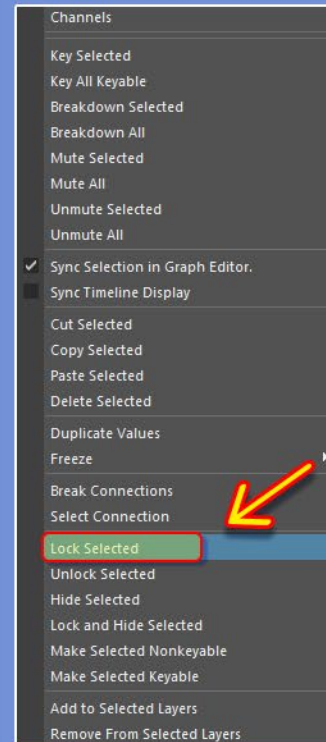
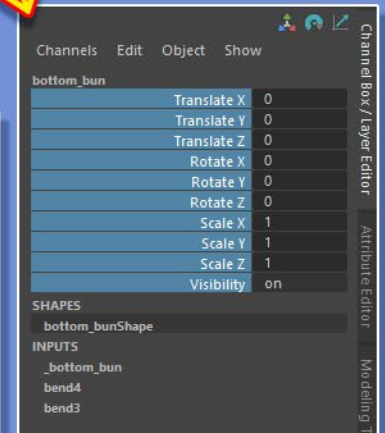
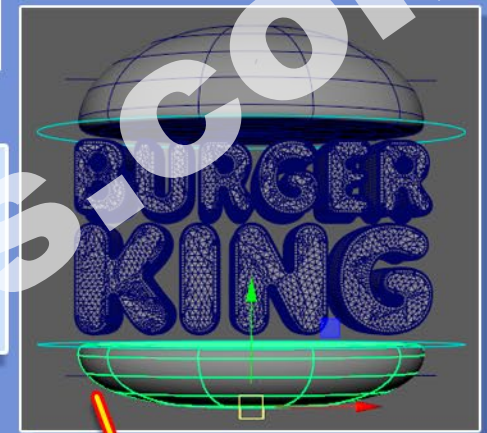
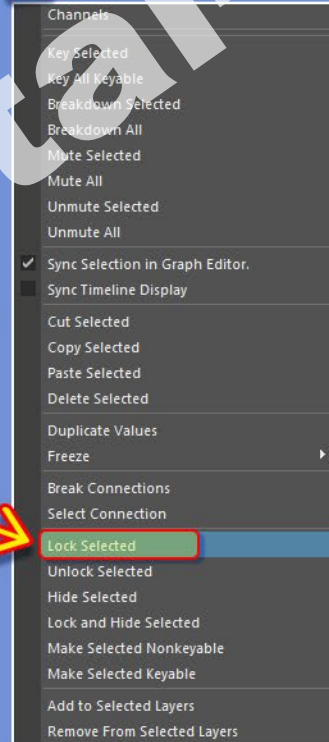
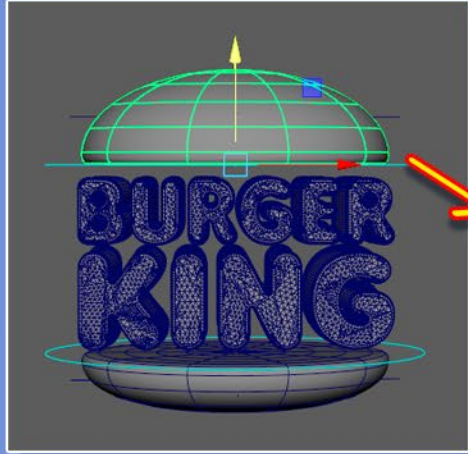


Burger King Project Guide: Rigging~ Part 015

"top_bun" & "bottom_bun": Locking Attributes



1.

1. Select "top_bun". Then go to the Channel Box.
2. Left mouse click + hold the click, now drag your cursor down to highlight all the attributes.
3. Right click and select "Lock Selected".
4. Now those attributes should be greyed out.

Reason:

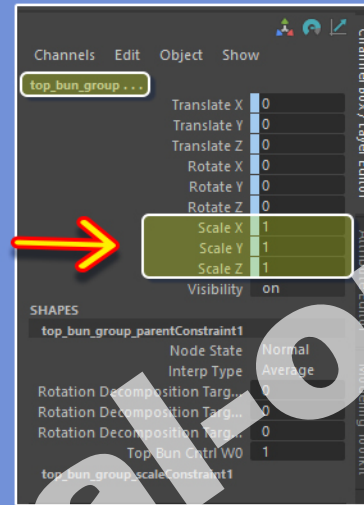
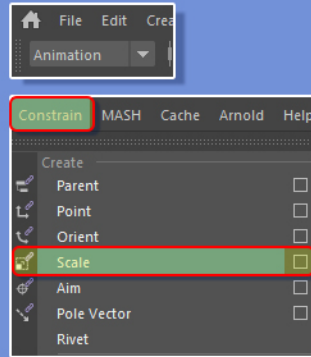
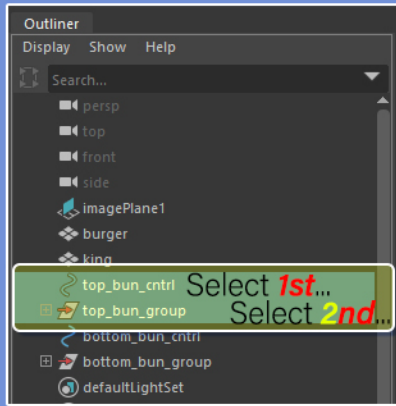
We do not want those attributes to be accidentally keyframed during animation. You only want the animation controller "top_bun_cntrl" to be selected and keyframed for animation.

2.

Now do the same process for the "bottom_bun"

Burger King Project Guide: Rigging~ Part 016

"top_bun" & "bottom_bun": Scale Constraints



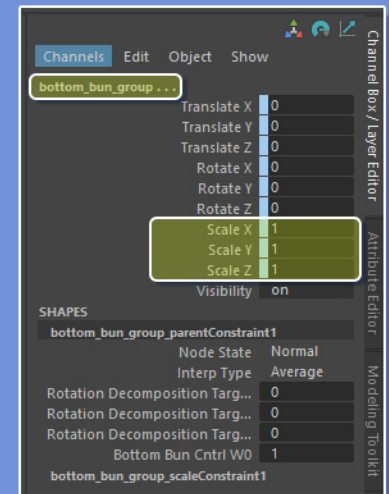
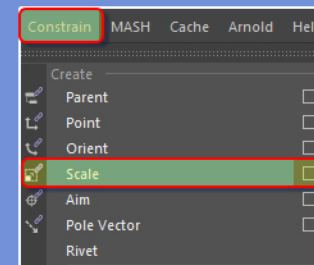
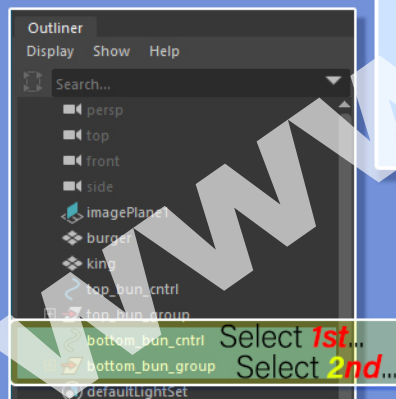
"Scale Constraint" allows you to control the scale & setting keyframes to the top bun. So now you can manipulate & keyframe every attribute for the top bun!

1.

1. Select "*top_bun_cntrl*", then (CTRL+left click) "*top_bun_group*".
2. (Animation Menu): Constrain> Scale
3. The Channel Box's (Scale X/Y/Z) should be blue.

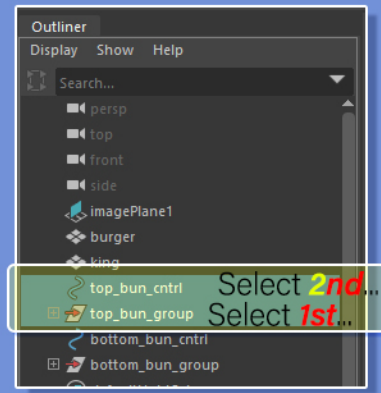
2. Now do the same process for the "bottom_bun":

1. Select "*bottom_bun_cntrl*", then (CTRL+left click) "*bottom_bun_group*".
2. (Animation Menu): Constrain> Scale
3. The Channel Box's (Scale X/Y/Z) should be blue.

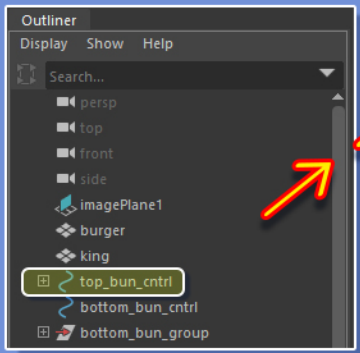


Burger King Project Guide: Rigging~ Part 017

"top_bun" & "bottom_bun": Parenting

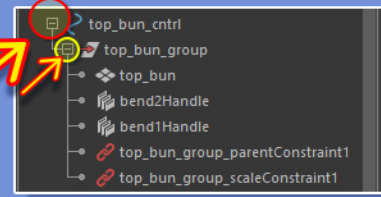


BEFORE...



AFTER...

Click both tabs to unveil (top_bun_ctrl)'s full hierarchy tree.

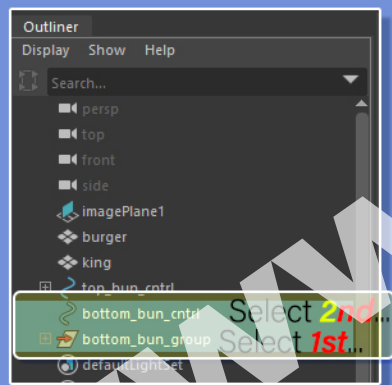


1.

- a. Select "top_bun_group", then...
- b. Shift select "top_bun_ctrl"
- c. Press "p" to "Parent"
- d. Your end result should match my example.

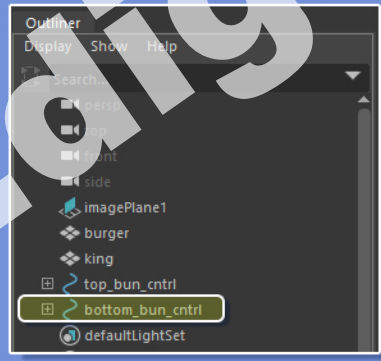
2. Do the same parenting steps/procedure for the "bottom_bun_group" & "bottom_bun_ctrl".

Click both tabs to unveil (bottom_bun_ctrl)'s full hierarchy tree.

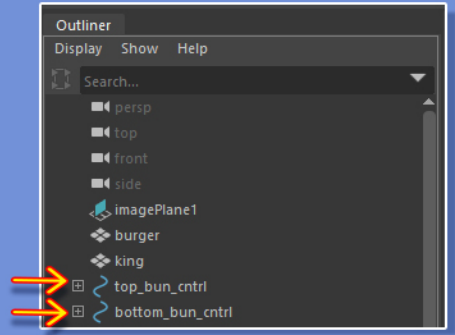
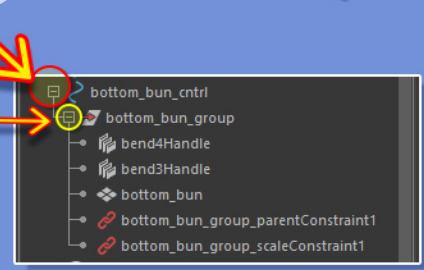


BEFORE...

Press "p" to "Parent"



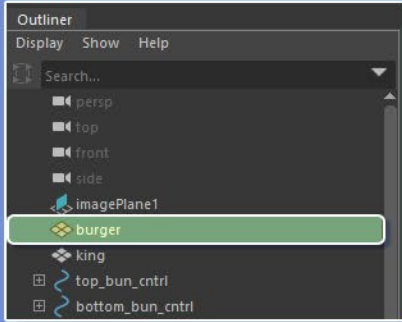
AFTER...



Now close the hierarchy tree & examine what you have in your Outliner to my example. This is what you should have.

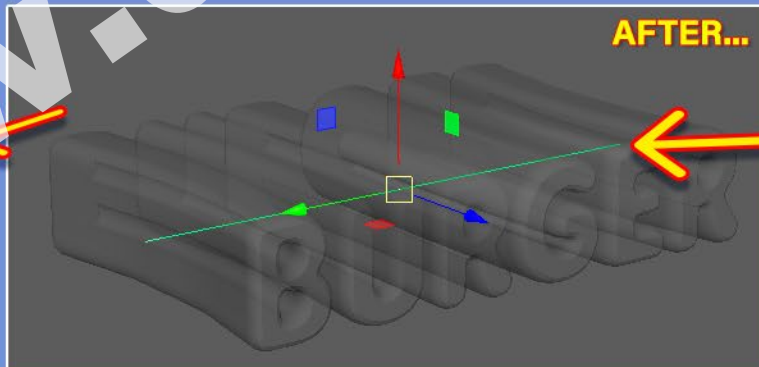
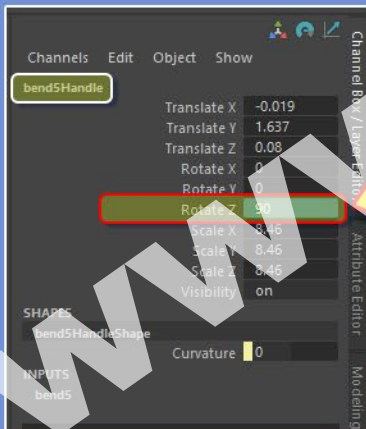
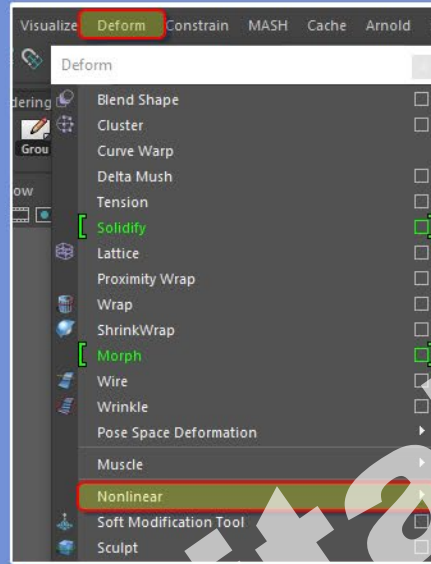
Burger King Project Guide: Rigging~ Part 018

Rigging "burger": Setting up a "Bend Deformer"



1.

- a. Select **"burger"**
Make sure you're on the:
Animation Menu
- b. Deform > Nonlinear > Bend

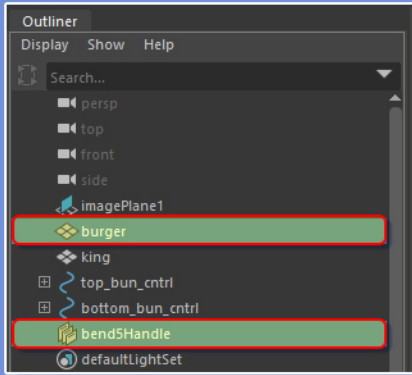


2.

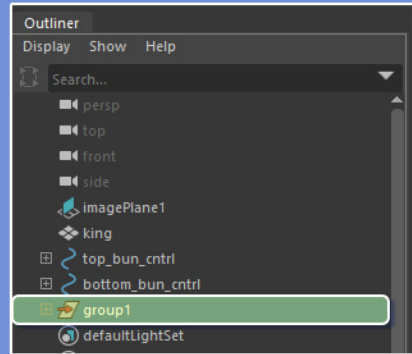
- a. Select **"bend5Handle"**. Yours may have a different number sequence from "5". That is ok too.
- b. Go to Channel Box & change **Rotate Z** to **"90"**.
- c. Your bend handle should rotate down like my example here.

Burger King Project Guide: Rigging~ Part 019

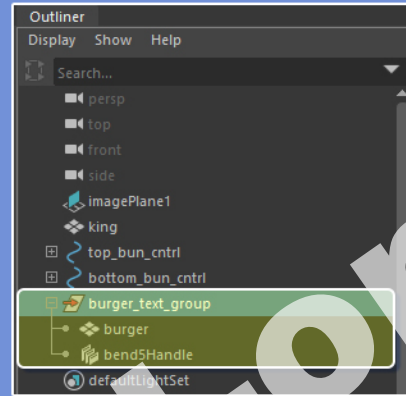
"burger": Group, Rename, Controller, Freeze Transform



Press **"control+g"** to group them.

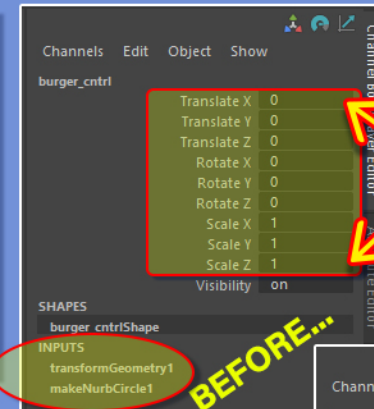
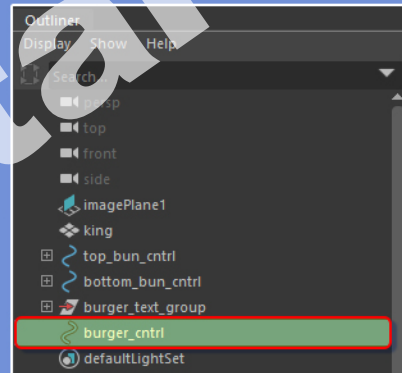
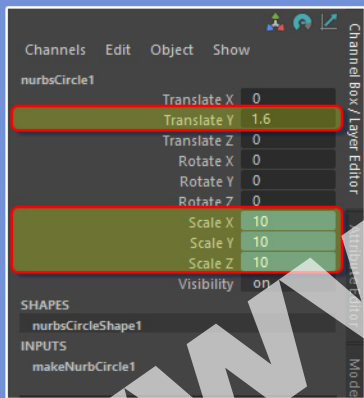
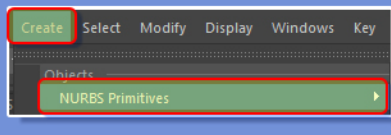


Double click to rename.



1.

- Select **"burger"** & **"bend5Handle"**
- Press **"control+g"** to group them.
- Rename to **"burger_text_group"**.
- Double check and open the group. The hierarchy should look like my example.

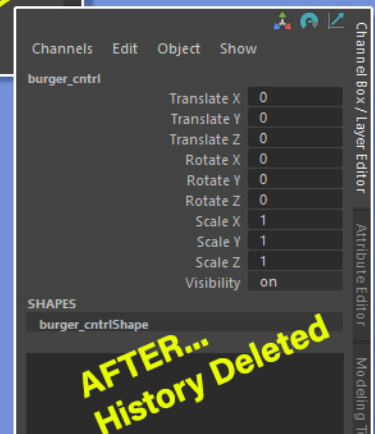


Freeze Transformation

2.

Controller, Freeze Transform, & Delete History.

- Create> NURBS Primitives> Circle
- Translate Y = **"1.6"**
- Scale X/Y/Z = **"10"**
- Rename as **"burger_ctrl"**
- Modify> Freeze Transformations
- Edit> Delete by Type> History

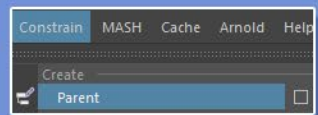
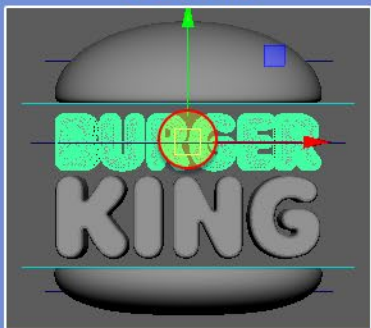
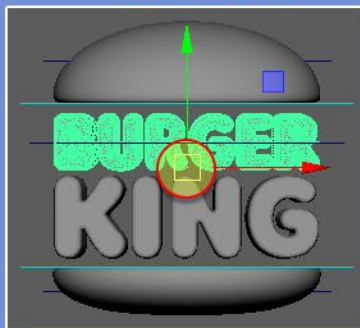


Burger King Project Guide: Rigging~ Part 020

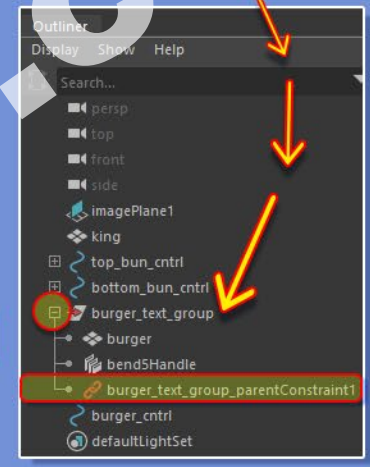
"burger": Center Pivot, Parent Constraint

BEFORE...

AFTER...



The hierarchy should look like this.

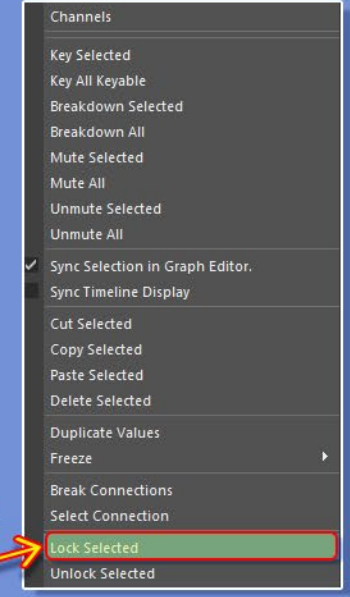
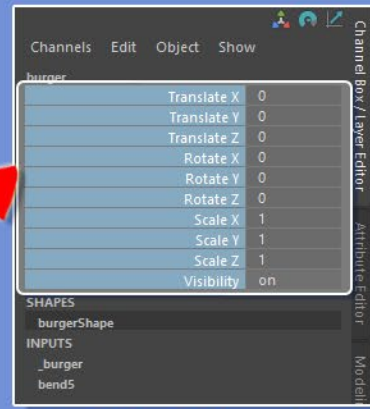
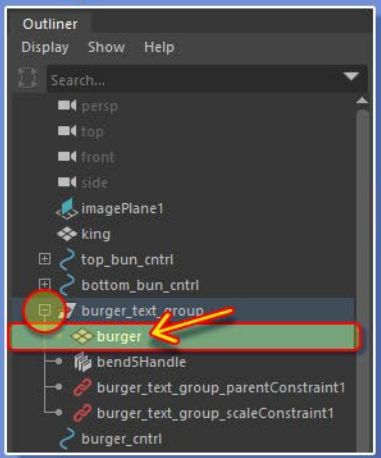
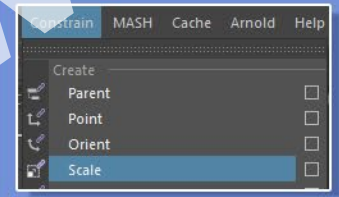
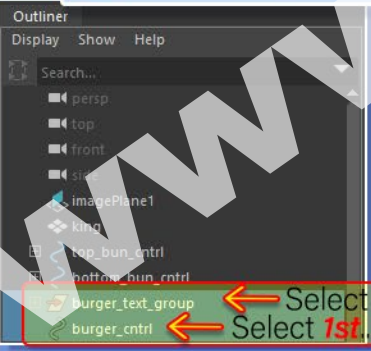


1. Select "burger_text_group". Then apply: Modify> Center Pivot
2. Select "burger_cntrl" then (shift+select) "burger_text_group"
3. Constrain> Parent Constraint

2.

1. Select "burger_cntrl" then (shift+select) "burger_text_group"
2. Constrain> Scale Constraint

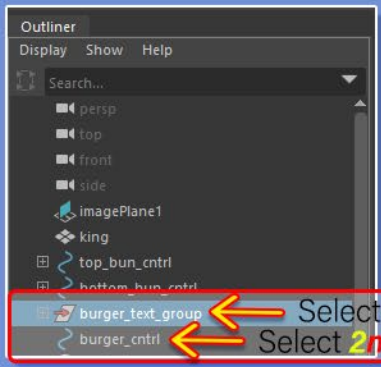
Specifically choose "burger" from Outliner.



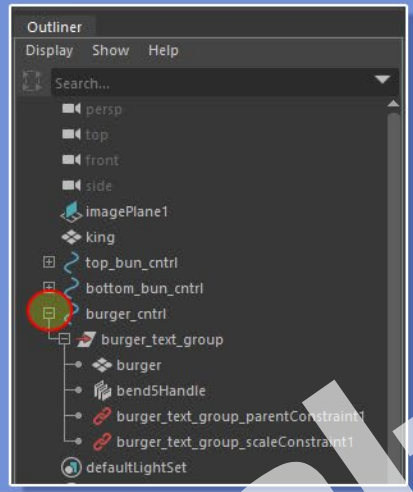
Left click+"drag down" & (highlight select) all. Then "Right click+select" (Lock Selected)

Burger King Project Guide: Rigging~ Part 021

"burger": Parenting | "king": Delete History/Bend Deformer



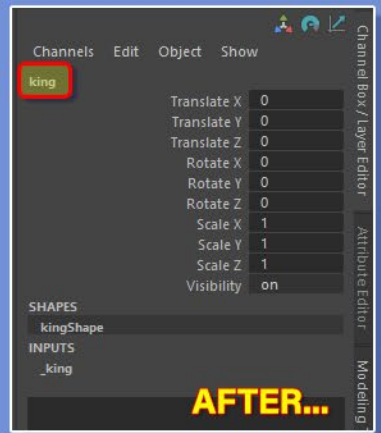
1. First select "burger_text_group" then shift+select "burger_cntrl". Now press "p" for (Parent).



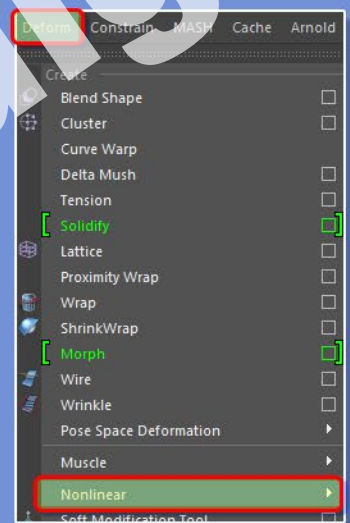
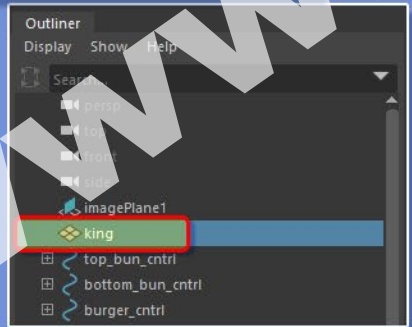
2. This is how your "burger_cntrl" hierarchy should look like after parenting.



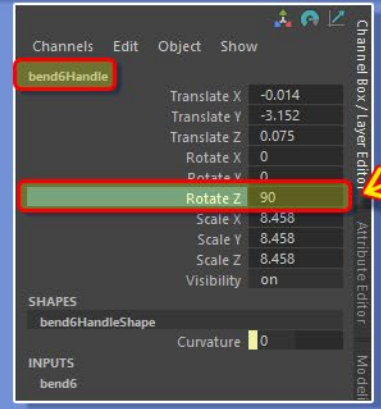
3. Select "king" text. Next... Edit> Delete by Type> History



4. Select "king" text. Next... Deform> Nonlinear> Bend

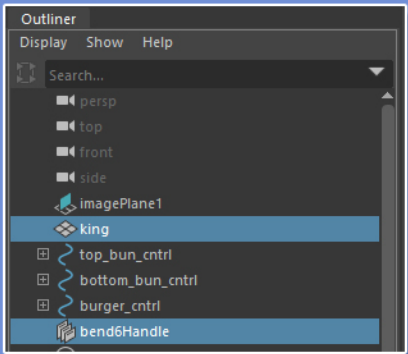


5. Select "bend6Handle" from Outliner. Go to Channel Box, & set (Rotate Z): "90"



Burger King Project Guide: Rigging~ Part 022

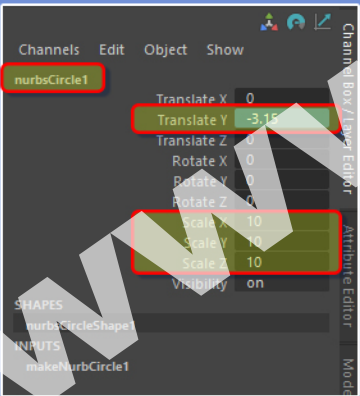
"king": Group, Controller, Freeze Transform/Delete History



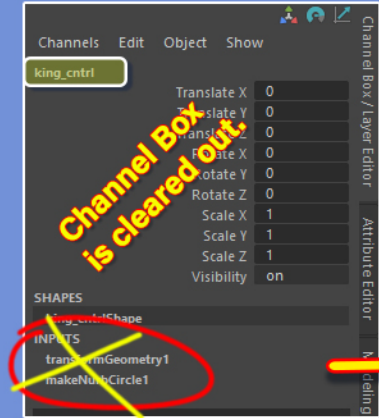
- 2. Center Pivot & Renaming**
 - a. Select the new "group1" you created.
 - b. *Modify > Center Pivot*
 - c. Double click on "group1", and rename: "king_group"

- 1. GROUPING**
 - a. Select "king", and then (shift+select) "bend6Handle"
 - b. (control+"g") to group.

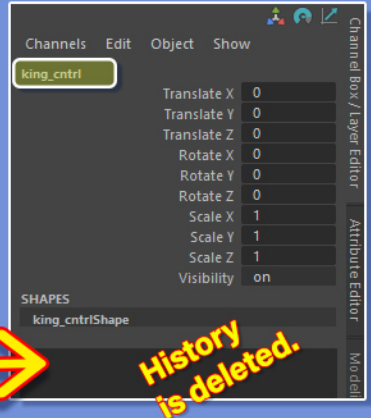
- 3. Creating/Rename "king" Controller**
 - a. *Create > NURBS Primitives > Circle*
 - b. Go To (Channel Box) & input:
Translate Y: "-3.15"
Scale X/Y/Z: "10"
 - c. Double click on "nurbsCircle1", and rename as "king_cntrl"



Freeze Transform Applied



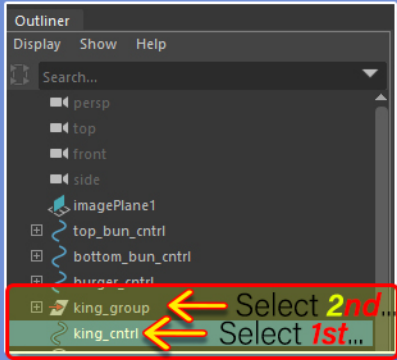
Delete History Applied



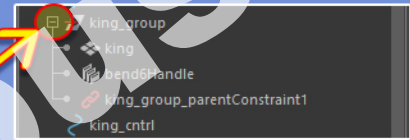
- 4.** Select "king_cntrl", apply a "Freeze Transform", and then apply "Delete History"

Burger King Project Guide: Rigging~ Part 023

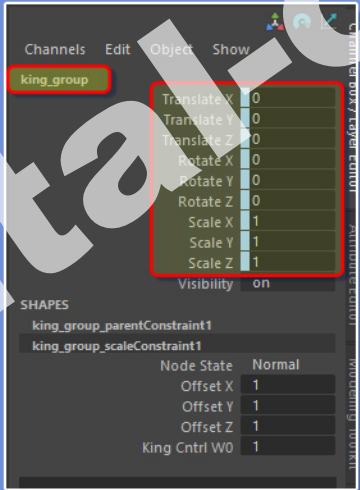
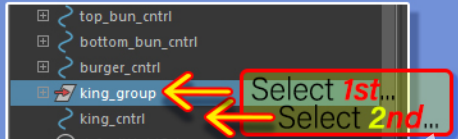
"king": Creating Parent/Scale Constraints & Parenting



- 1. Applying "Parent Constraint"**
 - a. Select "king_cntrl" then (shift+select) "king_group".
 - b. Now apply a "Parent Constraint".
 - c. **Constrain> Parent**
 - d. Open the hierarch & check with example.



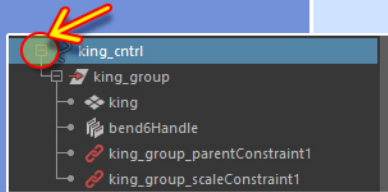
- 2. Applying "Scale Constraint"**
 - a. Select "king_cntrl" then (shift+select) "king_group".
 - b. Now apply a "Scale Constraint".
 - c. **Constrain> Scale**
 - d. Open the hierarch & check with example.



Select "king_group" & check the Outliner. You will see that the Channel Box attributes are now a "teal" color. This means the "king_group" is now controlled by the "king_controller".

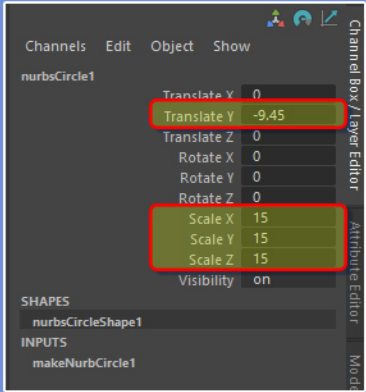
- 3. Applying a "Parent"**

Select "king_group", then (shift+select) "king_cntrl". Now apply ("p"). Open the hierarch & check with my example.



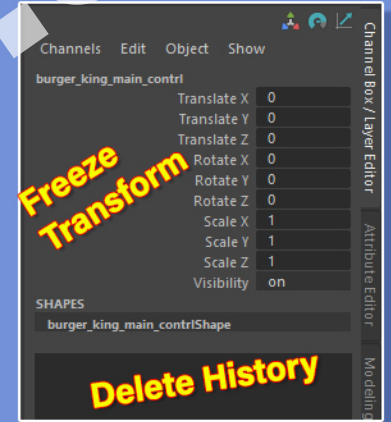
Burger King Project Guide: Rigging~ Part 024

"main_cntrl": Freeze Transform/Delete History/Parent



1. Creating "burger_king_main_cntrl"

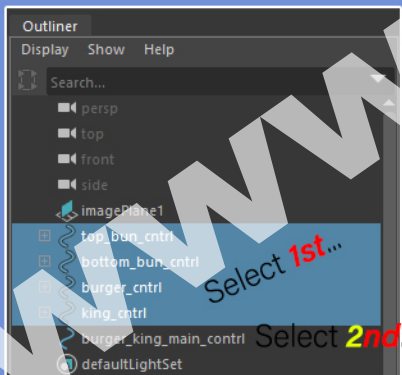
- Create> NURBS Primitives> Circle
- Go to Channel Box:
Translate Y: -9.45
Scale X/Y/Z: 15



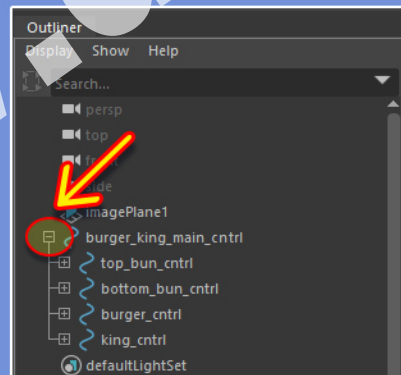
2. Freeze Transform & Delete History

- Select "burger_king_main_cntrl"
- Modify> Freeze Transform
- Edit> Delete by Type> History

BEFORE



AFTER



3. Parenting smaller controllers to "burger_king_main_cntrl"

- Select all the other controllers **ONLY** from the **Outliner**
- Then (**Shift+select**) "**burger_king_main_cntrl**"
- Apply (**p**)
- Open the hierarchy and check/compare with my example.

Burger King Project Guide: Rigging~ Part 025

Locking Out Bend Deformer Channel Attributes

1

Hide EVERYTHING except for the "bend deformers":
Apply these two hot-keys:

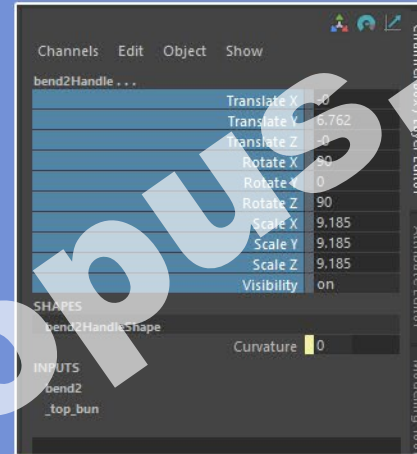
Hide NURBS Curves
(Alt+1) for PC (option+1) for Mac

Hide Polygons
(Alt+2) for PC (option+2) for Mac



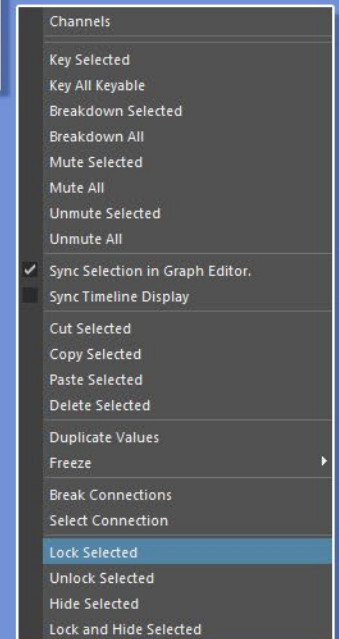
(Left mouse click and drag select)

2. These are all the "bend deformers" that we created. We need to lock them out to prevent accidental keyframes.
(Left mouse click and drag select) ALL of the "bend deformers" from the 3D world space.



3

(Left mouse click + drag select) every Channel Box attribute.



4

Then (right click) & hold for the menu. Now choose, "Lock Selected"