Basic 3ds guide leading to a finished Body Conversion

Disclaimer & Info

in this guide i will go over how *exactly* i'm doing conversions of FFXIV gear pieces to a different base body.

the base body in this case is *-like always-* my beloved CB2-L body that was originally created by the awesome @Sel#6068.

this is how *I* do it currently with the knowledge i acquired up until this point. it is by no means the perfect way and i believe the more knowledgeable modders that spend months and years with these things know lots of other tricks that i can't even grasp yet.

I will go over every little detail from exporting the required resources to releasing it. Because of that it will have a lot of very basic information that can be used for situations other than body conversions as well.

Following this guide is supposed to teach you the basics of the things happening here. It is by no means an exact step by step manual that will work with every item.

Common sense and learning by doing will be needed to apply the information in this to various other situations.

This guide will only cover conversions for **upper body** pieces, as i have very little experience with butt stuff. -hehe-

Butt in general the process i'm going through will work with leg models too.

If you DM me after trying what this guide explains and having a problem that's explained in here there will be no mercy.

Please note that for TF2, BBWVR, and CB3, you can use the morph-rig.

Which is a whole package of complicated everything but in turn makes things easier if you really know how to handle it.

This guide is still a good starting point for a lot of things however.

Some parts might be outdated or can be solved differently by now, but they would still work. I did my best to touch up or comment on some of these.

Compatibility

Please remember that all upper bodies are compatible with all other body options. The introduction of TF2 (Tight & Firm v2) as the first "gen2" base body made things a bit complicated but generally the only thing affected are the legs.

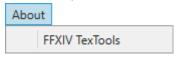
Only the texture layout of the leg models were changed.

You can still use any other upper body model by only importing its 3D model file.

Getting started

So you want to have your favourite body inside of someone's mod or in a vanilla piece of gear huh.

First of all you want to have the latest TexTools version.



Then you want to make sure that you're running the Game in Directx version 11.

Choosing a piece of gear

Unique models

assuming you want to mod female items

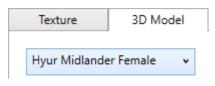
Since the base body you use is always in Hyur Midlander Female size, you want to work with that specific racial size only.

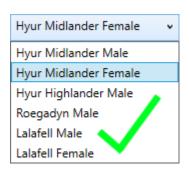
The female midlander body is commonly shared with female highlander, au ra, elezen, miqo'te and roegadyn.

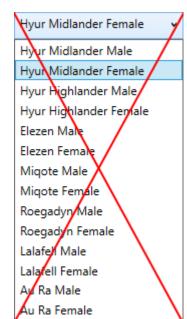
However, some items have unique models for multiple races.

Your modded item will only be compatible with midlander and all females (except for lala) that **don't** show up in the list.

You can check the pieces' unique models by going into the 3D Model tab of TexTools and looking at the genders/races dropdown menu







Mesh group limitations (removed)

Since TT version 1.9.7 we no longer have mesh group or mesh count limitations. You can freely edit all items you want.

Therefore this part of the guide is no longer valid and got removed.

Exporting a piece of gear

After choosing the piece of gear you want to modify, go onto the Hyur Female Midlander model in the 3D Model tab of TexTools.

Then click the export button.

Export Model + Materials

After clicking the export button, TexTools will create a folder structure looking like this:

C:\Users\[your pc username]\Documents\TexTools\Saved\Body\[gear piece]\3D

You also want to export your installed base body so you can use it later on to put it into the piece of gear.

To do this you navigate to "SmallClothes Body", choose the Hyur Midlander Female model in the 3D model tab again and export that one as well.

3ds OpenCOLLADA Plugin

As per popular demand of people that just never understand i will now include this. Since their Github shut down this link leads to a pin in the 3d help channel of the TT server (OpenCOLLADA is no longer required, but it still works and i prefer to use it)



In 3ds

After starting 3ds max you will be stunned with an overwhelming amount of buttons and options, but fear not, you will only use very few of them anyway.

Changing the view



It's recommended to maximize the viewport on the **lower right window** within 3ds by clicking on the [+] or pressing Alt+W

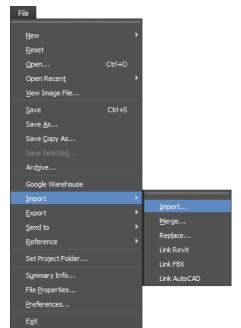
You want to have the quality set to 'High Quality' by clicking on [Standard] and choosing it.

furthermore you may want to change the view to 'Edged Faces' by clicking on [Default Shading] and choosing it.

This menu also has various other useful options to change the view like 'Clay'.

Importing

First you want to import the gear piece you have chosen. [For this guide i will be using the Star Velvet Himation of Healing]



An import window will open.

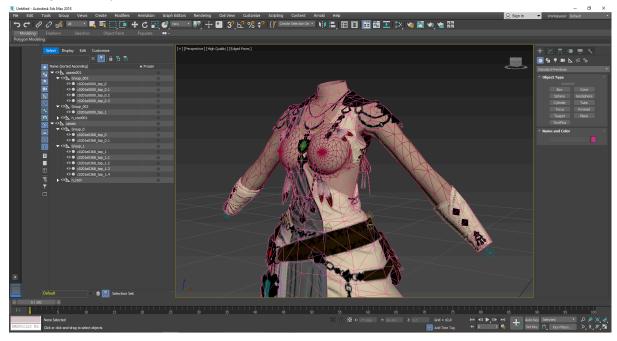
Navigate to the 3D folder that got created when exporting the piece of gear and import the .DAE file as OpenCOLLADA (*.DAE). (OpenCOLLADA is no longer required, but it still works and i prefer to use it)



Import the .DAE file of the gearpiece you want to mod, as well as the .DAE file of the Base body you want to use.

Preparation

After getting comfortable with the moving of the 3d objects with middle mouse button and rotating with alt you can start to work on it now.



This is how your 3ds would look like now.

I recommend expanding all the groups except for the bone groups n_root and n_root001.

As you can see the body is clearly clipping through the gear piece at many places, but before you fix this you need to do a few things.

Activating soft selection

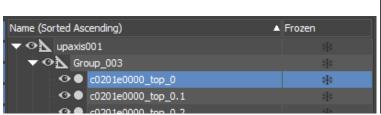
Soft selection is a powerful tool that enables you to, for example, select only one vertex (the corner of one or multiple polygons) but actually move several vertices around the selected one as well in a soft manner, so roundings will be kept.

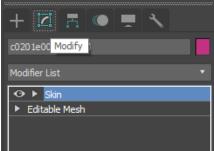
To activate soft selection please follow the instructions on this official autodesk guide for soft selection:

Knowledge.autodesk

Resetting always deform

Before editing the mesh of any 3d model you want to reset it to its original position. To do this you click on one of the meshes on the left to your 3d environment, and go to the 'Modify' tab to the right of your 3d environment.





By default you should have the 'Skin' modifier selected now.

Look down on the right to see the parameters of the selected modifier.

Scroll down until you see the tab 'Advanced Parameters', expand it, uncheck and recheck the first checkbox 'Always Deform'. **Repeat for all meshes**.



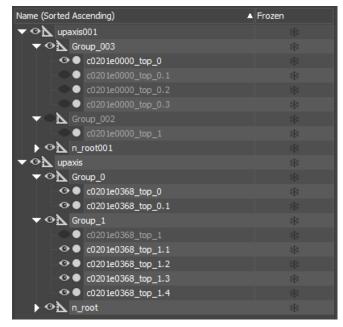
Preparing your meshes

Since you most likely only want to replace your torso and not your arms, you can hide the arm meshes.

Having piercings work on a modded gear piece is more complicated and, since i don't use piercings myself, i honestly don't know how it works. So you hide those as well.

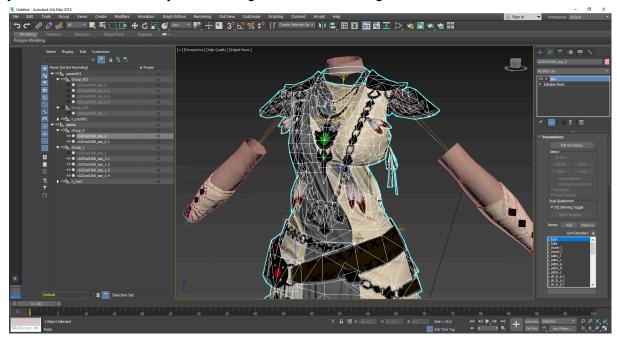
Because you want to replace the gear pieces' body model you hide that one too.

To hide meshes or other objects you click on the eye to the left of the name of the object so it blacks out.



This is how the object list looks now.

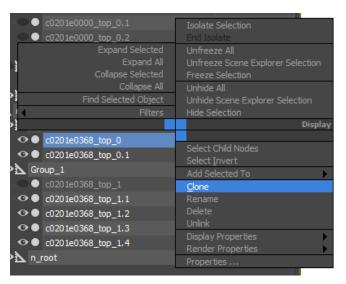
In this case you want to remove the top shirt to have the characters left boob exposed, so you hide the custom body too and begin the work on the gear mesh.

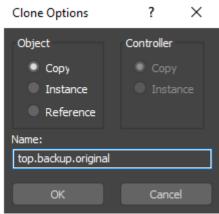


Making backups of your meshes

Before you start deleting things you should make a backup of the original mesh just to be on the safe side.

Make sure to **Copy** the object and give it an appropriate name and then hide it. The usual copy and paste keybinds like CTRL + C apply.





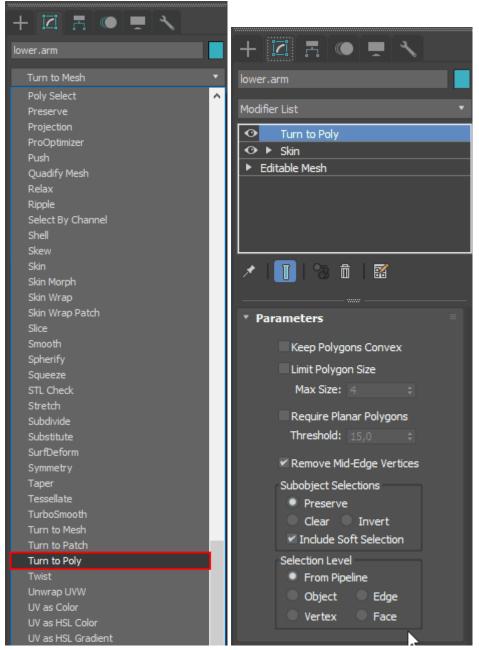
Your object list might re-sort itself now.

The actual 3D work

Turning to poly

It is advised to Turn to poly before doing any actual geometry modifications, which i didn't do in the further steps.

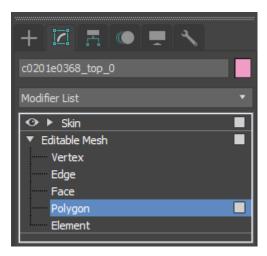
Select the Mesh you want to work on and expand the Modifier list



After adding the 'Turn to Poly' modifier to the mesh you will have to move it so **Skin is on top** and then right click it and select 'Collapse to'.

Skin always has to be on top. Otherwise you will not be able to import the item back into TexTools.

Mesh Editing & Selecting



You then select the top part you want to modify, mesh 0 in this case.

Begin by expanding the 'Editable Mesh' on the Modify tab and select 'Polygon'.

You can also use 'Element' to select a larger portion of the gear piece at once. Be careful tho and double check if you didn't select anything you want to keep.

Make sure you have the selection tool selected to not accidentally move things.

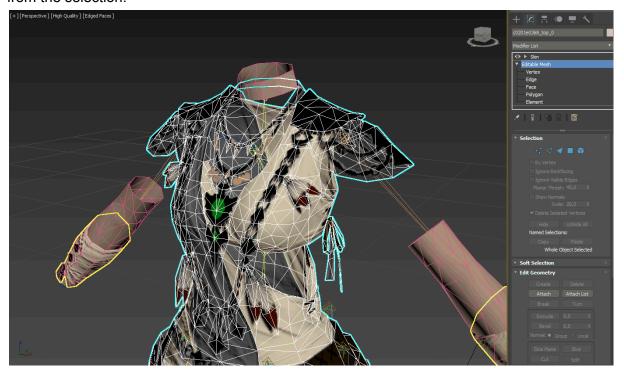


Slowly but steady and carefully select the things you want to remove now by using the CTRL, SHIFT and ALT keys.

While holding CTRL you will add to the current selection no matter what.

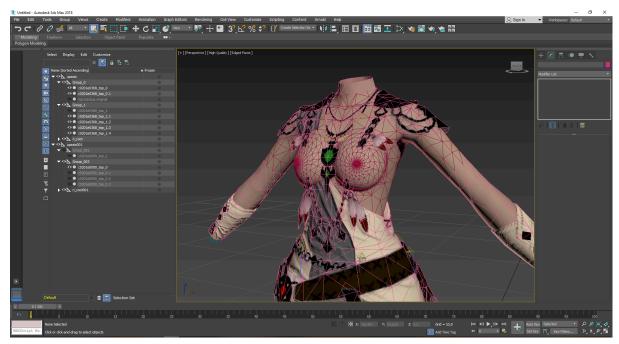
While holding the SHIFT key you will toggle between selected and unselected.

After selecting a group of things, holding ALT and clicking on a selected thing will remove it from the selection.



You now got everything selected you want to remove so you can just hit delete.

You're done with deleting what you dont want now so you can unhide the body now.



Now that you deleted the unwanted things you want to fix the clipping areas by moving the mesh to be *around the body*.

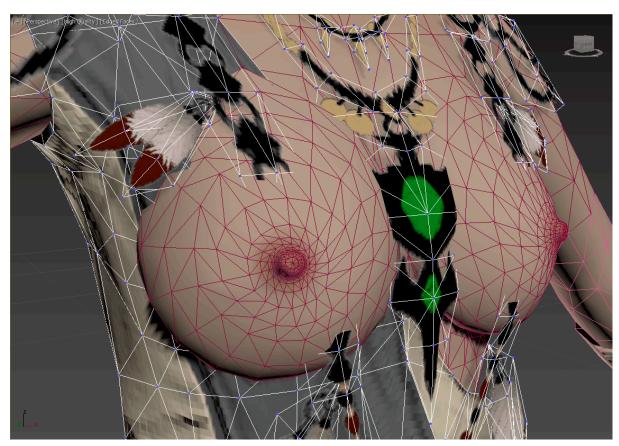
Before moving anything you want to make another backup of the mesh to save its bone weights for later.

Having the backup in the backhand you can start moving the gear now.

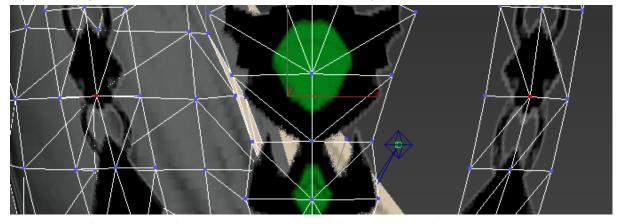
Moving Vertices

Select 'Vertex' on the Editable Mesh and find one or multiple verts that are as close to the center of the nipple as possible.

Since part of the mesh is hidden by being clipped into the body you can hide and unhide the body to better find what you search.



Try to identify the vert(s) on the opposite side of the body as well and select them too.

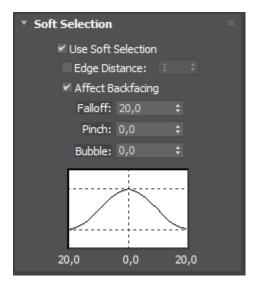


In this case the x/y/z axis is not centered because the gear piece is asymmetrical.

Now you want to activate soft selection so you don't have to move every vertex by itself.

Moving vertices with soft selection

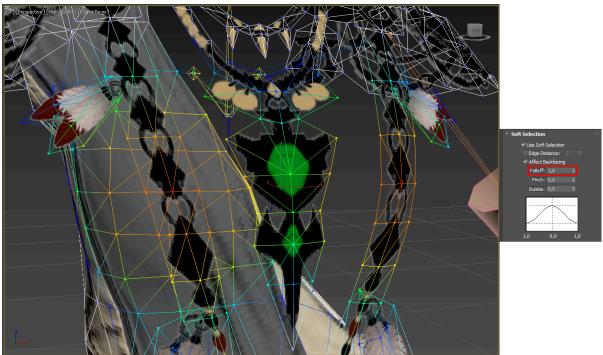
For this scroll down again in the Modify tab until you see the soft selection tab. Expand it and check the box.



The falloff of 20 is way too high for your uses so i recommend setting it to a max of 1,0.

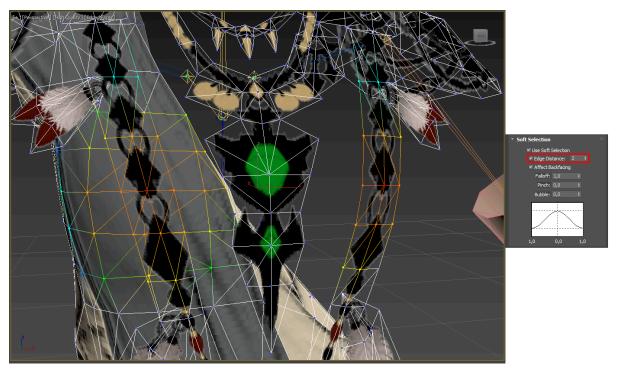
Pinch and bubble further change the shape of your selection.

Edge distance hinders you from moving distant edges that are not connected to the vertex you selected.



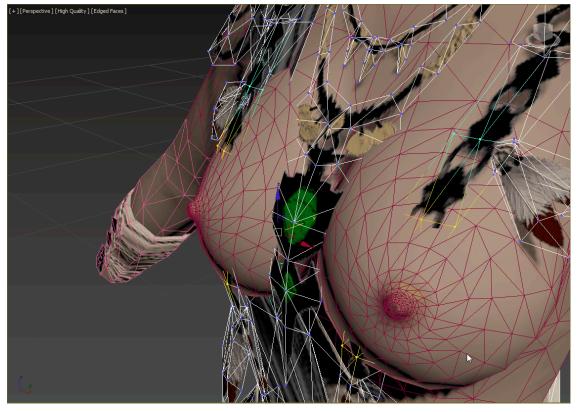
As you can see, with a falloff of 1.0 you have *about* the size of the boob. However, the center accessory is selected as well, so you should play around with the soft selection settings until it's not selected anymore.

In this case simply setting the Edge Distance to 2 resolves this issue.



Now that you have the right vertices and mesh parts selected you can unhide the body again and begin moving it with the move tool until the selected vertices are above the body mesh.





You can move anything that you selected on a singular axis by clicking on the the arrow for that axis and then moving.

Similarly you can move things on only two axis by clicking the square between the two arrows

To move something on all 3 axis at once you click on the small square at the center of all the 3 axis.

This however often results in moving the selected thing halfway across the scene so i don't recommend it.

Now that you moved the cloth a bit to the front, it's still not properly laying on top of the body, since it has to be widened as well.

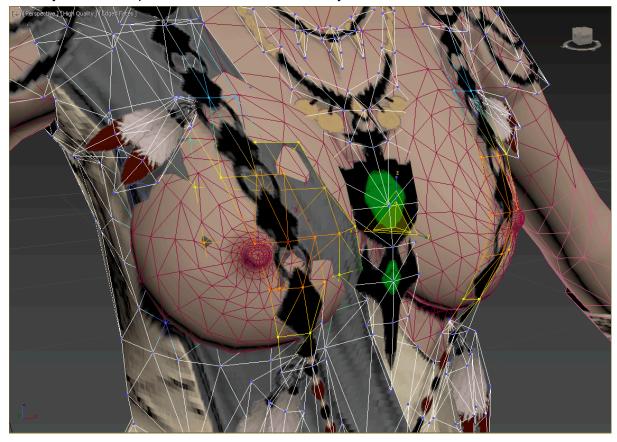
Moving vertices away from, or closer to each other

To move two or more verts away from each other or closer to each other you can use the scaling tool.



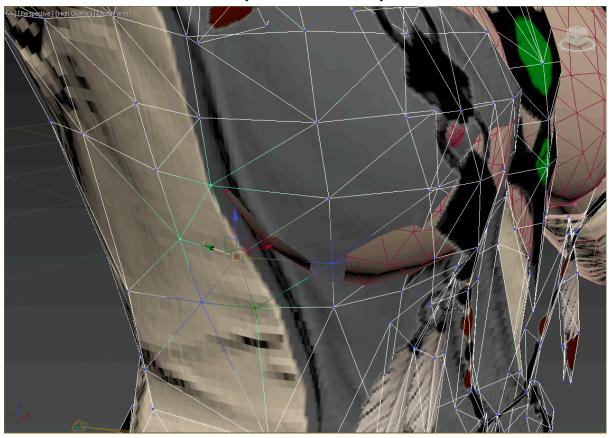
Select and Uniform Scale

With it you want to space out the selected verts only on the x axis now.



Since you got a *rough* shape going now you can go over to fixing the clipping areas that are left.

On a symmetrical piece you would still always select the opposite verts on each side to fix both sides at the same time, but now you can focus on only one side.



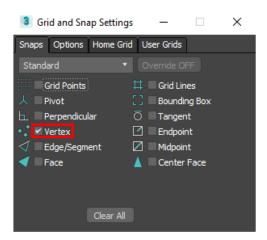
UH OH!

There's an edge in the mesh that's not connected! We can fix this with the Snapping toggle.

Moving vertices with snapping

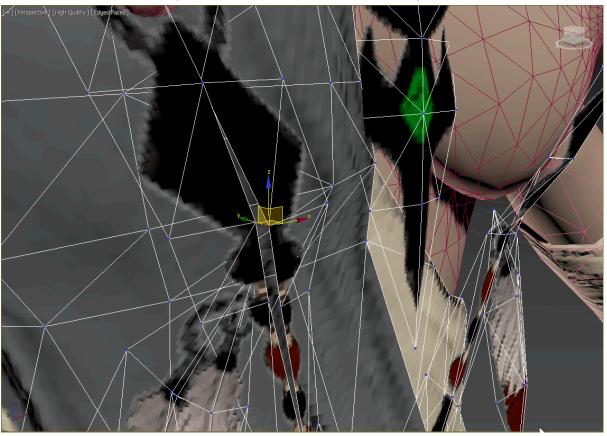


Right-click it and select vertex



Deactivate soft selection beforehand.

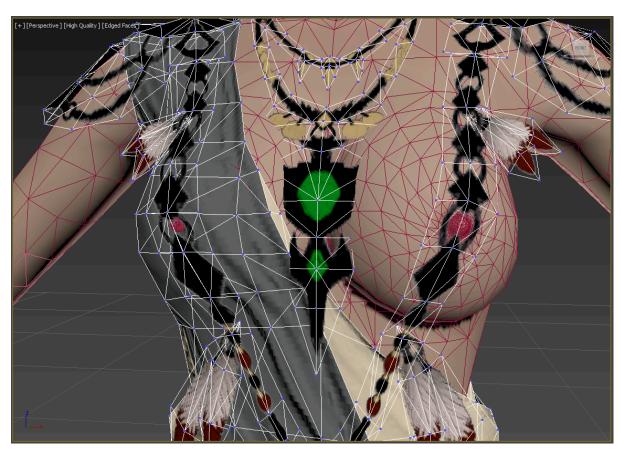
Then select the vertex that you want to fix and snap it onto the right one.



Now you can go back to adjusting the rest of the top.

Be prepared for moving single vertices around a lot as this is the most time consuming part for complicated pieces like this one.

Don't forget to use soft selection and snapping when needed and look from multiple angles from time to time to check if it looks good.



After some more adjusting you consider the top piece to be nice and move on to the necklace.



Necklace done as well you're basically done with the gear itself. Maybe you will need to do some more adjustments later, but for now let's move onto doing the weights for the adjusted top.

Weights

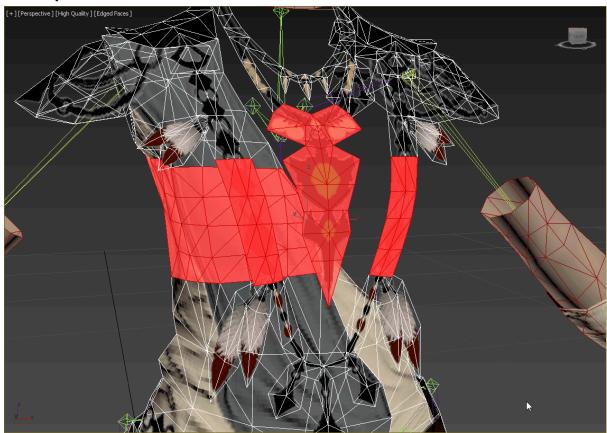
Preparing the backup

Remember the backup you made to save the weights?

You will cut that down now.

Since you moved a lot in the chest area, which is also bigger now, you want to remove roughly the area that's going to be affected by it the most.

For this you chose to remove these areas:



It gives the body a lot of space to unfold its size, while keeping all the other vertices. *It is not always necessary to cut out the back.*

This allows us to copy the weights of the original gear piece to the adjusted one to keep skirts and solid objects weighted properly.

For the chest area you will be copying the weights of the body itself so it scales and moves properly with the body.



Skin Wrapping

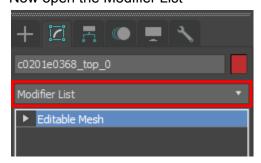
Now you will be using the Skin Wrap modifier to adjust the weights of the reshaped top.

Select the mesh you adjusted again.

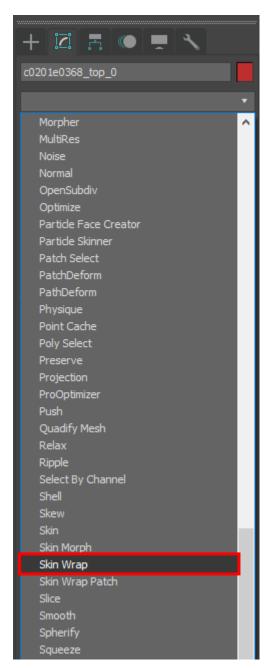
First of all, delete its skin modifier. You don't need that anymore. You never needed it after making the backup actually.

Just right click and delete.

Now open the Modifier List



Then select the modifier 'Skin Wrap'



You can find the modifier more easily by pressing the S key multiple times, so 3ds will switch through various modifiers that start with the letter S.

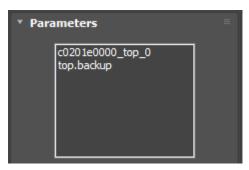
In the parameters of the skin wrap modifier add the backup of the top and the base body as sources by clicking 'Add' and then selecting the backup mesh and the body mesh in the object list.

! extra point: Sleeves

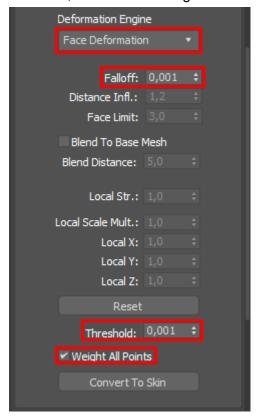
If the piece you want to skin wrap has separate sleeve meshes you will get seams between the torso gear mesh and the sleeves.

To prevent this you can select the sleeves in question as additional source mesh to copy the weights from.

This is here not the case since the example top has no sleeves.

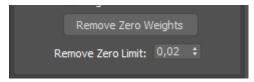


Then select the weight engine 'Face Deformation' in the drop down, choose a low falloff and threshold, and tick the 'Weight All Points' checkbox.



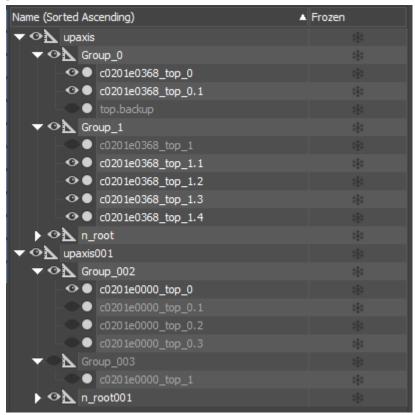
When that's done click on the 'Convert to Skin' Button.

You will automatically have the newly created Skin modifier selected now. Scroll all the way down to advanced parameters and remove zero weights with a tiny threshold.



Naming and moving of meshes and bones

Now that all adjusting for the first version is done you can handle the meshes itself in their groups.



This is how the objects list looks currently.

Move the n_root001 group **and all its 'children'** as it is into the 'upaxis' group, which is the group of the gear piece.

You do this by only selecting the n roo001 object, and moving it to where you want it.

Rename the original body mesh to something more fitting for an unneeded object like 'original.body' or 'trash'.

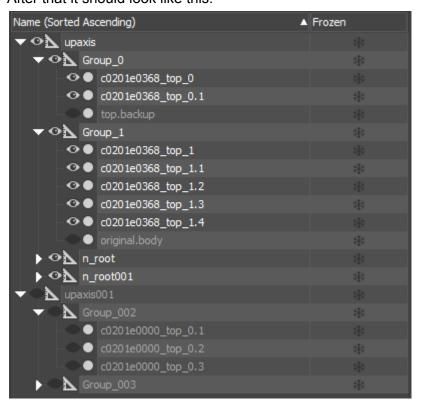
Rename the **custom body** to match the original name of the original body mesh. In this case you change 'c0201e0000_top_0' to 'c0201e0368_top_1'.

TexTools works with only the mesh group and mesh part assignment after the last underscore, so "name_x.y" with x and y being mesh and part number are technically enough.

Then hide or delete the remaining meshes and groups of the imported base body since you don't need those anymore.

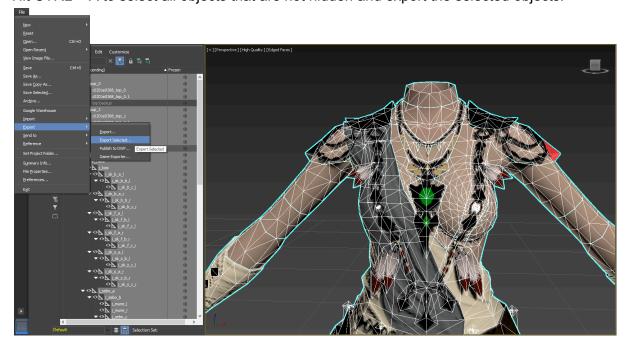
Note: Even if hidden, sometimes 3DS likes to put the info of meshes into the file anyway. So to avoid getting import errors, at least rename everything to not have identical mesh and part names.

After that it should look like this:



Exporting

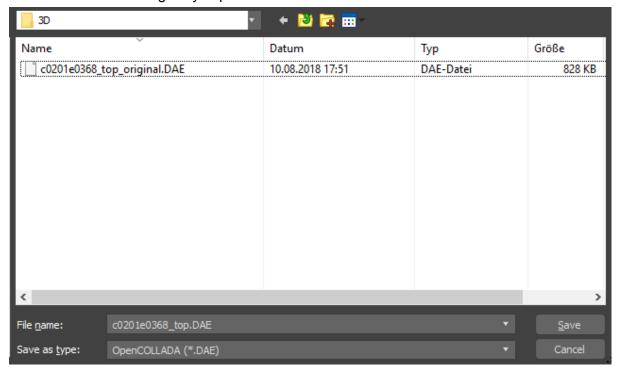
Hit CTRL + A to select all objects that are not hidden and export the selected objects.



An export window will open.

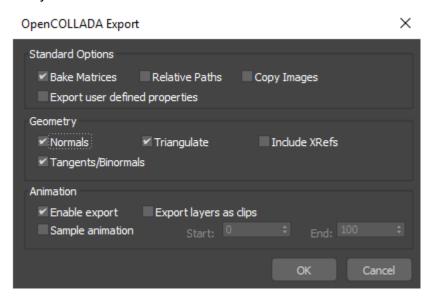
Navigate to the 3D folder of the gear piece you modified and export the scene as **OpenCOLLADA (*.DAE)** with the name of the original .DAE.

You can rename the originally exported file to not lose it.



Press the save button.

You will be prompted with a window showing you several exporting options. Always use these:



You can also export by not selecting anything and pressing 'export' instead of 'export selected'.

The first test version

Congratulations!

You successfully exported a modified 3D model out of 3ds.

Importing

Now to import it into TexTools, press the import button.

Import

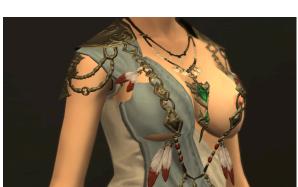
TexTools will now show you a bunch of fixed weights and maybe a warning for deleted mesh parts, but you can ignore those for now as long as you haven't seen the item ingame.

After you [Ok] them all away you will see the result of your hard work up to this point.



Testing

At first sight you spot some issues.





There are some clipping areas on the cloth, as well as a gap at the back side due to the slimmer waist.

The feathers hanging on the necklace are a bit too far away from it and the centerpiece has messed up center weights.

So let's fix that!

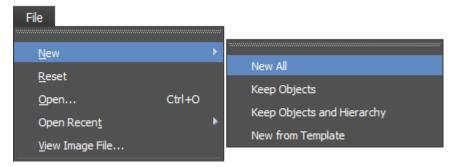
Fixing

Since the import into the game worked good and only has small issues, you can work off the imported version now. For that you want to rename your exported .DAE to something else so it doesn't get overwritten.

Then hit the Export Meshes & Materials button in TexTools again to get the cleaned up version that wont give us weight fixing messages on the next import.

Back to 3ds

Save your current scene that you exported and create a new scene.



Import into 3ds the .DAE you just exported with TexTools.

Fixing spacing and clipping

Since the weights are mostly working as intended in the affected areas and it's just some clipping and no bad deformations you can fix these things by giving the body underneath the cloth some more room for example.

Just select the verts of the gear again, and move them away a bit

Another way to have clipping like that fixed if you don't want to make the cloth even bigger, is by deleting part of the body underneath.

Just select the body mesh and delete the clipping polygons as well as some polygons around them to be sure.

Look from multiple angles before deleting body polygons tho, as you may accidentally delete polygons that are visible from the outside, which will leave you with a hole in the body.

Moving verts or deleting mesh parts should be easy for you now if you got this far.

In this step you have to work with feelings mostly, since in 3ds it might look fine but ingame it's not.

There's no fail-proof way of getting it right all the time. Something will always break.

Trial and error, many game restarts, and many new imports into TexTools lay before you.

Fixing center weights

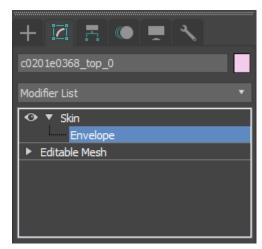
You know your center weights are messed up a bit.

This can happen sometimes.

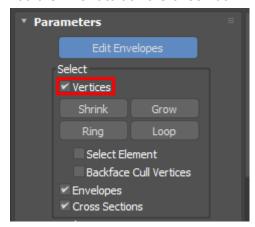
We will fix them manually by editing their values in the weights table.

Be careful with the weight table as it has the potential to horribly break everything if you don't backup or save in between and fuck something up.

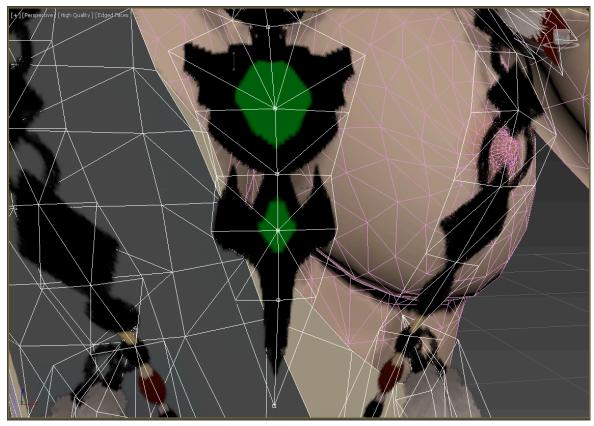
To get into the weight table to look at the messed up weights you will need to select the skin modifier again and expand it to select 'Envelope'



You then want to tick the check box 'Vertices' in the selection options of the parameters.

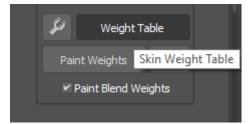


Select the center vertices of the necklace.

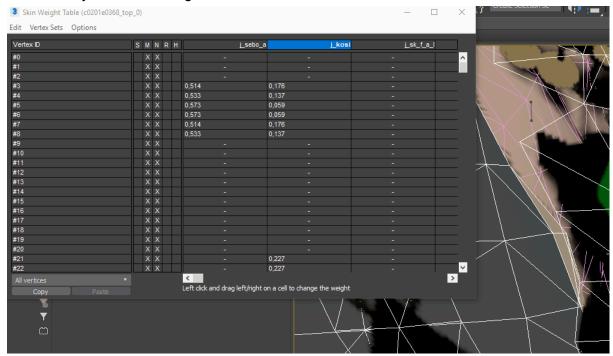


Written and executed by @Kirara#0799

Now open the weight table by scrolling a bit down in the parameters again until the button for it appears.



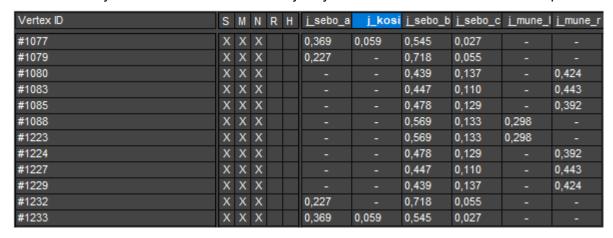
In the table you should first get a better overview.



Then change the dropdown menu in the bottom left to 'Selected Vertices'.



This will leave you with a nice view of exactly why the necklace looked so messed up:



As you can see, the selected verts are only partially affected by either a 'j_mune_r' or a 'j_mune_l' bone.

Those are the breast bones.

They are basically pulling one vertex into the one direction and the other vertex into the other direction, making the necklace be all messed up in the end.

You will fix this by **dividing** the weight value the specific vertex has on one of the mune bones onto **both** of the mune bones.

First, uncheck the **N** column of the verts you are going to adjust.

Then, divide the value of the mune bone weight into 2, and type that into both of the mune bone columns.

Vertex #1080 for example (the first that's affected by this problem) has a j_mune_r value of 0,424.

Divide this into 2.

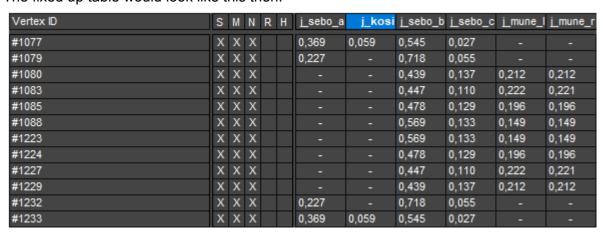
Get 0,212 each,

Type 0,212 into both of the mune bone columns.

Repeat for the other affected vertices.

Last, recheck the **N** column of the verts you adjusted.

The fixed up table would look like this then:



Having an offset of 0,001 between left and right bone when dividing an uneven number is not very important since it's such a tiny difference that you wont notice it ever.

Fixing other kinds of Weights

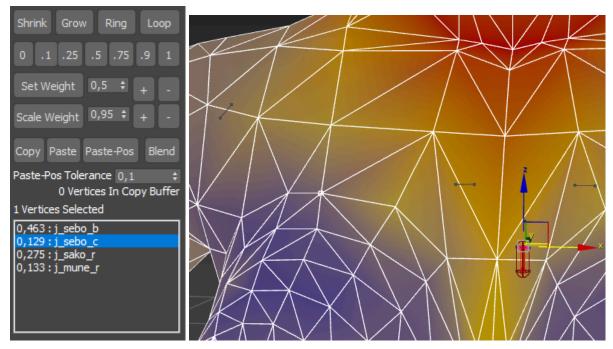
Not executed in this guide but an important point to add.

The best way to fix normal weights for whatever you have, is grabbing a couple animation files and using them to check how things move while editing the weights with the weight tool.

Clicking on this tiny Wrench will bring up one of the most useful windows when working with weights.

After you select a vertex you will see all the bones its weighted to, and you can set, scale, copy and paste weights and a couple other things.





You will also be presented of a Heatmap of how the currently selected bone is affecting all of the mesh. Should 3DS struggle to bring up the heatmap, clicking on the bone a second time works mostly.

You can use this tool to adjust basically everything you need in order to fix weights in general. If you want to to add a bone to the list you simply select it in the bone list in the Skin Parameter rollout and **set** its weights to something small to work up from there.

Scaling and adding/subtracting flat amounts is then used in conjunction with using an animation to check how the vertex behaves in any given position and adjust it accordingly.

This is largely a trial and error process too, that you will get better at over time so don't give up!

The second test version

After fixing some spacing problems, deleting some parts of the body mesh, and fixing the center weights of the necklace you can export the 3d model again in the same manner you did before.

Import into TexTools again and go for a second testing round.

Testing (again)



As you can see, the clipping is not resolved entirely, but that's just more tweaking in that area.

What's more concerning is the now broken UVW (texture layout) on the lower arms and neck.

This is also a common thing that happens when replacing bodies that's pretty simple to fix.

At least the center weights are working now!

Fixing (this time different)

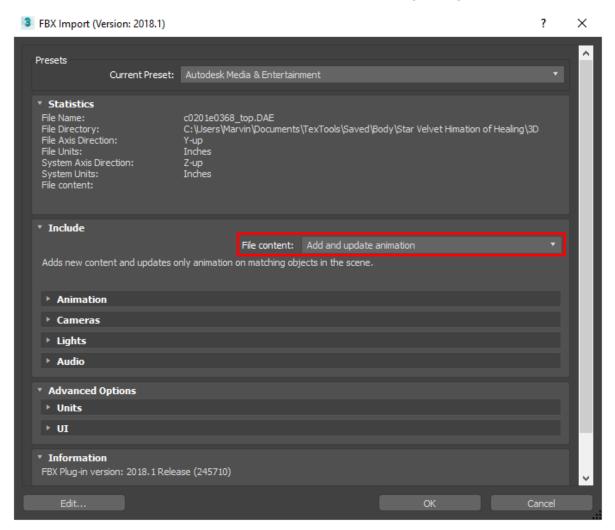
Broken UVW on arms / neck

To fix a broken UVW on the arms and / or neck you want to export **the broken** .DAE out of TexTools and import it into 3ds.

But this time as 'All Formats'.



Make sure to select 'Add and update animation' when importing during this.

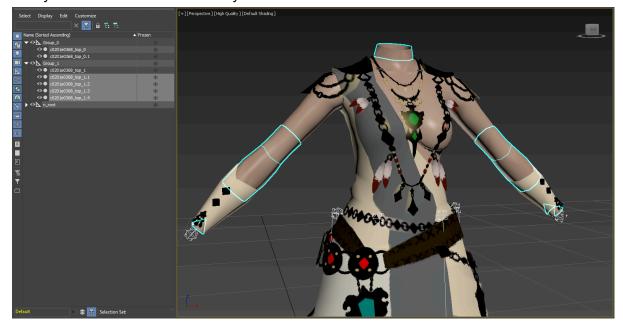


You will then get a warning about some specific objects, mostly n_hara, but you can ignore those.

You will see now that you no longer have the mesh groups and bones together in an Upaxis group.

This is how you want it, to fix the broken UVWs.

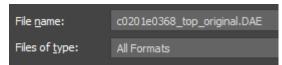
Now you want to select all the body meshes that have broken UVWs.



Delete them.

Hide all other objects.

Now import the original .DAE file that you exported and saved all the way at the beginning.



You want to import this one also as 'All Formats'.

You will now see that you have automatically selected the just deleted meshes. These are newly imported ones from the vanilla gear piece. With working UVWs.

If anything is still hidden, -the mesh groups tend to stay hidden sometimes- unhide it and export the scene as a OpenCOLLADA .DAE again.

Import into TexTools and voilá, fixed UVWs for arms and neck.

The third version



Looking pretty good so far right?

Testing (last time)

Now is the time for some animation testing with gpose and / or SSTool.

If you find big issues during this on your project, back to 3ds it goes and adjusting and tweaking until it works.

A lot of small things that clip during animations can't be be fixed due to the vanilla gear being so low-poly.

You can make use of Tessellate or other more complicated geometry edits to work around this, which will add a big amount of extra work on the other hand.

A lot of really extreme battle animations will still have you move stuff in weird ways and places. Those are really hard to fix but can be largely overlooked since you don't watch every pixel of your character during battle anyway.

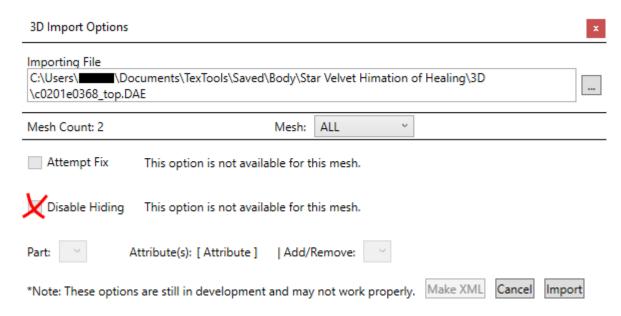
A decently modeled and weighted outfit is working in basically all emote animations and for general day to day use, so don't burn yourself on trying to fix *everything*.

Disabled extra Data?

Don't forget to test if medium / long gloves cause the model to explode.

If that is the case you need to import the .DAE via the advanced import button in the bottom right corner of TexTools and disable hiding.





As of TexTools version 1.9.7 this option is also known as "Disable extra Mesh data" As of TexTools version 2.x+ this option is also known as "Disable Shape data"

The final version!

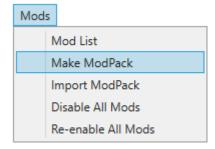
After testing everything and fixing everything that's broken, you're good to go!

Have fun using your self-modded gear piece.

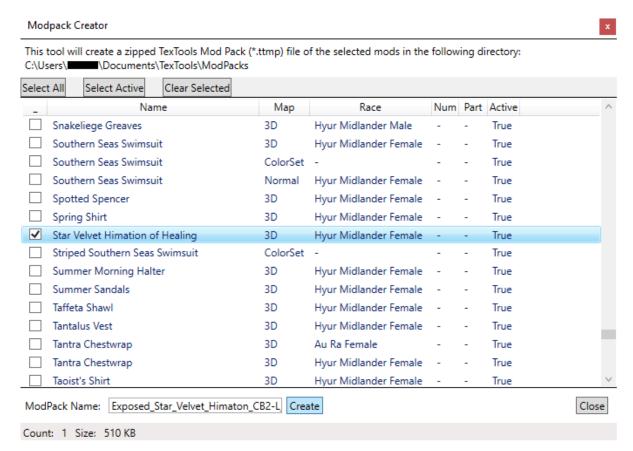
Sharing is caring

If you want to share your creation you can always do so on the FFXIV TexTools & Modding Discord.

First of all you want to make a modpack out of your edited 3d model.



A window will appear in which you will have to search the gear piece you modified. Check the 3D file since that's what you just modified, give it an appropriate name and click on create.



A progression window will open and tell you very quickly it's done creating the .ttmp file.

You can find that file now in the directly that's shown at the top of the modpack creator window.

Releasing

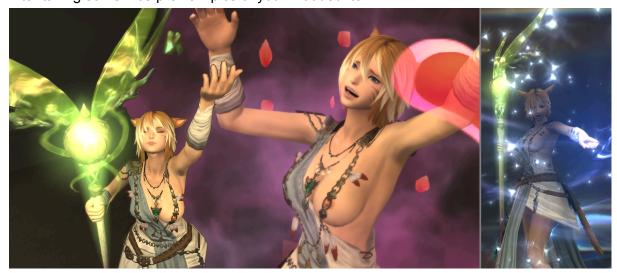
Hmm should you release now?



First your should get **permission** of all the people you borrowed assets from.

This includes base body, any modded outfit you used as a base to edit, custom textures, ... Basically anything that's not vanilla.

After taking some nice preview pics of your modded item...



And preparing a release post that follows the template and correctly credits all contributors...



[Lich] Kirara Yesterday at 10:58 PM

- Name: Exposed Star Velvet Himation CB2-L
- Author: @[Lich] Kirara
- Contributers: @Sel for the base body @Azurite for the idea.
- Races: Hyur, Au Ra, Migo'te, Elezen, Roegadyn
- Preview: https://i.imgur.com/OPFW2fR.png https://imgur.com/L4JzoYD

The piece that got created to show the world how it was done.

features include but are not limited to: one boob.

see and learn how this mod was made:

https://discordapp.com/channels/279130736806592513/414158219787894786/477943922904137758

more CB2-L and lazy upscales in my collection

■ **Modpage:** https://prettykittyemporium.blogspot.com/2018/06/kiraras-mod-

You can release it.

Congratulations!

Thank you for making it this far.

Useful but wasn't needed here

Sometimes you want to add a body to a gear piece that only has a neck part in the body group. Other times you may only have arms.

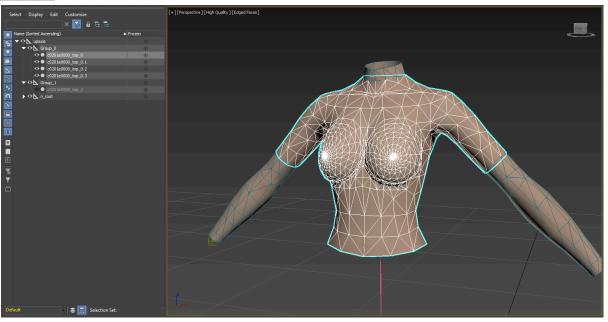
Behold!

You need to have exactly the same amount of meshes or less than the original item! this specific problem got resolved with the lifted mesh count limitations of TexTools version 1.9.7 but the process of doing it is still useful

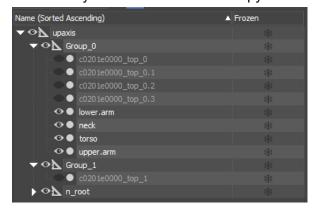
To work around this problem you need to combine the torso with the other parts of the body.

Combining meshes

This part will be shown with the body, but it generally works is all cases when executed properly.



As you can see here, you have a total of 4 body meshes: neck, torso, upper and lower arms. Reset always deform and make a copy of all 4 of them with appropriate names.

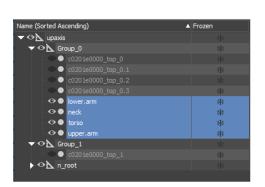


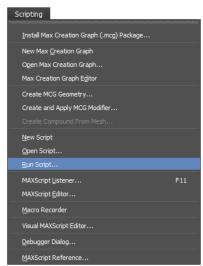
Go through all the meshes you want to combine and turn them to poly, as described earlier.

Using the Rigging_CombineSkin.ms

Next, you want to grab the Rigging_CombineSkin script from here.

Select all the meshes you want to combine and open the script.

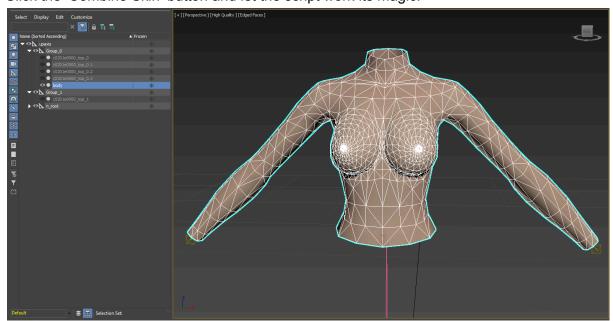




Navigate to the directory that you saved the script in and open it.



Click the 'Combine Skin' button and let the script work its magic.



Now you have one one mesh remaining that included all body parts.

To finish up the combination you can now give the body a new Skin Wrap, since it's that the weights get messed up by the script.

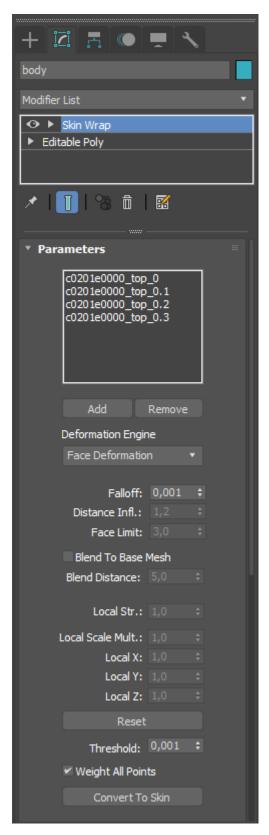
Making a new Skin Wrap for a combined mesh is not always needed, but a decent way to fail-proof the script in that regard.

For this you delete the skin modifier off the mesh and apply a new Skin Wrap modifier like you learned before.

The source meshes will be the 4 original body parts. Select a low Falloff and Threshold, check the Weight All Points checkbox and hit the Convert to Skin button.

Done!

Now you have a body mesh that includes all body parts.



Special thanks

Sel, Titan Firm, Natyusha, Pretty Kitty, Lizzy, Dillen, Kaiten, Sky, and Gii

Footnotes

A lot of time and effort went into the creation of this document so please be considerate and read it closely and entirely before asking me or someone else about something that is already covered in this.

Any wording or grammatical mistakes are special effects of my keyboard and by all means intentional. You are still free to point them out should you find them.

Please do not repost this guide as your own.

Please help people that want to learn anything that this guide touches by linking it to them or pointing them into the direction of it.

If you want to support me, you can do so by following either (or both idk) of these links: https://paypal.me/KiraraMods
https://ko-fi.com/kiraramods

Thank you.