Pender Blender... Collisions!

~~Mini-tutorial~~

General hint: for a better control of the collision shape, you need first to roughly setup the morphs for a shape close to the result, then to call the collision script and at last to fine-tune the morphs. For simple collisions (the touch of a finger...) the collision script can be enough.

In order to set up the collision between Fender Blender and another object:

 Set up your scene. If the colliding object is one of G8F's own hands or feets, load on G8F the matching invisible gloves, or the heels:





The gloves include morphs to thicken the fingers in order to avoid clippings:



- Select G8F or any of its nodes and load the 'Set Collisions' Script:



Select a colliding object (invisible glove, male genitalia,...). Select 'Collide'.



- Find Fender Blender shaping morphs with G8F selected in the scene (not Fender Blender!) filtering the results with "FB":



Set the morphs that more closely match the penetration.

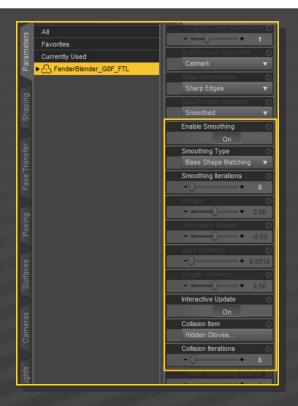
All Fender Blender morphs are posing parameters and you can save them in any pose preset.

Collisions Options

Collisions use DAZ Studio's smoothing modifier.

You can access to its options in the Parameters tab, with Fender Blender selected in the scene.

You can activate/deactivate the smoothing, choose the collision Item and number of iterations:



You can quickly set up collision options with the presets included in the **People/Genesis 8 female/Anatomy/Fender Blender/Collision/Collision Options** folder:



Keep iteration number low if you have a slow computer.

Collisions Limitations (courtesy hints by Thunder₃D)

Collision detection and smoothing are very powerful tools, but they have limits. Below are some things you will want to be aware of when using collidable objects.

- 1.) A smoothed object (such as Fender Blender, Golden Palace, Breastacular...) can only have ONE object set as its collision object.
- 2.) G8Fs hands cannot collide with his own butts because it's all one object. Also, a figure cannot be set to collide with its' own geograft, or the geograft mesh will separate from the parent figure.

The answer to this problem was to create the invisible gloves that allow the character to easily collide with her own butts so she can penetrate them more naturally!

- 3.) For Fender Blender collision with any other surface like a 2nd figure, simply set that object as the collision object in the provided script.
- 4.) Fender Blender to Fender Blender/Breastacular/Cluster Bomb collision works but only one instance at a time will deform. You cannot have 2 collidable objects smoothing into each other!

This also includes the parent figure attached to the collision object!

Additionally, the same rules above apply for any collidable geofrafts, both having a smoothing modifier and collision enabled against each other or the parent figure.

5.) Collision will only morph an object as deeply as the object being pushed against it.

This basically means, if you Push a finger into Fender Blender, then FB will deform until the finger has fully entered the original shape of the graft, then the finger will pass through the mesh. This is why the invisible gloves include fingers thickening morphs.

Therefore you can get a small depression from fingers but very deep depressions from an object. Any large object will "smoosh" Fender Blender deeper, but the deeper you smoosh, the sharper the depression displacement and less realistic the effect. Don't try to over-do collision;)

Multi-graft collision example scenarios:

A single figure (G8F) with 3 collision enabled grafts (Fender Blender & Breastacular & Golden Palace) have no trouble colliding with G8M and Dicktator. You can have multiple collidables on the same figure work as long as the collision objects (G8M and Dicktator) don't have collision enabled on G8F Parent Object.

Examples:

Fender Blender and Golden Palace set to collide with G8F invisible gloves works.

Fender Blender set to collide with Dicktator, and Breastacular set to collide with G8M Invisible Gloves works.

Fender Blender set to collide with Dicktator, and Dicktator set to collide with G8F does NOT work.

(Breaks because G8F is the parent object for GP. Technically it works but the result is horrific!)

Fender Blender set to collide with Dicktator, and Dicktator set to collide with G8F Invisible Gloves works (works because gloves are a wearable, not a graft)

You will need to experiment to find the best combinations for what you are rendering, but all the necessary tools have been provided.:)

Setting collision with large shapes may create an identation. Change smoothing type or lower the collision weight to solve the problem.