

MakeHuman - Basic Steps

Step 08:

Pose and Export

Posing

Now that we have our model assembled it is time to strike a pose. The basics are as follows.

- In the Outline Editor, select the **MHBasics** object and make it visible (LMB the Eye icon). It is the object to which all other objects are parented. It is also the object that contains the rig which is needed for posing. Each bone is represented by a colored line. You should be in **Pose Mode** (as opposed to Edit Mode or Object Mode).



1037

- **RMB on a bone** (line), e.g, the upper left arm, and **drag**. The hand along with the clothing moves.
- **LMB** on the bone when you have the arm in the desired **position**.



1038

That's all there is too it. By combining changes to the arms legs, head, etc. you create the desired pose.

I am going to have my man lean against something, perhaps a station wall next to the platform, or a tree, with his hand in his pockets and his eyes closed as he naps. This is the kind of pose you should strive for, a static pose yet one that expresses a moment or attitude.

To assist in positioning my model, I am going to add a cube for him to lean against. I am going to close his eyelids and therefore delete the eyes.



1039

Save your work.

- Press **SHIFT + CMD + S-KEY** and **NUMPAD-PLUS-KEY** to **incrementally increase** your file name “**MHBasics19.blend**”.
- **Save** the file to a folder named “**MHBasics Blender Files**”.
- Right after you have saved your Blender file, under the **Information Editor’s Window Menu**, select **Save Screenshot**.

Keep in mind that there are other rigs that there are other preset rigs in MakeHuman that you can experiment with, although you have to choose your rig in MakeHuman before you port your model over into Blender. If you are a PC user, you can also try out the MHX2, which according to vscorpianc has a different rig.

<https://www.youtube.com/watch?v=WiEDGbRnXdE>

Cleaning up your Model

Before we can port our model over in to Trainz, there are a few thing we still need to do, namely, apply modifiers, remove vertex groups and check for doubles.

- With the MHBasics object selected and visible, switch from **Pose Mode** to Object Mode.



1040

- Now switch to **Edit Mode**.



1041

Notice that the model switches back to the original pose. To retain our pose we need to apply the modifiers that have been assigned to the various objects. We can then un-parent the various objects from the MHBasic object which contains the rig and delete this object with its rig. We can also delete the Basic Mesh, which we have no use for.

Apply Modifiers

- In the Outliner Editor, **select each object in turn:**
 - Body 1591
 - Eyes
 - Hair
 - Jeans
 - Left hand
 - Right Hand
 - Shoes
 - T-shirt
- In the Properties Editor select Modifiers (Wrench Icon) and **apply (LMB) all Modifiers.**



1042

Un-Parent

Now we can un-parent the models objects from the rig.

- In the Outline Editor, **select each object in turn:**
 - Body 1591
 - Eyes
 - Hair
 - Jeans
 - Left hand
 - Right Hand
 - Shoes
 - T-shirt
- With the mouse cursor hovering over the 3D Editor, press ALT/OPT + P-KEY and in the Clear Parent Popup Menu select **Clear Parent**.



1043

- **Delete:**
 - **MHBasics**
 - **Base Mesh**

Note: I am also going to delete the eyes and then select paired vertices on the upper and lower eyelid and merge CTRL + M-KEY > Merge at Center to close the eyelids.



1044

Save your work.

- Press **SHIFT + CMD + S-KEY** and **NUMPAD-PLUS-KEY** to **incrementally increase** your file name “**MHBasics19.blend**”.
- **Save** the file to a folder named “**MHBasics Blender Files**”.
- Right after you have saved your Blender file, under the **Information Editor’s Window Menu**, select **Save Screenshot**.

Clear Vertex Groups

A number of vertex groups have been assigned to the model by MakeHuman, which are also no longer needed. To ensure there will be no problems when the model is exported to Trainz let delete them.

- In the Outline Editor, **select each object in turn**:
 - Body 1591
 - (• Eyes)
 - Hair
 - Jeans
 - Left hand
 - Right Hand
 - Shoes
 - T-shirt
- In the Properties Editor select Object Data (Triangle Icon).
- **Delete all Vertex groups** found by LMB clicking on the Minus Icon.



1045

Remove Doubles

It is always a good idea before exporting from Blender to Trainz to check and remove any Doubles, i.e., vertices within an mesh that are on top of each other.

- In the Outline Editor, **select each object in turn:**
 - Body 1591
 - Eyes
 - Hair
 - Jeans
 - Left hand
 - Right Hand
 - Shoes
 - T-shirt
- In the 3D Editor, switch to Edit Mode and Vertex Selection Mode.
- Select the mesh (A-KEY) and in the Tool Shelf > Tool Tab > Remove Pane > select **Remove Doubles**.



1046

Save your work.

- Press **SHIFT + CMD + S-KEY** and **NUMPAD-PLUS-KEY** to **incrementally increase your file name "MHBasics20.blend"**.
- **Save the file to a folder named "MHBasics Blender Files"**.
- Right after you have saved your Blender file, under the **Information Editor's Window Menu**, select **Save Screenshot**.

Export from Blender

Now (finally) we can export our model.

Note: The Blender file and the texture file (mhbasicstexture.tga) need to be in the **same folder**.

Only **objects** that are **visible** in the Outline Editor will be exported, so make sure all parts of the model are visible.

- In the **Information Editor's File Menu** select **Export** and choose **“Trainz Mesh and Animation...”**.

If all has gone well (no errors) you should see the following files in your folder:

- MHBasics20.im
- MHBasics.log
- MHBascis.xml
- mhbasicstexture.tga
- mhbasicstexture.texture.txt

Note: I forgot to mention that you need to uncheck “Transparency” in the material otherwise the model will not show up in Trainz.



1047



1048