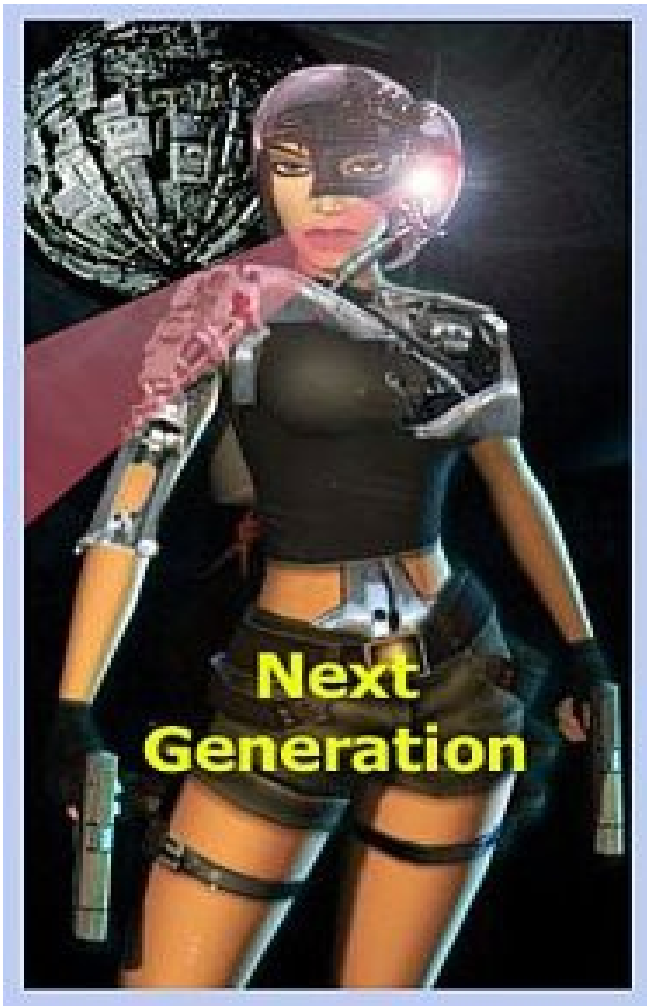
TOMB RAIDER
NEXT GENERATION



TOMB EDITOR
WAD TOOL

SKELETON EDITOR

VERSION 1.3.10

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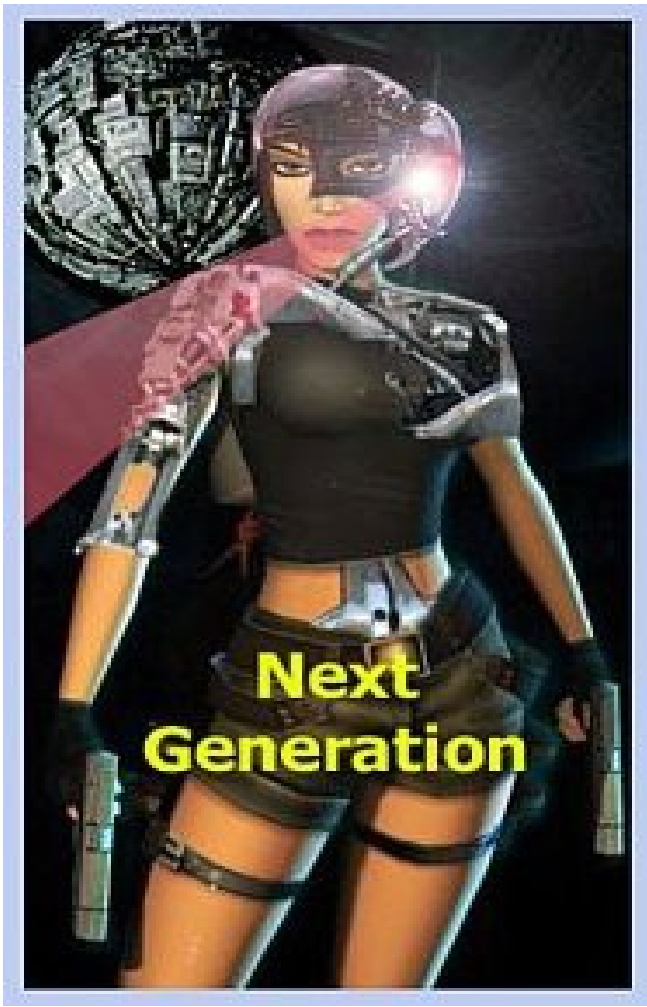
Mesh Diagram Mutant

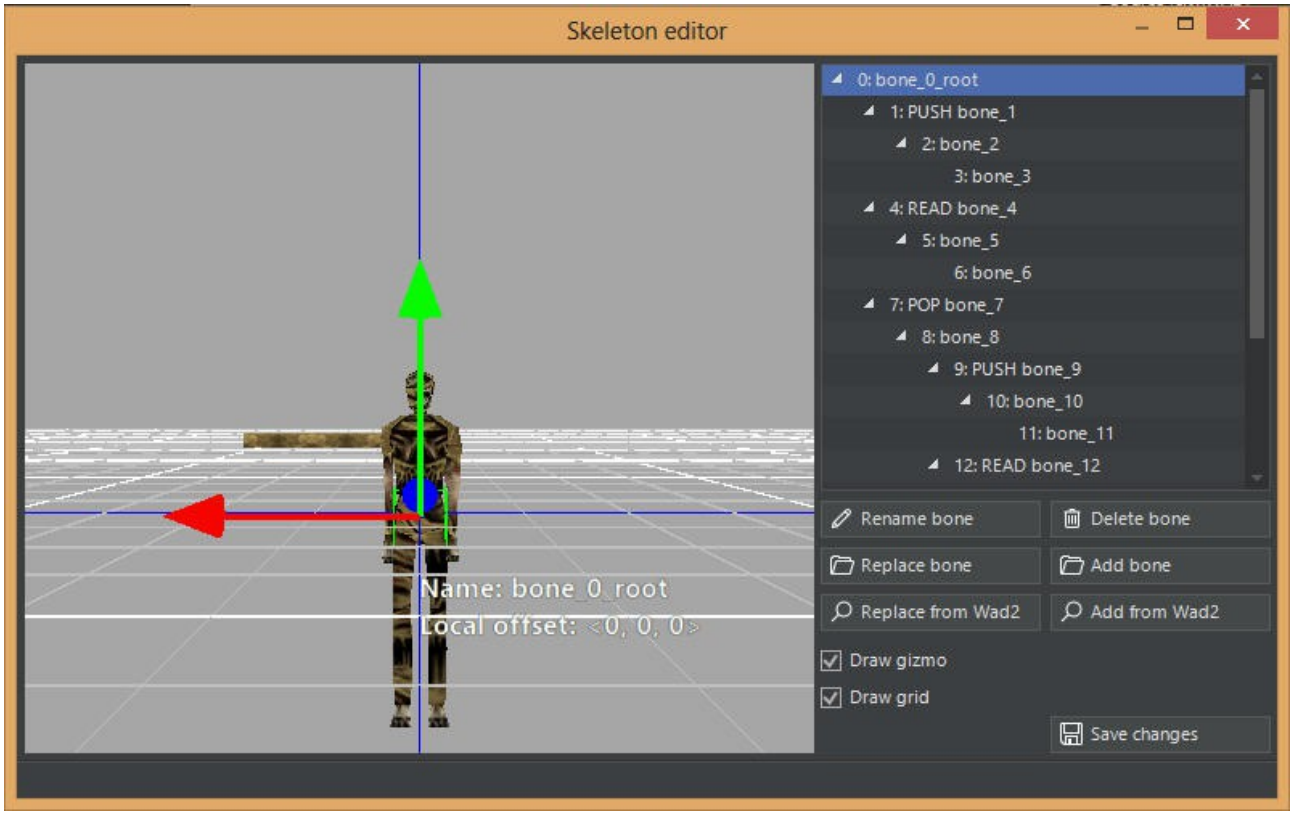
TOMB RAIDER
NEXT GENERATION

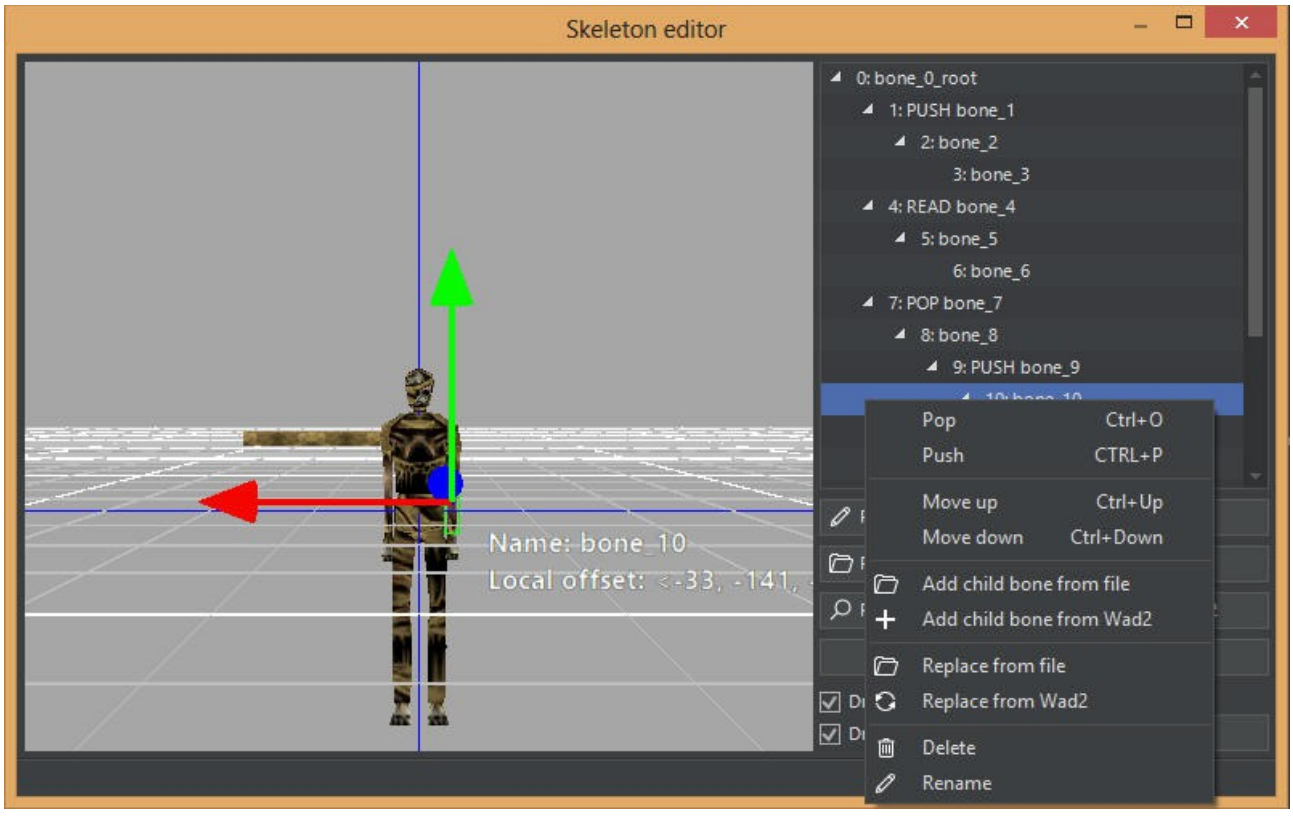


TOMB EDITOR
WAD TOOL

SKELETON EDITOR

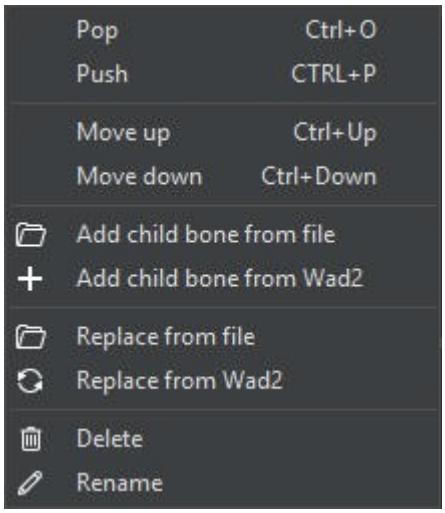
SKELETON EDITOR (MESH EDITOR)





TOMB EDITOR WAD TOOL MANUAL

Select a bone then **mouse right click** to display the window:



POP **HOTKEY:** **CTRL + O**
POP means return to parent level.

PUSH **HOTKEY:** **CTRL + P**
To specify the Mesh as a "parent" then **PUSH** must be marked.

MOVE UP **HOTKEY:** **CTRL + UP**
Move mesh up the list.

MOVE DOWN **HOTKEY:** **CTRL + DOWN**
Move mesh down the list.

ADD CHILD BONE FROM FILE **HOTKEY:** **…..**

ADD CHILD BONE FROM WAD2 **HOTKEY:** **…..**

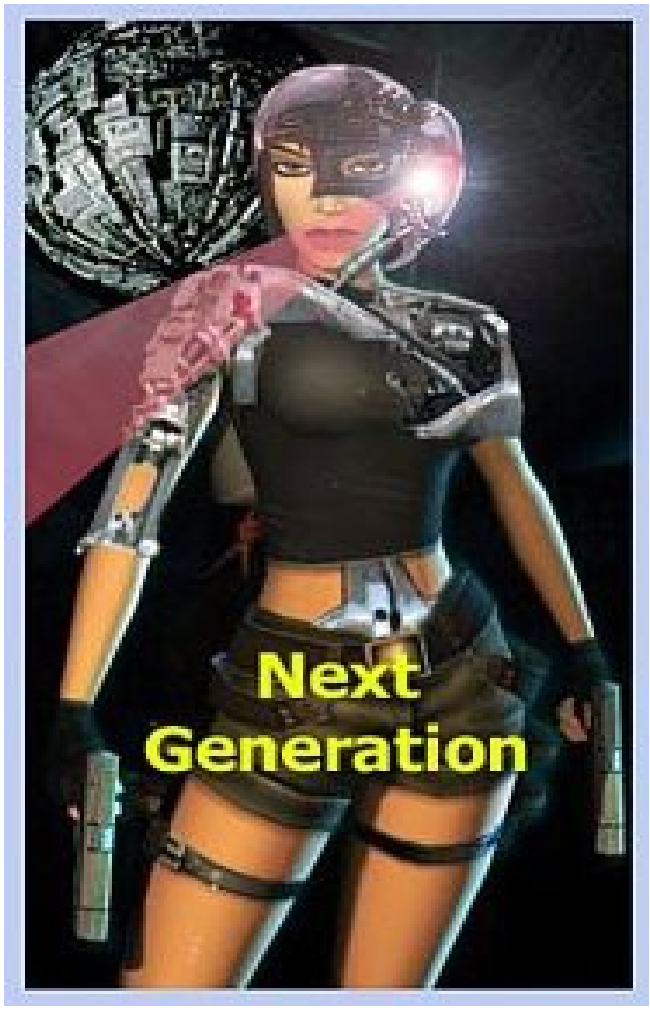
REPLACE FROM FILE **HOTKEY:** **…..**

REPLACE FROM WAD2 **HOTKEY:** **…..**

DELETE **HOTKEY:** **…..**
Delete mesh.

RENAME **HOTKEY:** **.....**
Rename mesh.

TOMB RAIDER
NEXT GENERATION



TOMB EDITOR
WAD TOOL

SKELETON MESH TREE EDITOR
HOW TO

SKELETON MESH TREE EDITOR

The structure of animations in Tomb Raider.

If you look more closely, at how the Meshes are connected, then this "list" will remind you of a “Family Tree". Also, in the Mesh Editor you can specify, where each mesh stands in the relationship. This is very important for the animation, because if you rotate a mesh other meshes automatically also rotate. Also the logic behind it corresponds to a family tree. Beginning with Mesh 0 all other Meshes are connected amongst themselves.
It is constructed like a genuine family tree with "children" and "parents".

For the snake’s mesh tree, Mesh 0 represents a "parent" to Mesh 1.
Mesh 1 is therefore the "child". At the same time Mesh 1 is also the parent of Mesh 2, which is the child of Mesh 1. Thus it continues sequentially.

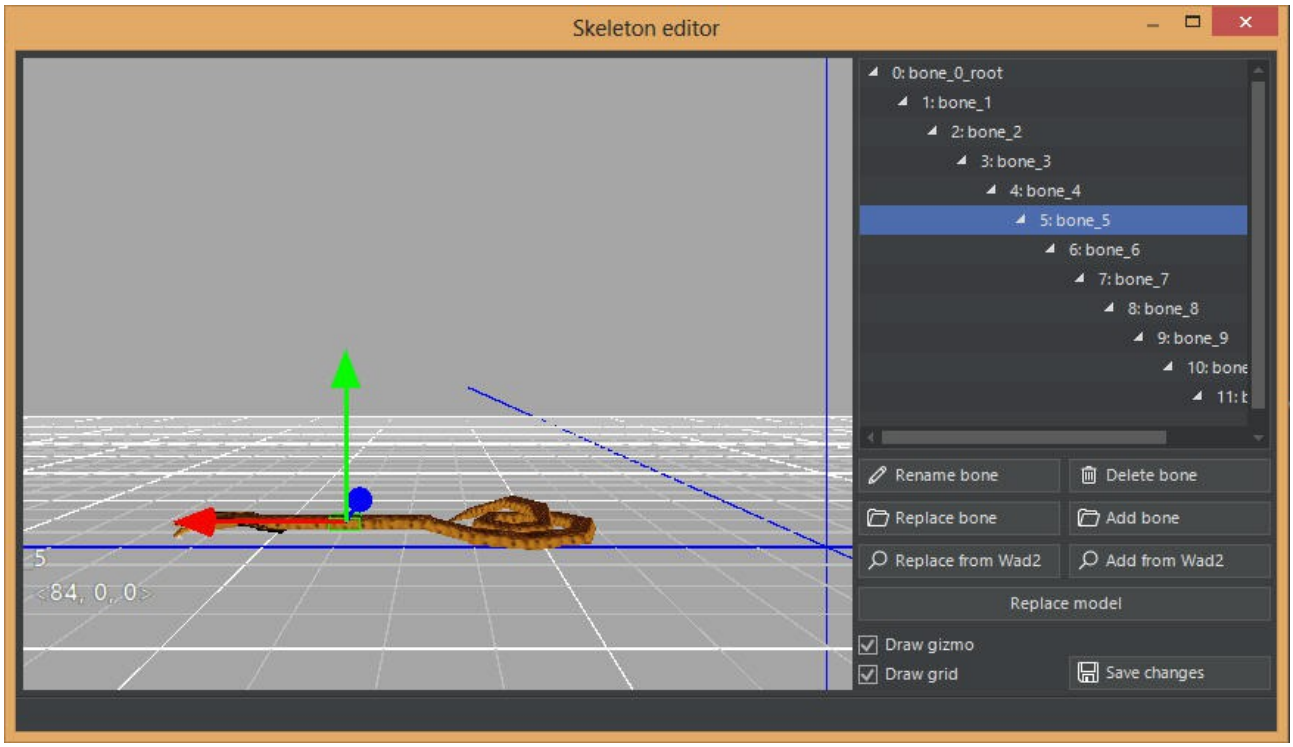
Mesh 12 and 13 are children of Mesh 0, however they have no children.

Why is this parent child relationship important?
Fundamentally a "child" always moves along and/or rotates with its parent.
In this case it would mean that all Meshes move with movement and rotation of Mesh 0, because they are all "relatives” with Mesh 0, as one can recognize by the lines.

If for example Mesh 7 is rotated, Meshes 8, 9, 10 and 11 also move as they are the "children", "grandchildren", "great-grandchildren" etc. of Mesh 7 .

All Meshes below Mesh 7 however do not move as they are not children of Mesh 7, but "parents", "grandparents", "great-grandparents" etc.

It is always advisable to study the Mesh Tree before providing a new animation in order to understand which Meshes are to be connected together and which are not.

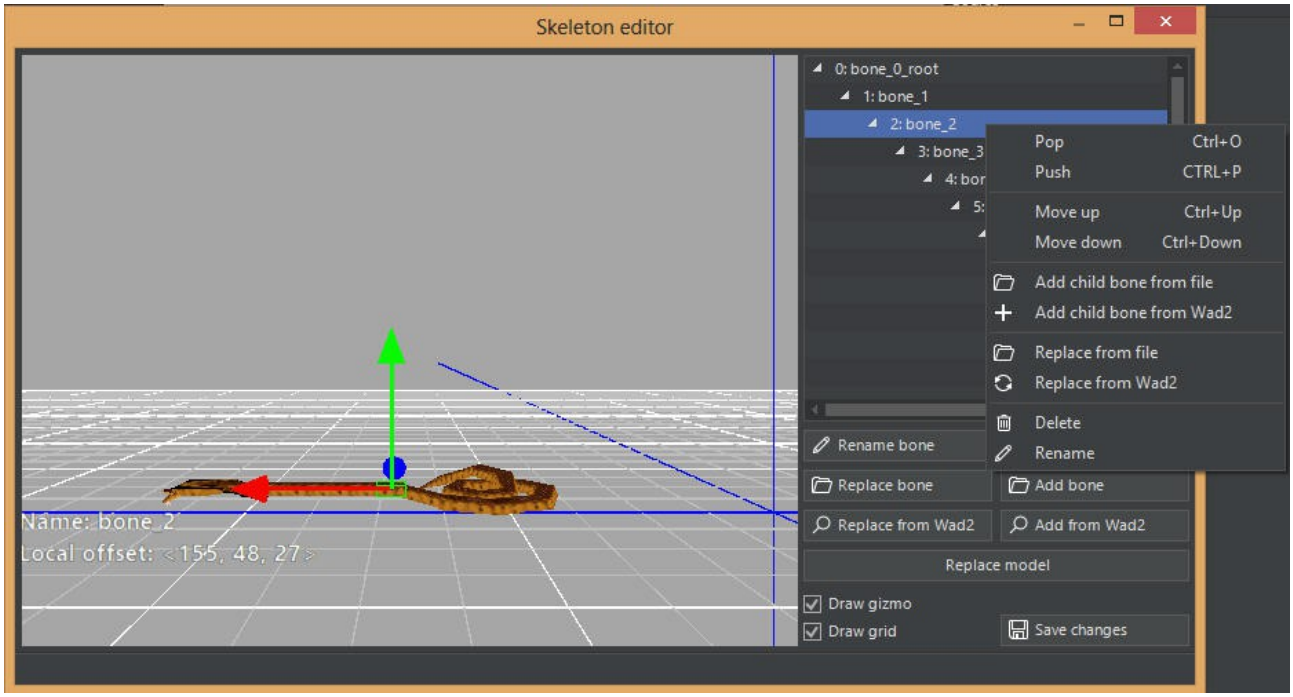


In addition it is very important for animations to provide a physically correct Mesh Tree.

For example: Consider to raise a thigh of a human opponent, a Baddy etc.
Now it is very important that the lower leg is a child of the thigh, otherwise it will not move. Likewise the foot must be a child of the lower leg. Then the foot will lift up with upward movement of the thigh.

Now you know what a Mesh Tree is and how it is constructed.
However, how can you change it?

TOMB EDITOR WAD TOOL MANUAL



To specify a Mesh as a "child" leave as unmarked.
To specify the Mesh as a "parent" then **PUSH** must be marked.
POP means return to parent level.

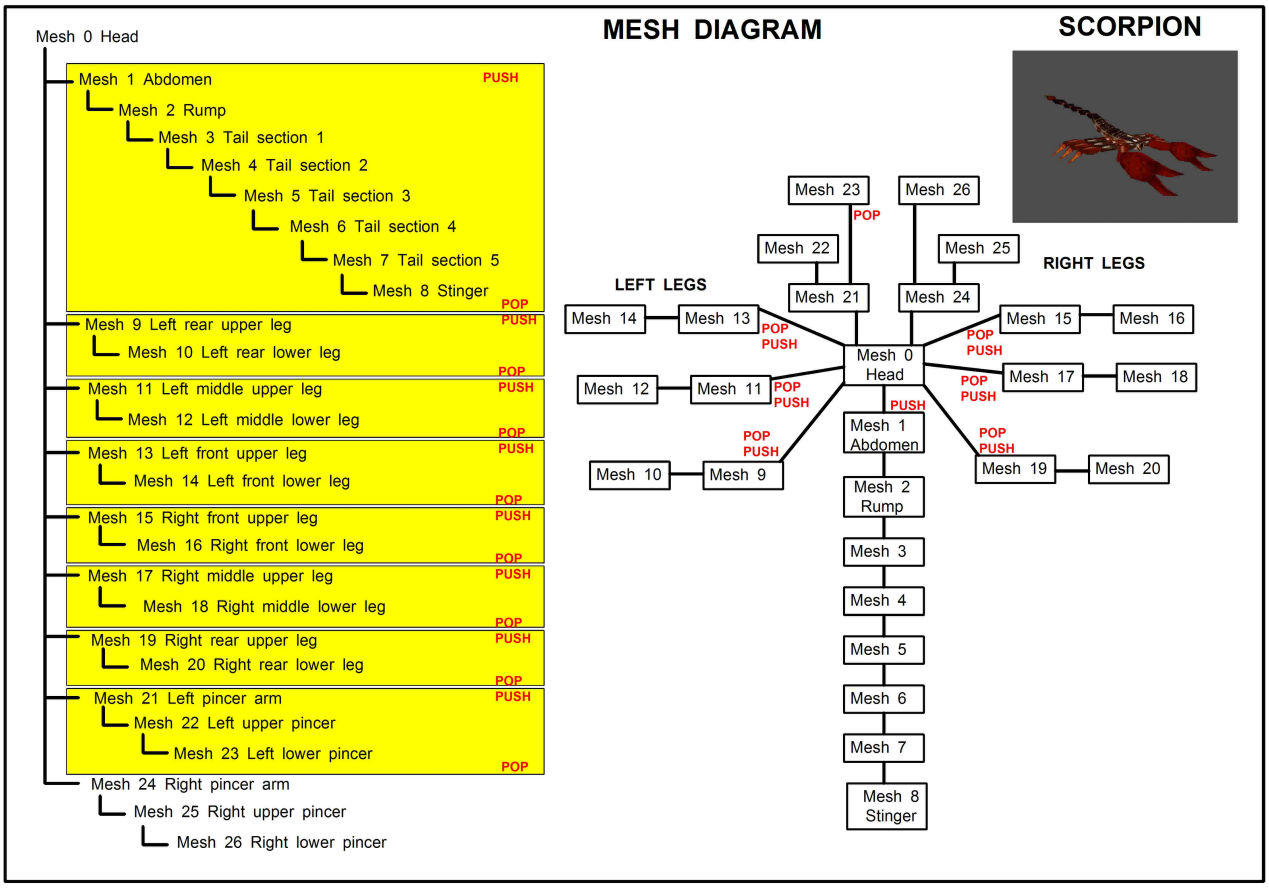
The **MOVE UP** can shift a mesh in the family tree upward.
The **MOVE DOWN** can shift a mesh in the family tree downward.
Here it is important to note that not only the meshes in the list shift up and down but also in the object itself.

If a mesh has a set of children, grandchildren etc. and one now clicks the next mesh **POP** then a line to Mesh 0 will form directly to this mesh.

In the object this mesh will connect with Mesh 0, if no other mesh above it in the mesh tree has the designation **PUSH**.

In theory there should be a balanced relationship between the number of **POP** meshes and the number of **PUSH** meshes.

In order to clarify this, open the Scorpion mip in the snake Wad in the Animation Editor and open the Mesh editor.

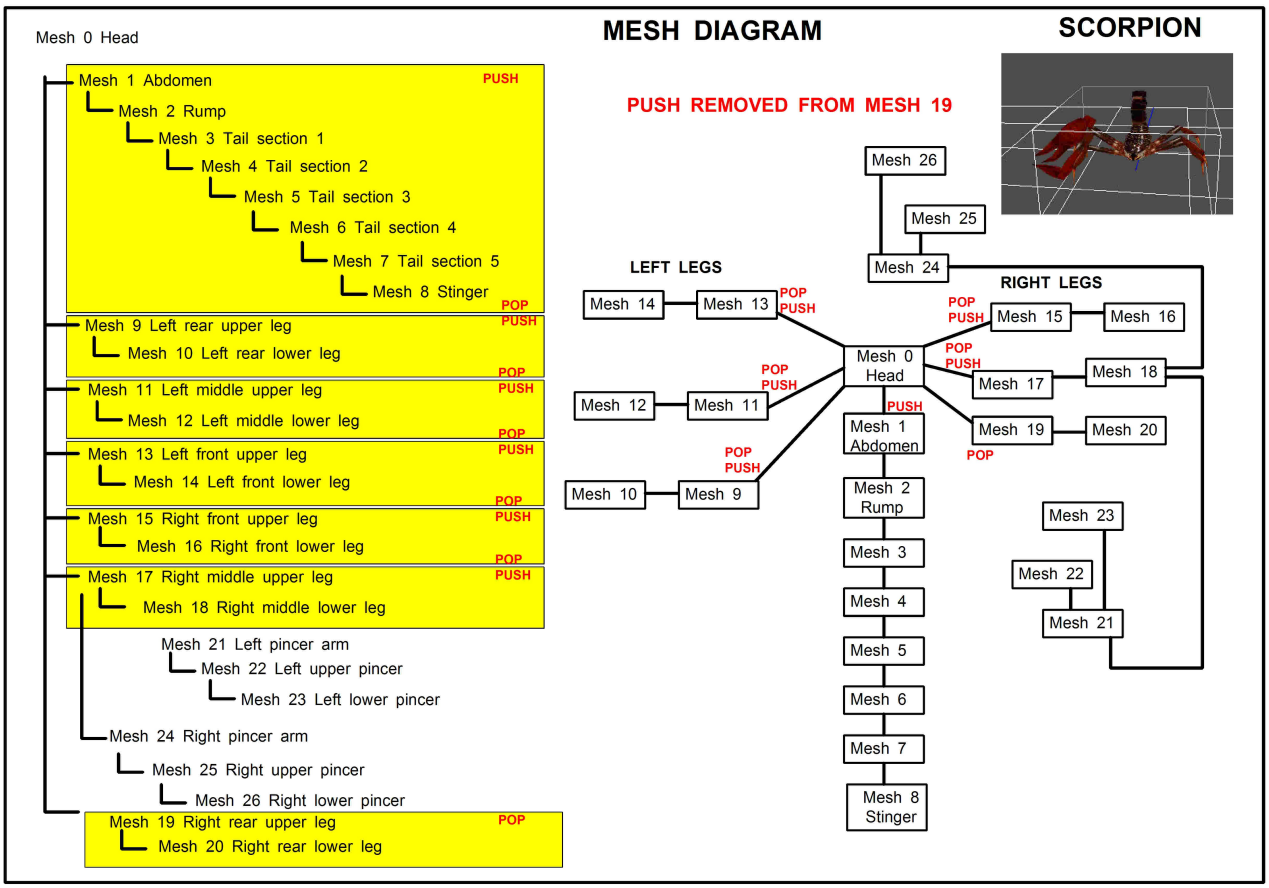


Click now on Mesh 19 and untick the **PUSH**.

Now Mesh 19 is no longer ticked **PUSH**, the scissors of the Scorpion Meshes 21, 22 and 23 now attach to Mesh 17 because this is the next Mesh which has **PUSH** ticked.

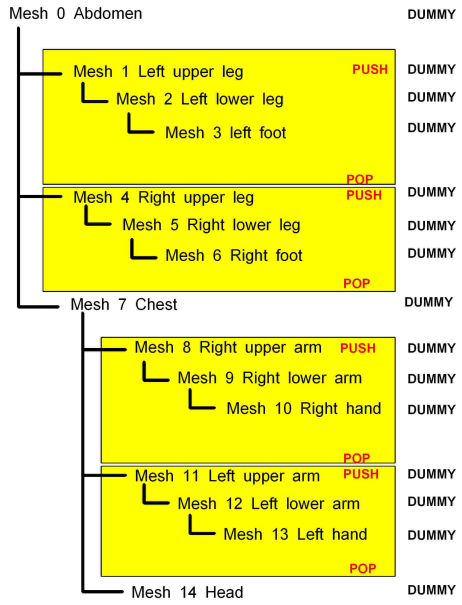
What has gone wrong?

Close the Mesh editor and view the result. Now use the **MOVE** to reposition Meshes 21 and 24 back to the body. View one of the animations now, the Scorpion does not move correctly although the scissors are attached again to the body. They depend on the movement of Mesh 17 because this is marked with **PUSH** and is the next **PUSH** Mesh-to-Mesh 21.

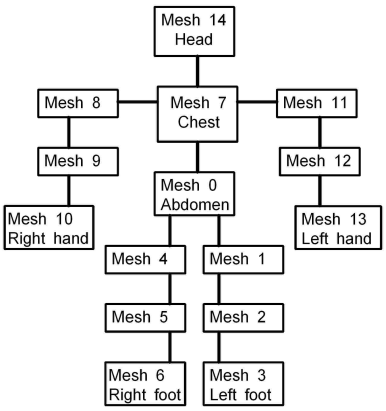


TOMB EDITOR WAD TOOL MANUAL

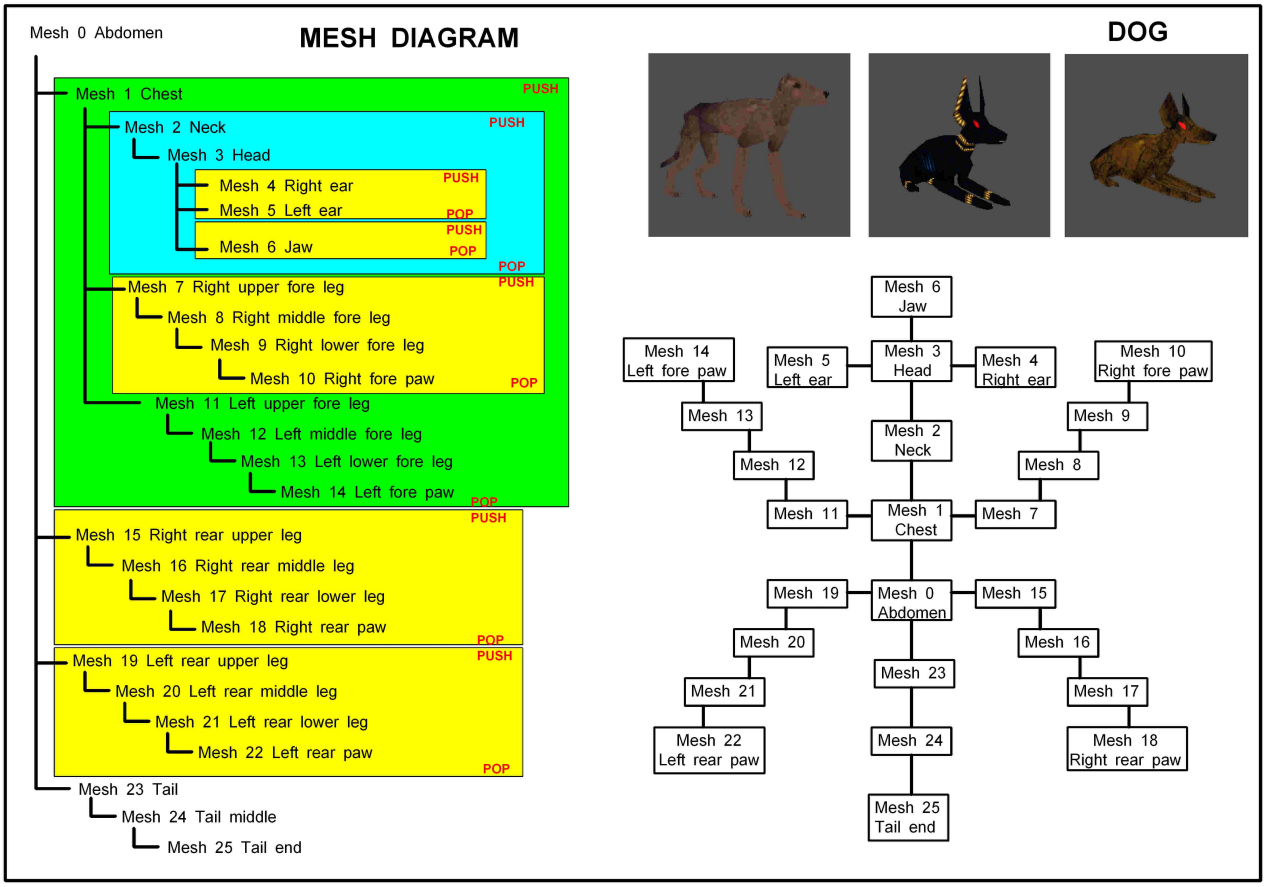
MESH DIAGRAM



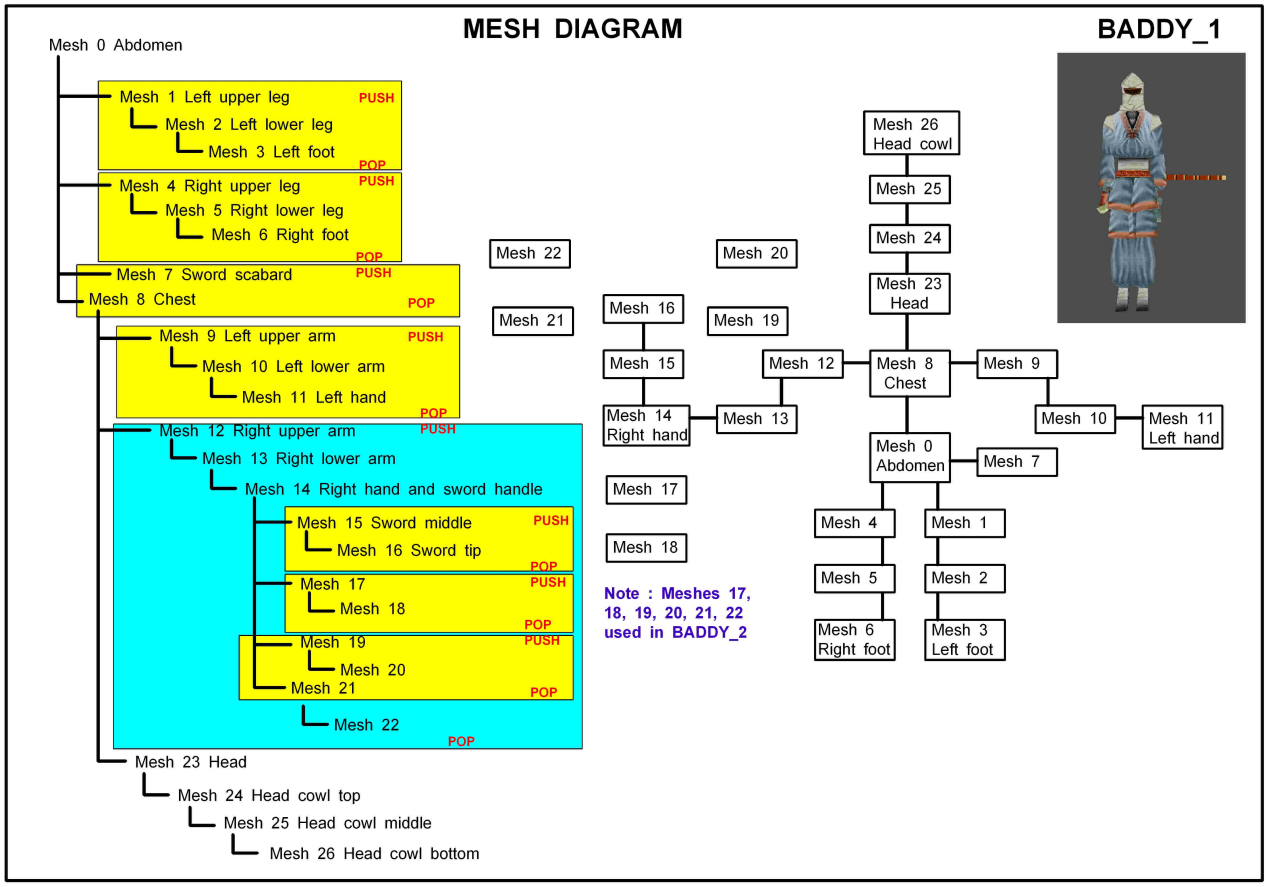
LARA



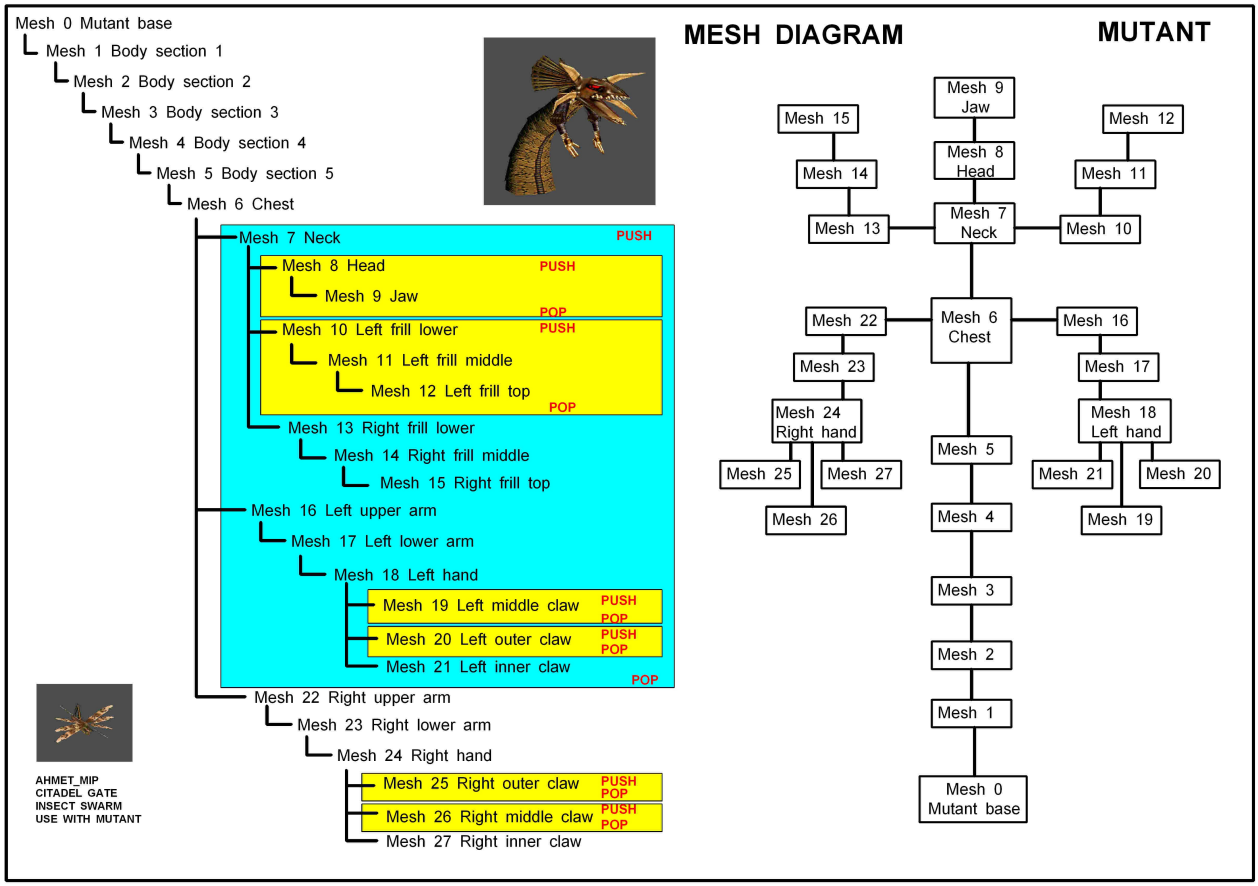
TOMB EDITOR WAD TOOL MANUAL



TOMB EDITOR WAD TOOL MANUAL



TOMB EDITOR WAD TOOL MANUAL



TOMB EDITOR WAD TOOL MANUAL