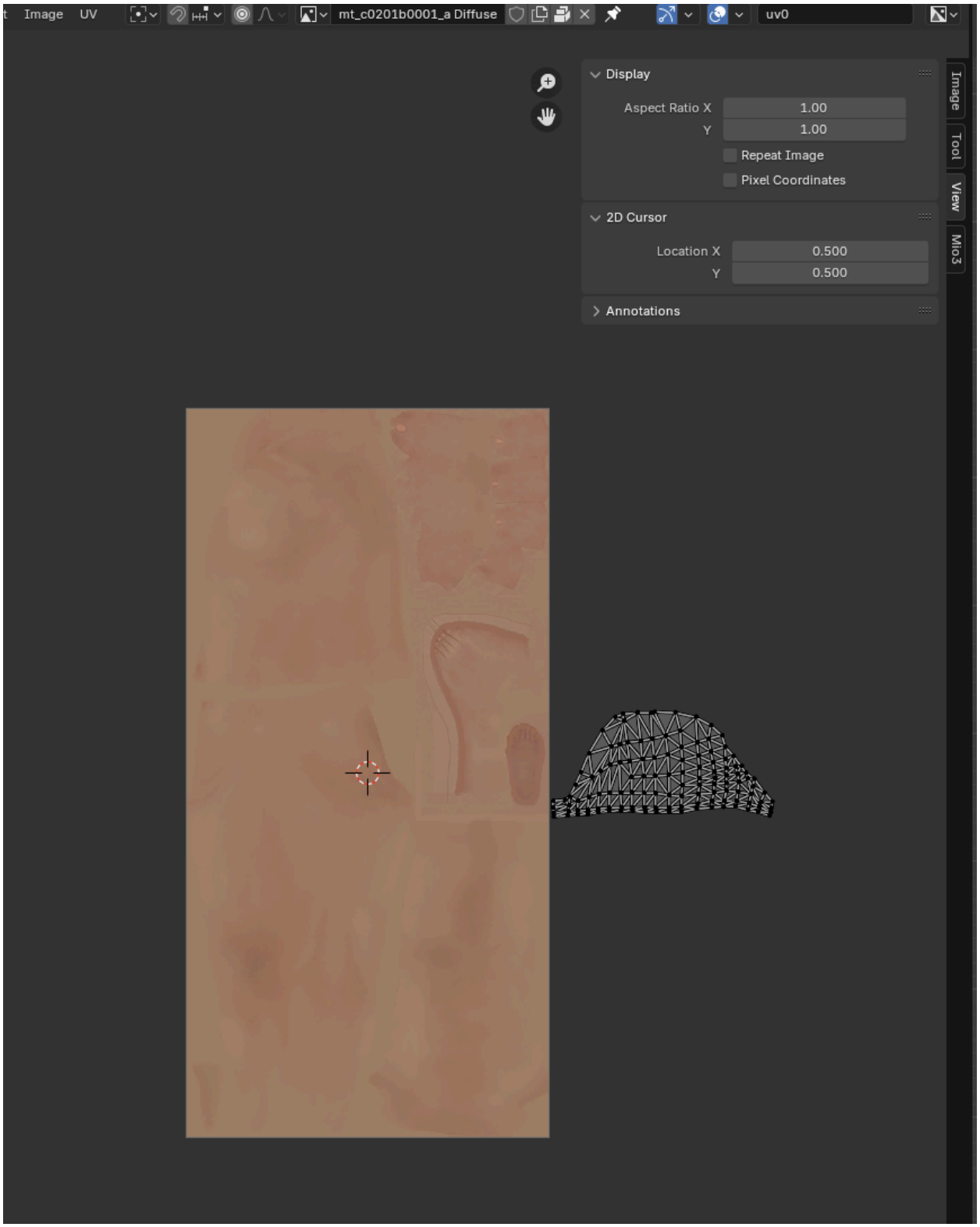
We're gonna set up the 2D Cursor to be directly in the middle of the texture. When you open UV editing mode, the displayed texture might be set defaultly to the skin Emissive. You can click on this dropdown and select the one that says Diffuse instead:



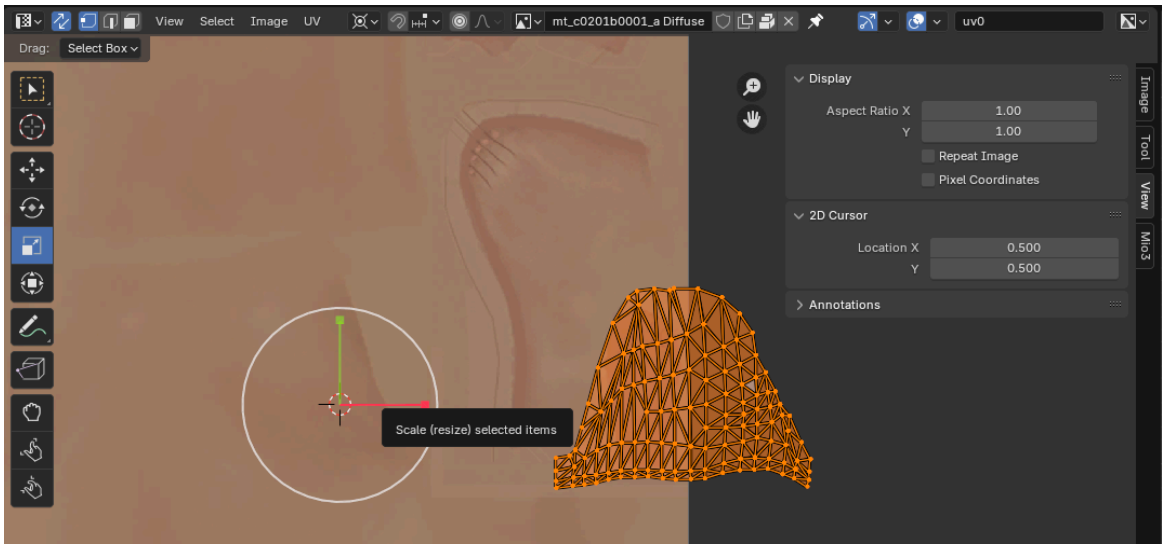
On the righthand side of the UV window, click on the little < carrot and drag to the left to expand the tools pane:



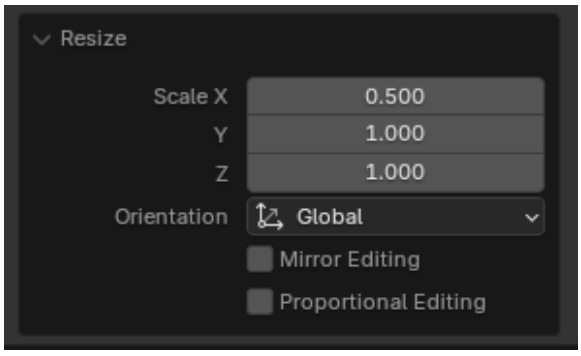
Change the 2D cursor Location X and Y from 0.000 to 0.5 on both, and now our Cursor is directly in the middle:



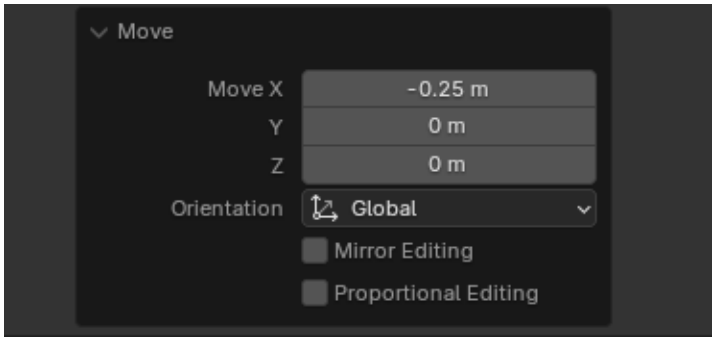
Now that we have that all set up, we can do three simple transforms in order to perfectly mirror these UVs and make them asymmetrical. First, select All of your skin parts by hitting the A key. Then, click on the scale tool and drag the red bar to scale your UVs down along the X axis a bit:



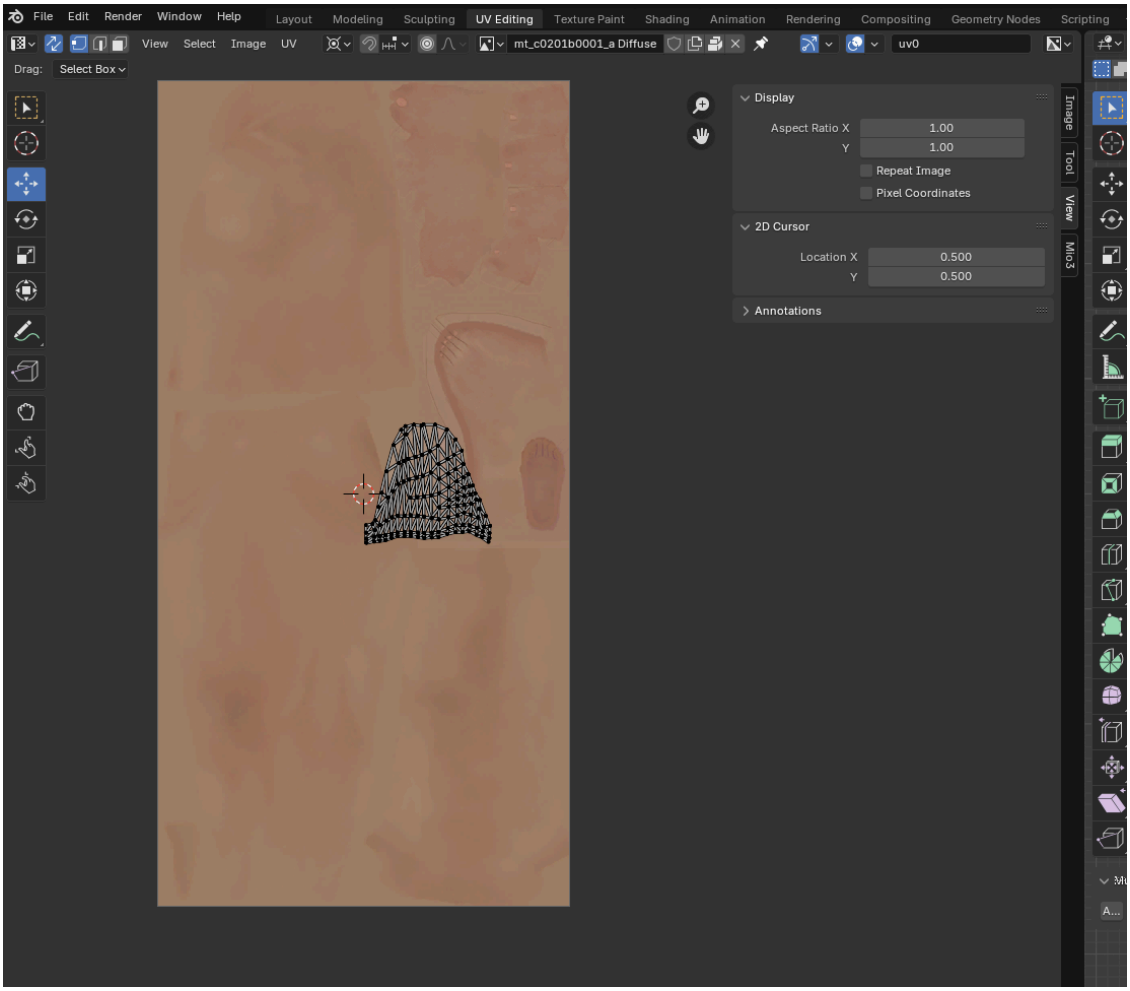
A little box that says **Resize** should pop up in the bottom lefthand corner of the window. Expand that box, and type **0.5** into the box that says Scale X and hit enter:



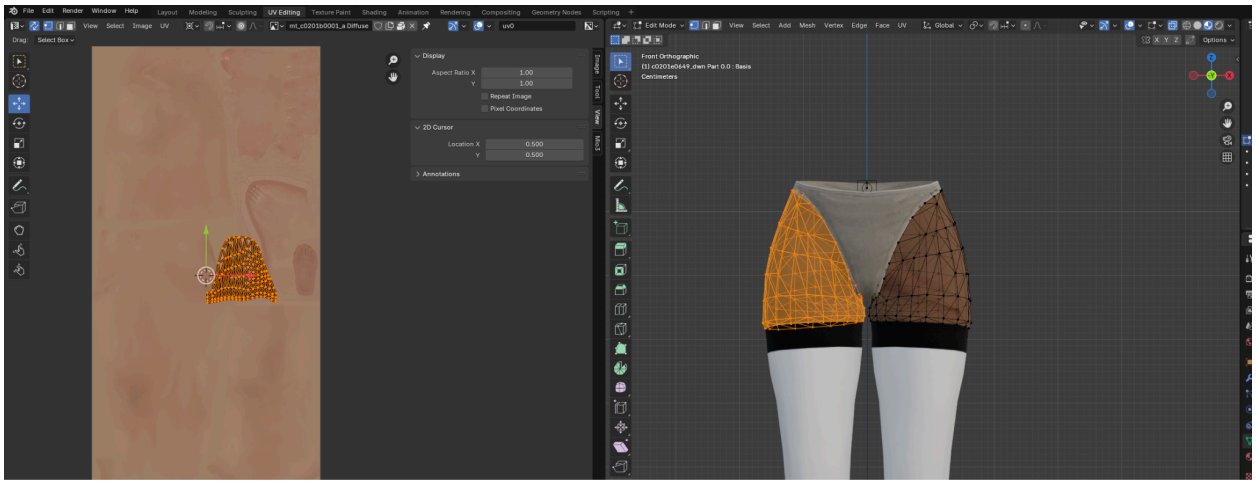
Now your UVs have been perfectly scaled in half! Next, we're gonna do the same thing to shift them all over 25% to the left. Click on the Move tool, and drag the red bar a little bit to move along the X axis. A window that says Move should pop up in the bottom lefthand corner again. Enter **-0.25** into the box that says Move X and hit enter:



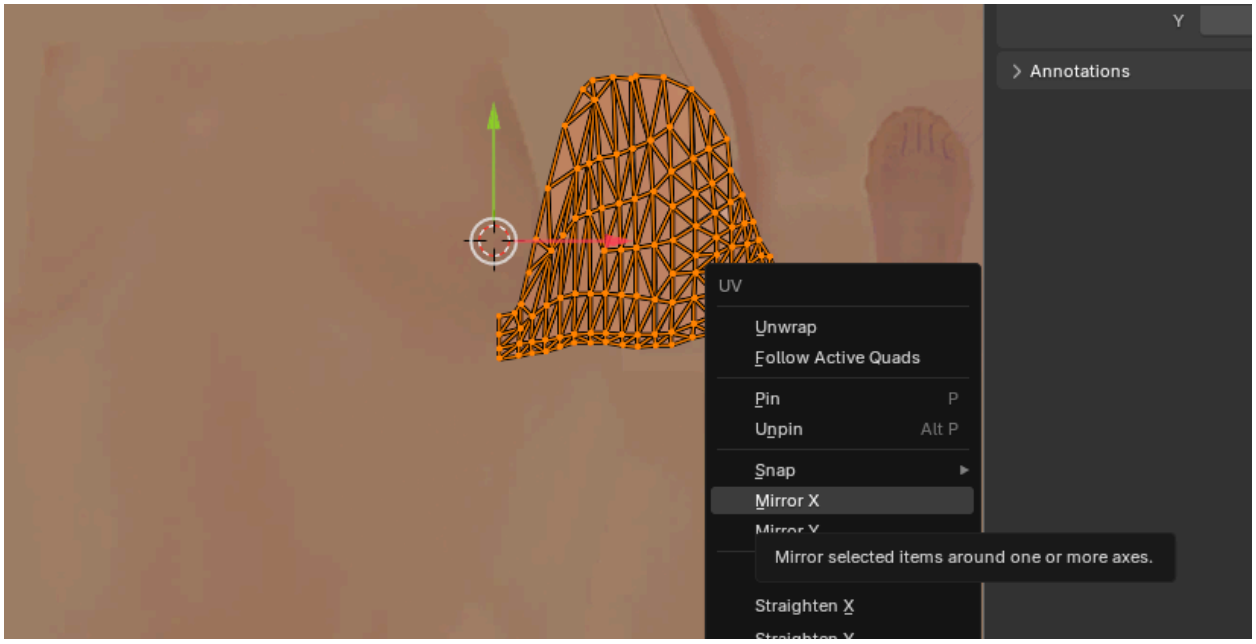
Awesome! Because the displayed texture is the vanilla symmetrical diffuse, the UVs will look really weird but I promise this will look normal as soon as we assign the bibo textures to it:

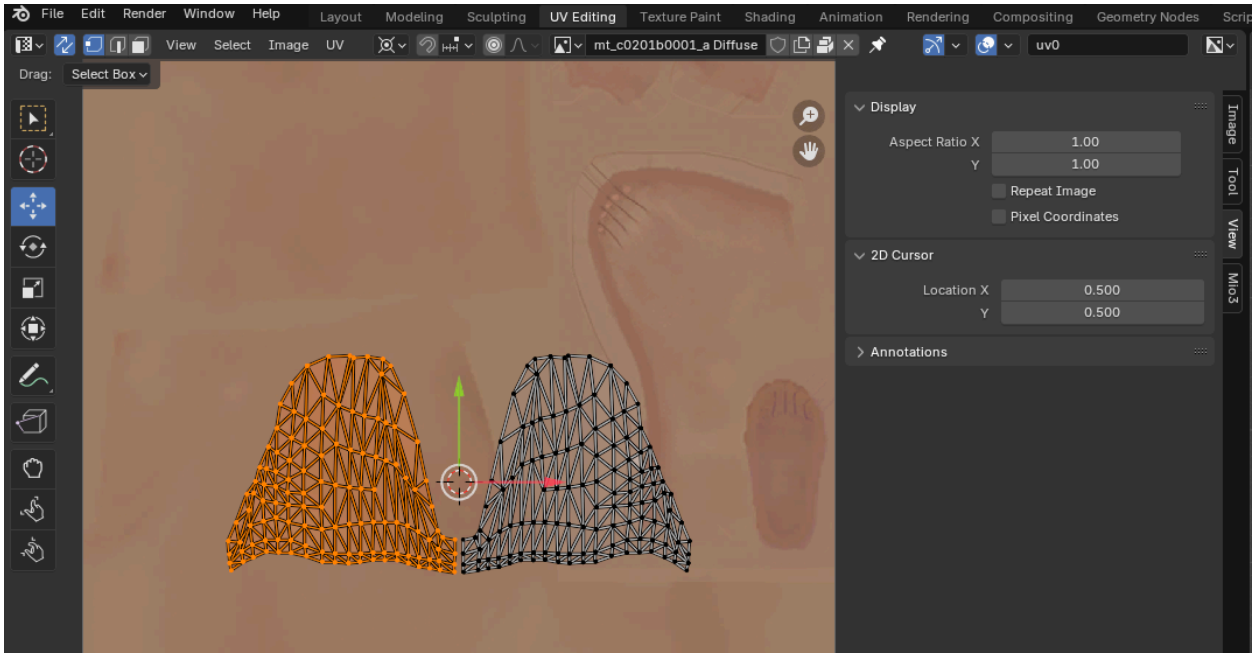


Now all we have to do is mirror the left side of the model (anatomical right, viewer's left) across the axis. Vanilla models are already split down the middle, so you should just be able to hit hotkey L on all parts to quickly select them:



Then, on your UV window, right click the selected UVs and click **Mirror X**:



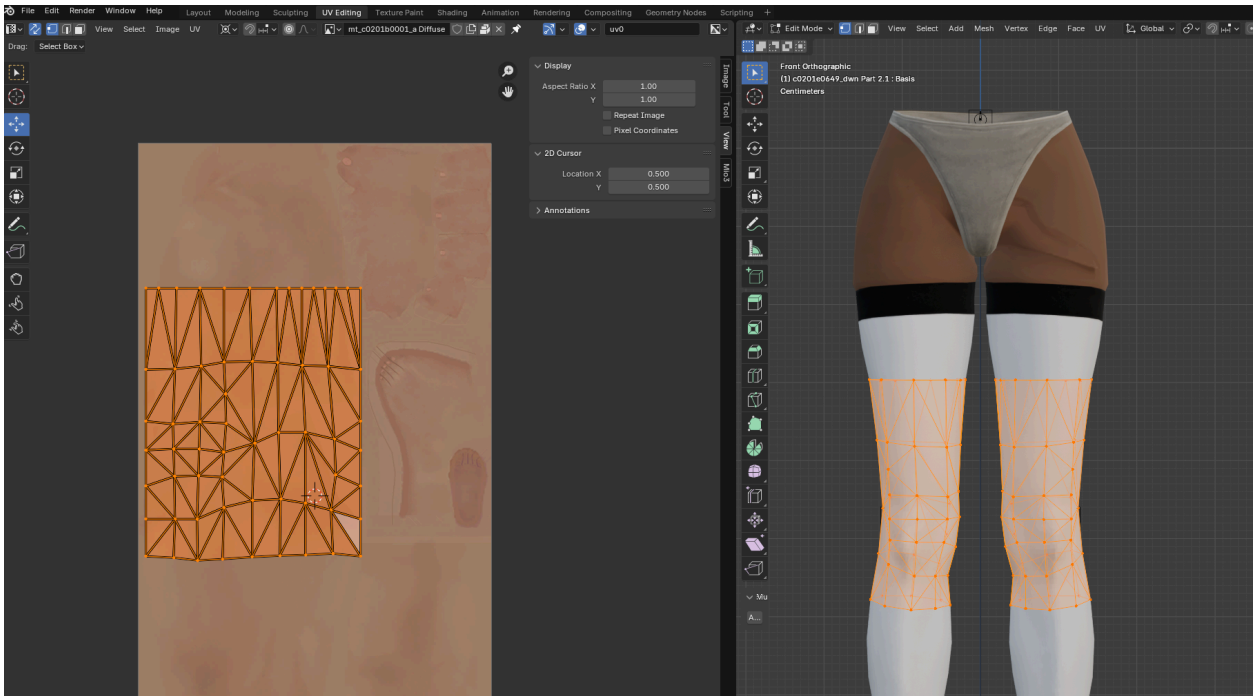


Awesome! Your vanilla skin is now asymmetrical. If you aren't editing gear that uses the characterstocking shader, you're done in blender!

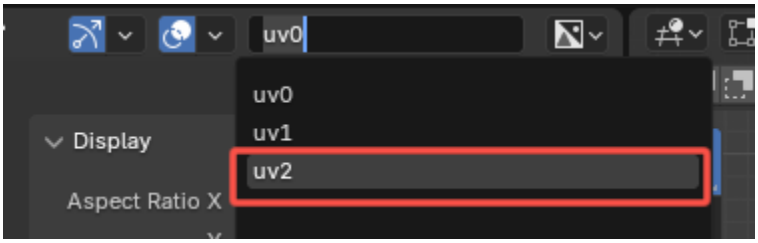
Step Two: Asym Characterstocking

This is actually really similar to making skin asymmetrical, we just have to do the exact same steps on a different UV map! Because Characterstocking uses the UV3 for skin display, we need to edit the UV3 in Blender. You need to do this **one part at a time** because if you select all parts and change to UV3 view, it will only actually change the UV map displayed for One Part even if you have them all selected.

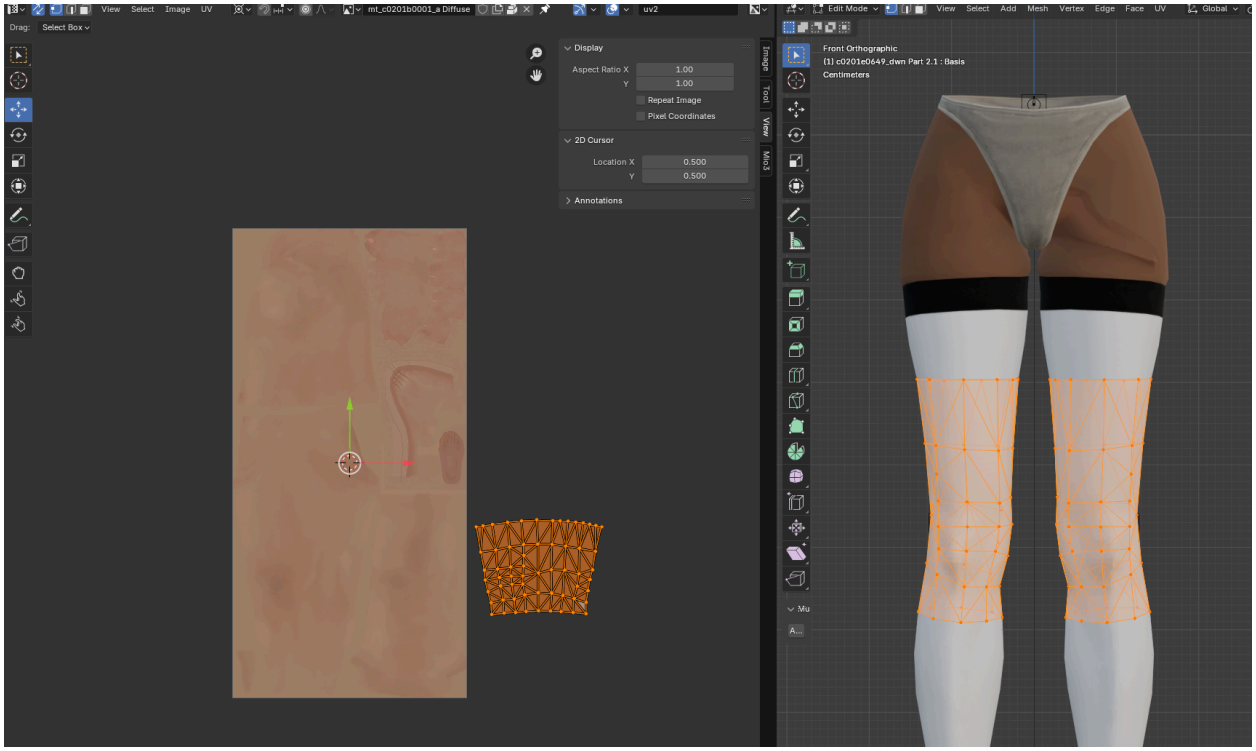
So, select one of your parts that uses characterstocking and swap to the UV editing window!



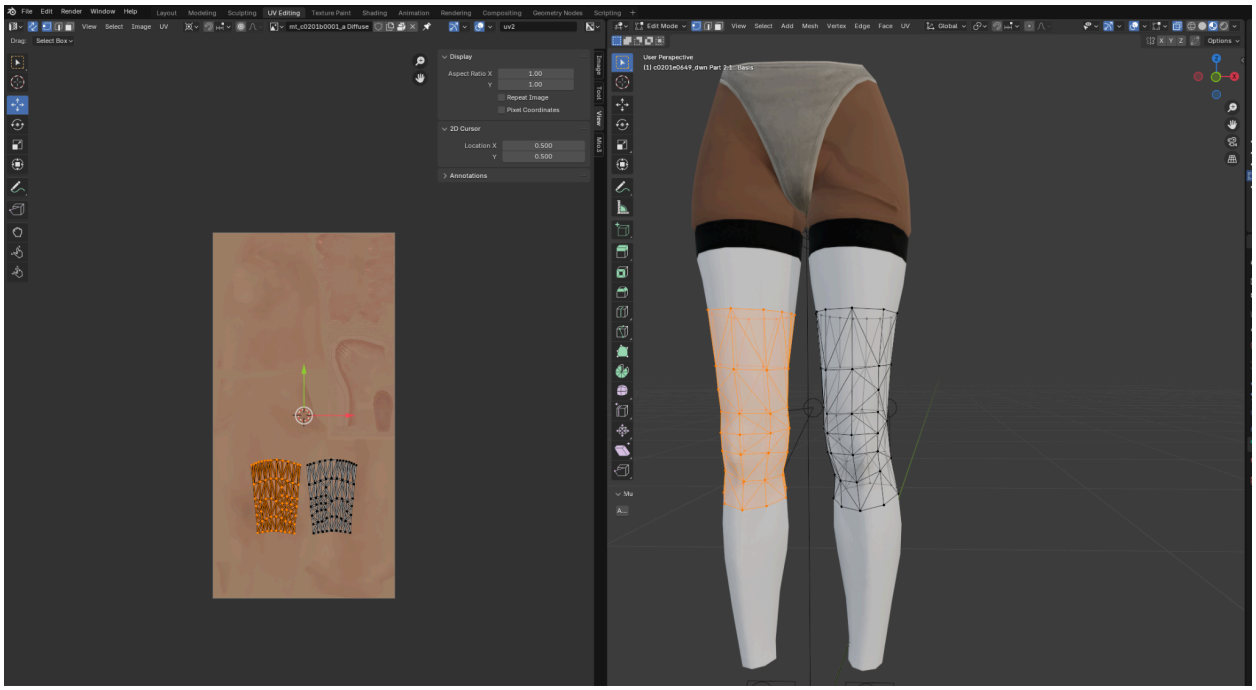
In the top righthand corner of the UV pane, click where it says uv0 and change it to **uv2**:



It'll look a little something like this:



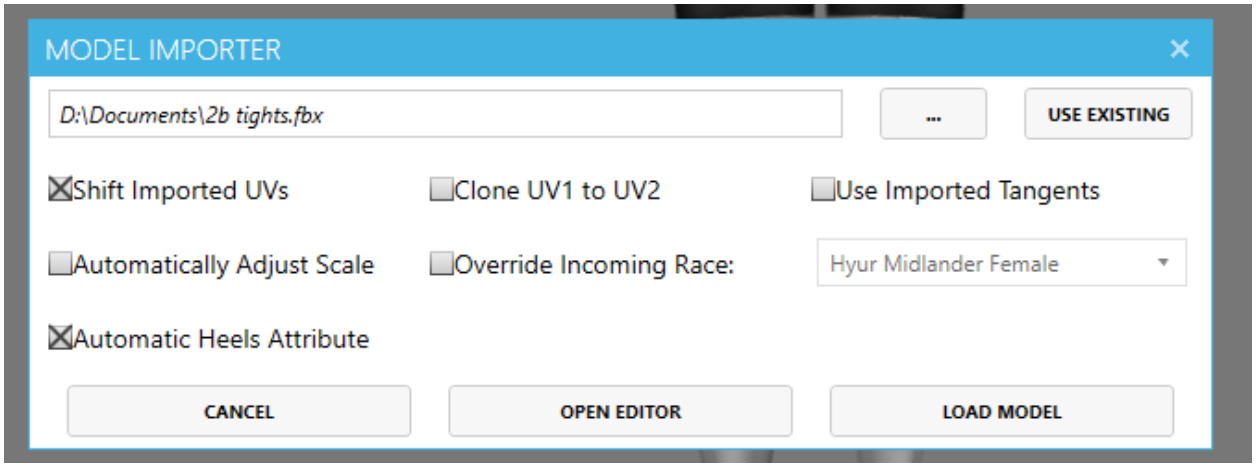
Now all we have to do is repeat the same exact transforms we did to make the regular skin asymmetrical. Scale the **X axis down by 0.5**, move it on the **X axis by -0.25** and **mirror** the left side across the X axis:



Repeat those steps for every characterstocking part you have and that's it for blender! We're done editing the UVs!

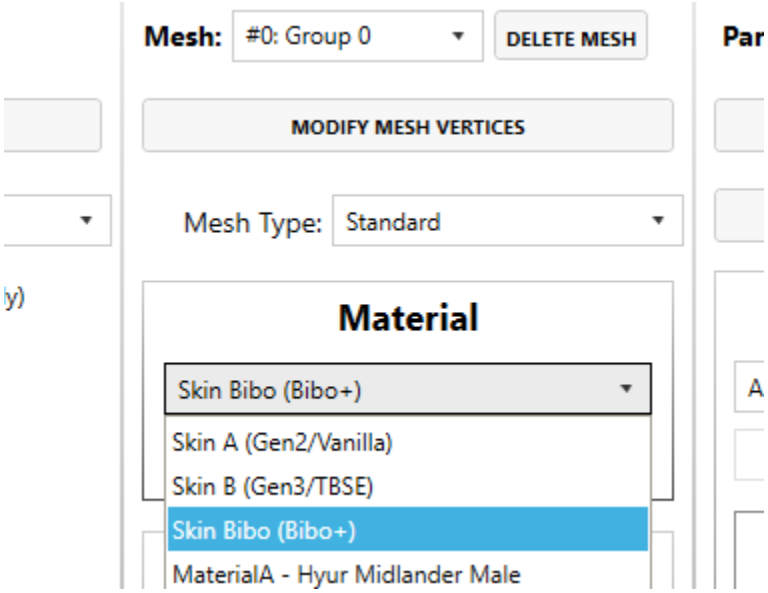
Step Three: Simple TexTools Changes

Now we can export as FBX and import into TexTools. When you import, make sure you have Clone UV1 to UV2 **UNCHECKED**:

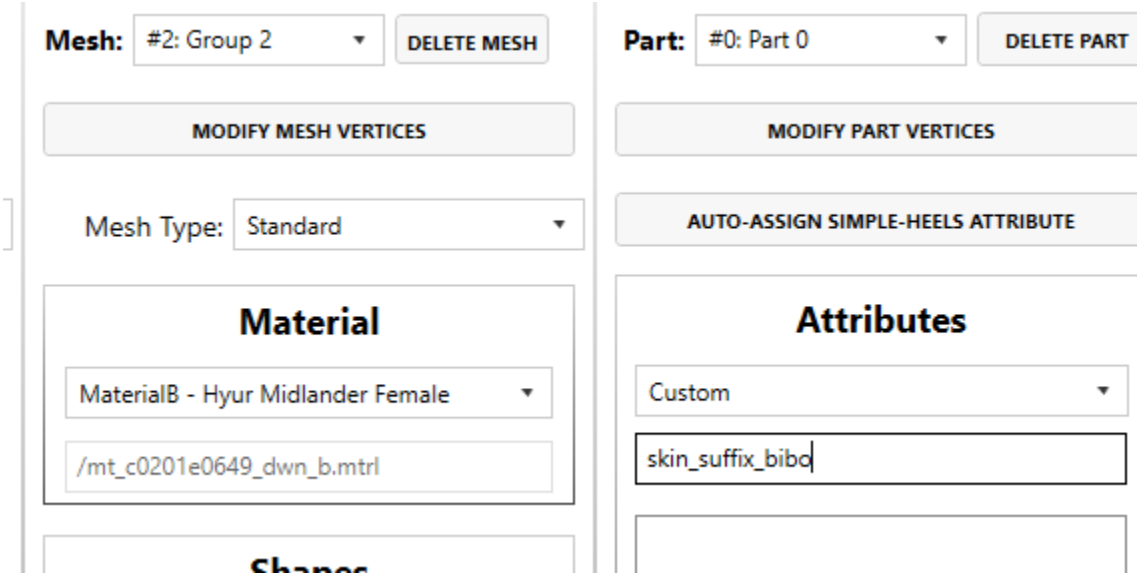


(checking clone UV1 to UV2 breaks all gear that displays company crest and breaks legacy tattoo placement on skin)

Click **Edit Model** then change the material for your skin part from Skin A to Skin Bibo (Or Skin B if you're using TBSE):



Now that we have the correct skin material selected, we have to add a custom attribute onto one of the characterstocking.shpk parts in order to get it to show the correct skin material. Select your group that has the characterstocking material. For me, it was Group 2:



In the attributes box, click the dropdown and select Custom then type in **skin_suffix_bibo** and hit enter. For TBSE this should be **skin_suffix_b** instead. This attribute needs to only be on ONE part, not all of them. So long as one of these parts has this skin suffix attribute, Penumbra will load the correct skin material.

And, that's all you need to set up asym skin and asym characterstocking materials! You can load your model into Penumbra and see how it looks from here: