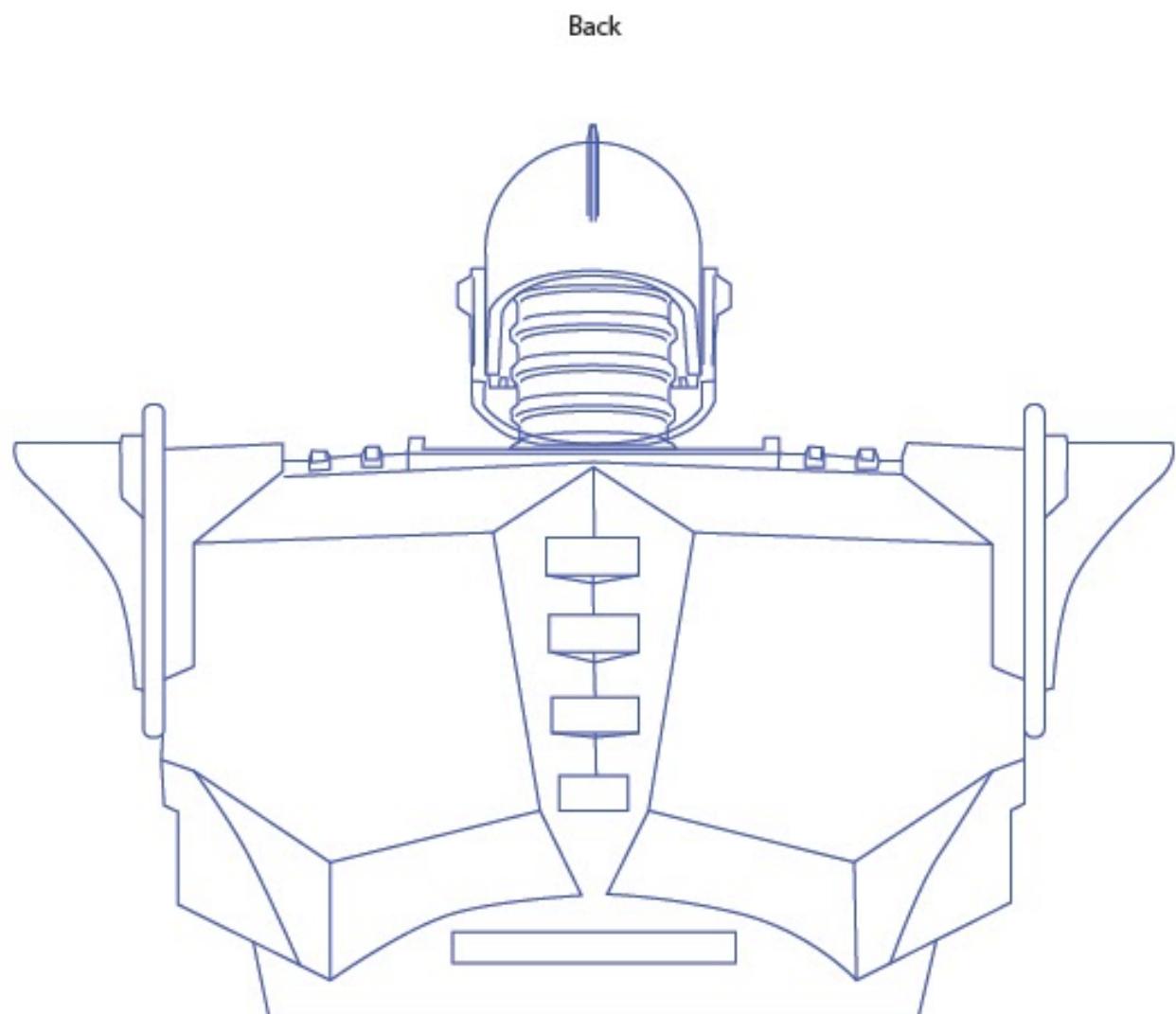


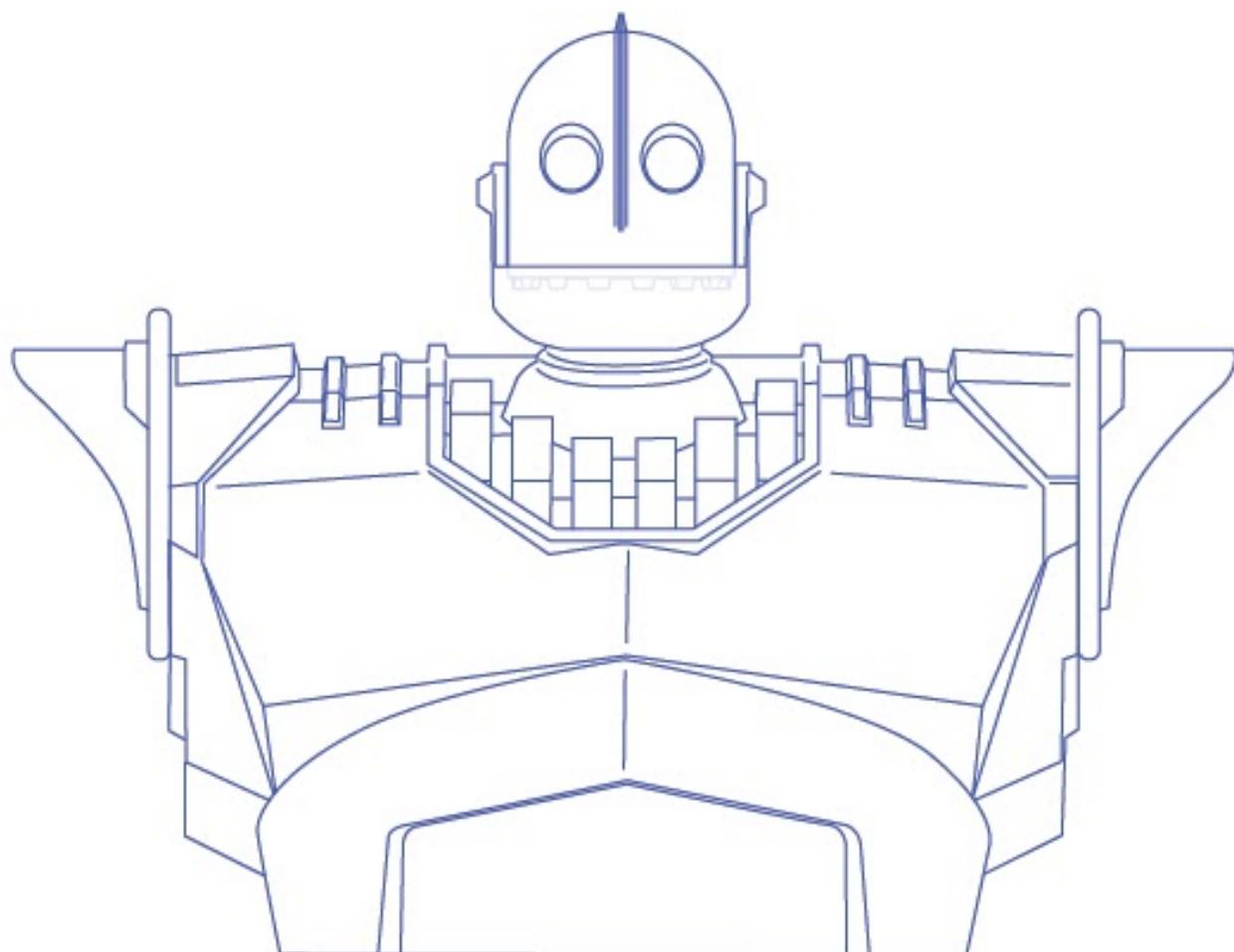
NM-



①

NM-

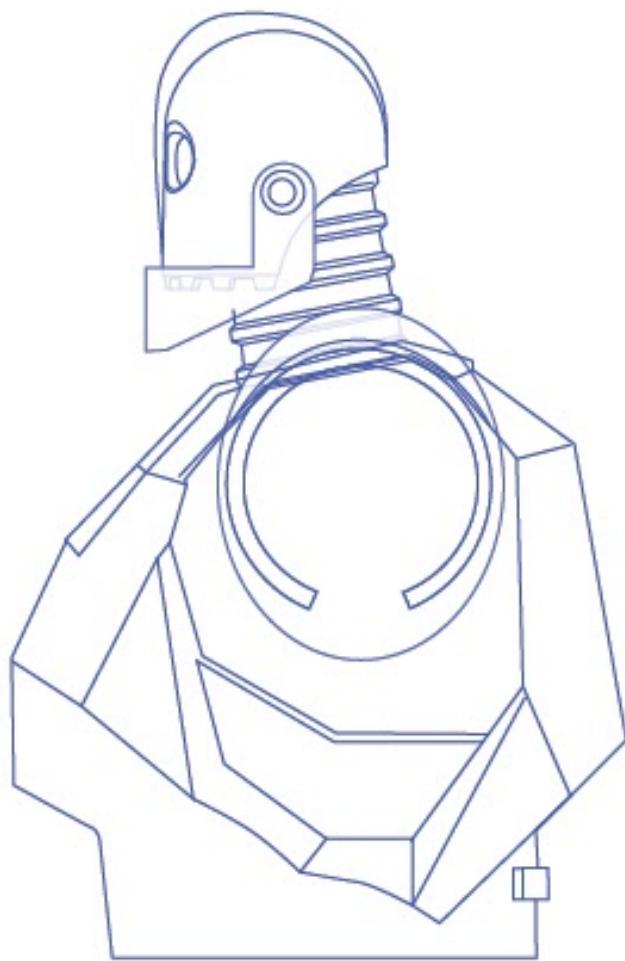
Front



①

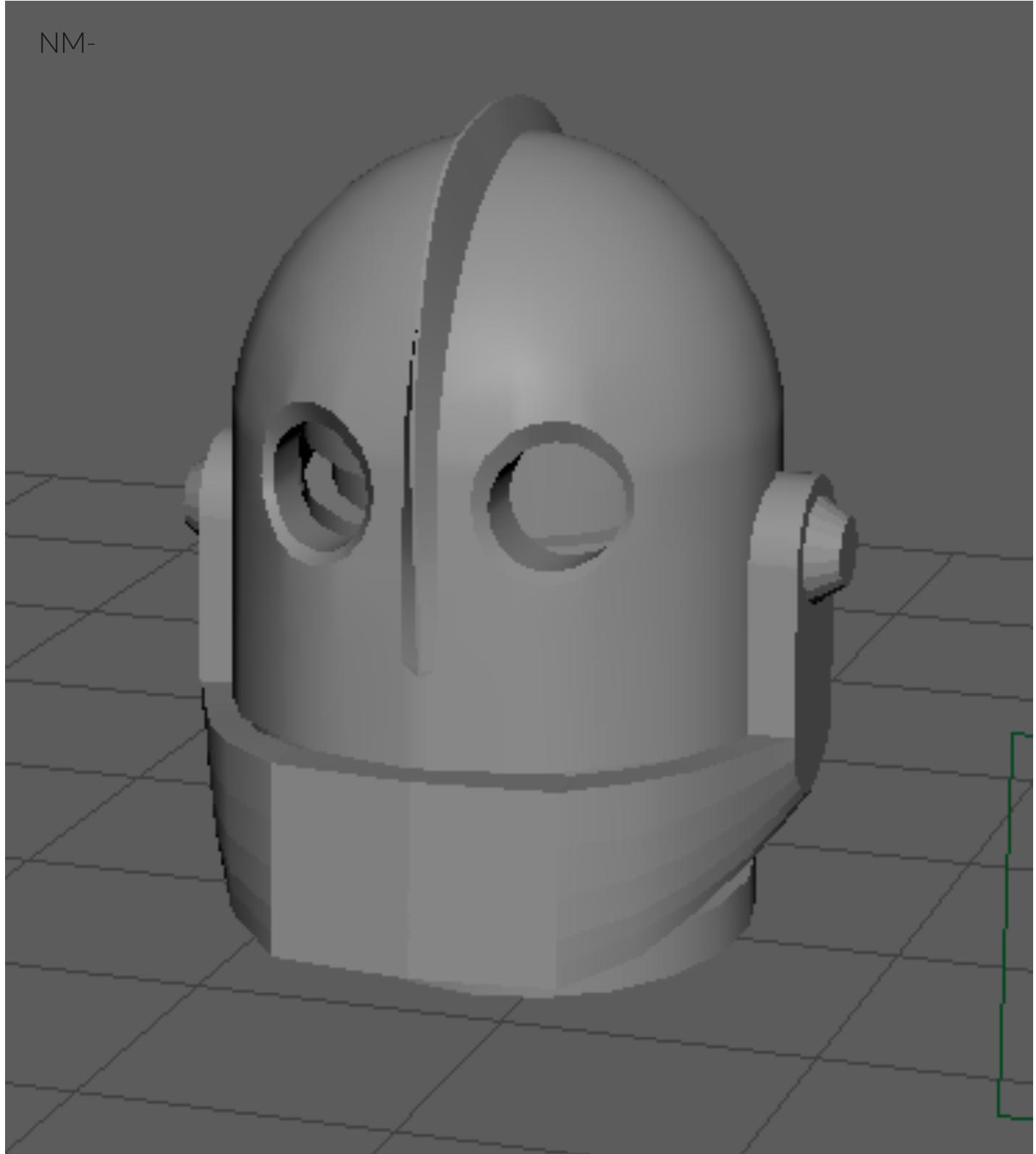
NM-

Side



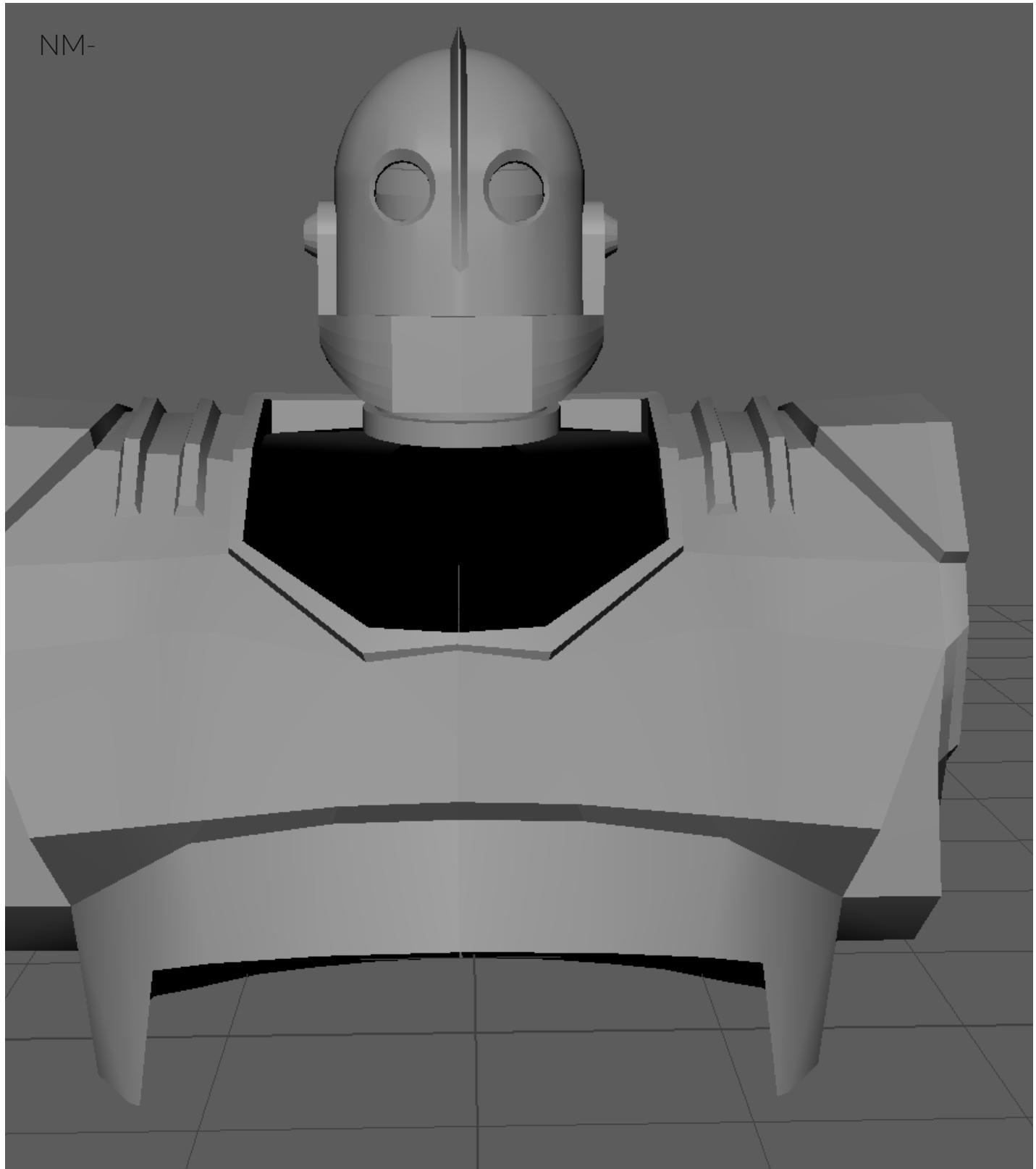
The initial blueprints from Assessment 2 Task Overview

(i)



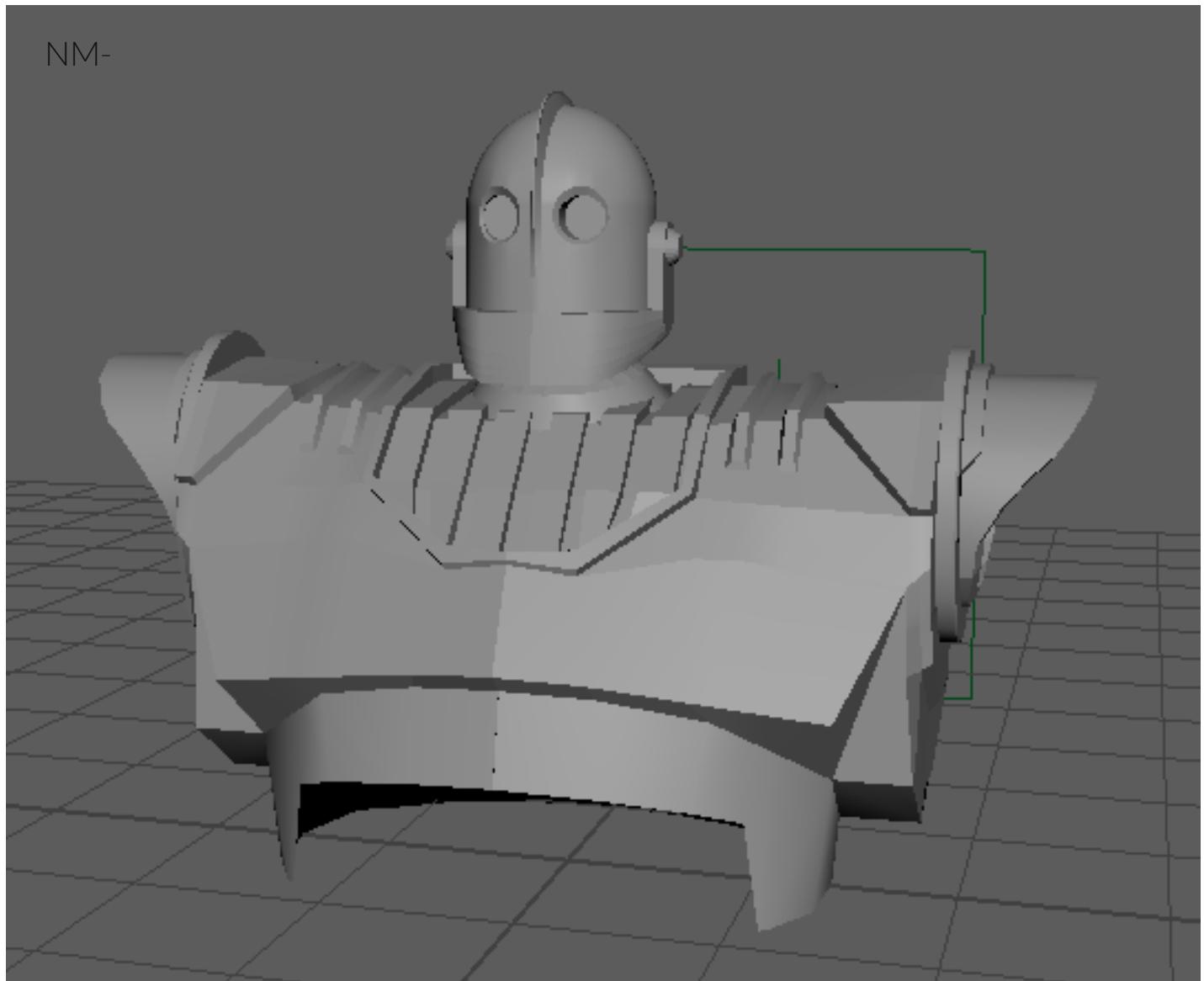
I started modelling the head of the robot from a sphere.





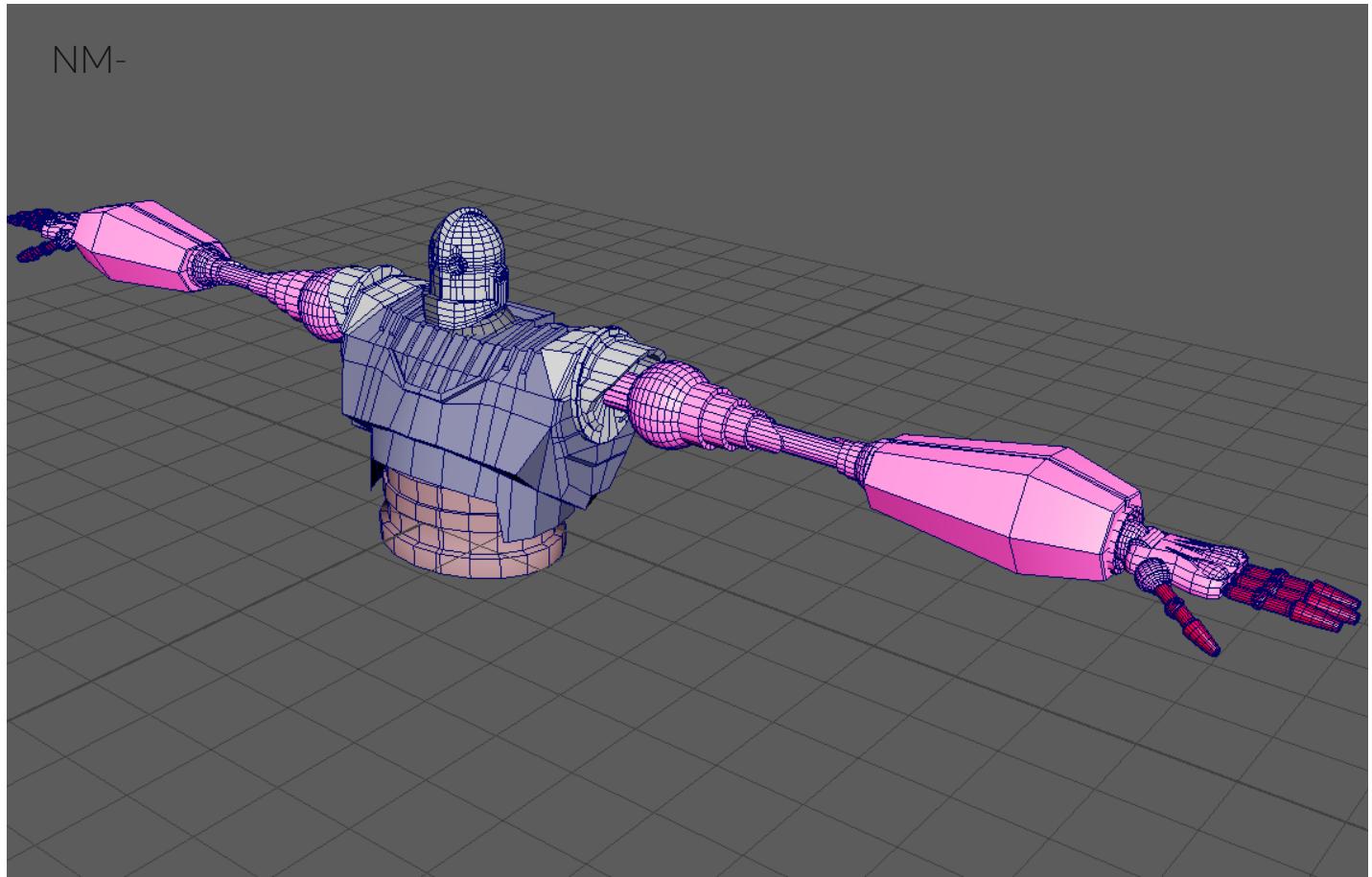
I then began to work on the body, getting the main shape done first. I extrude out the shell by following the initial blueprints from the three provided views.



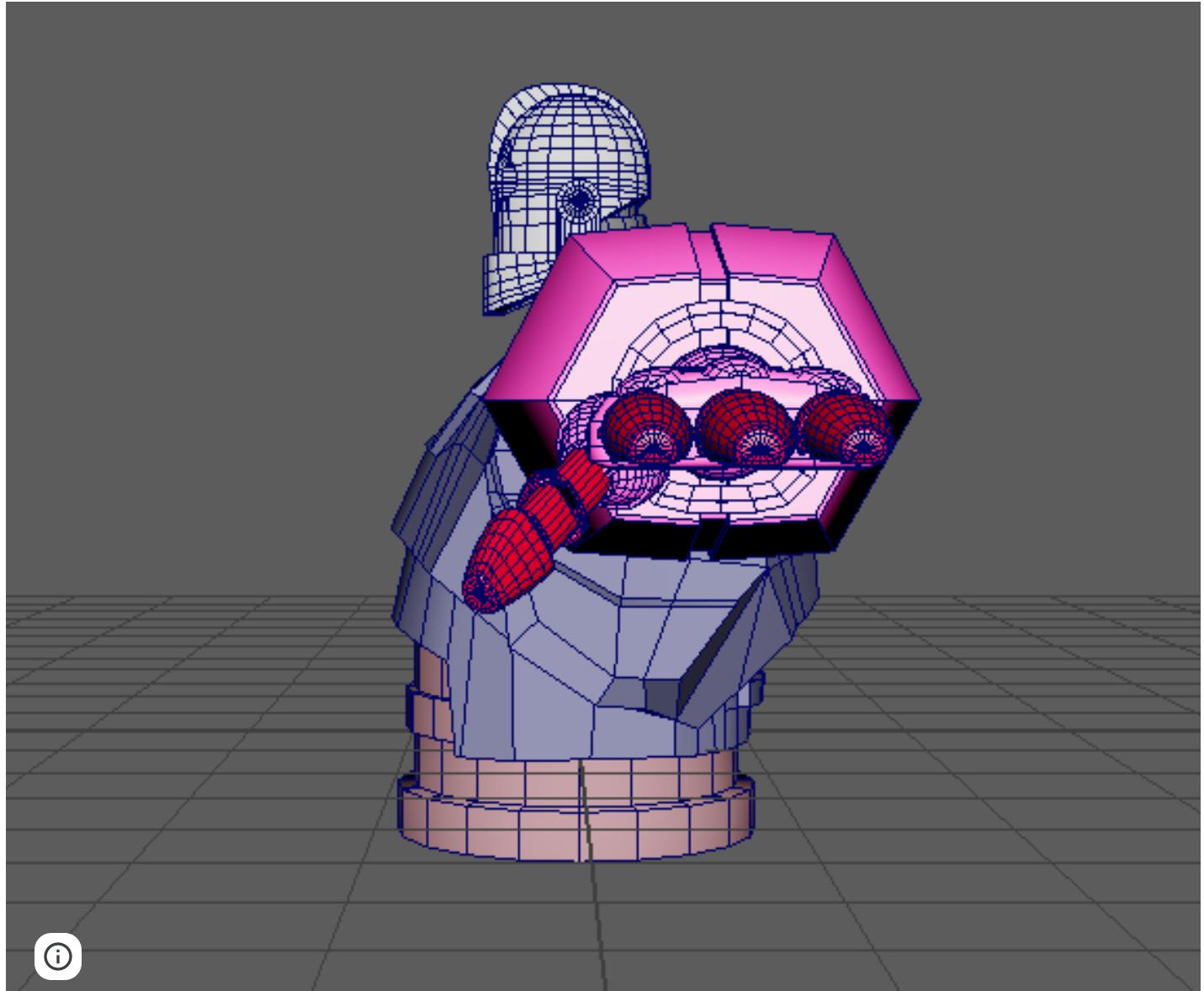
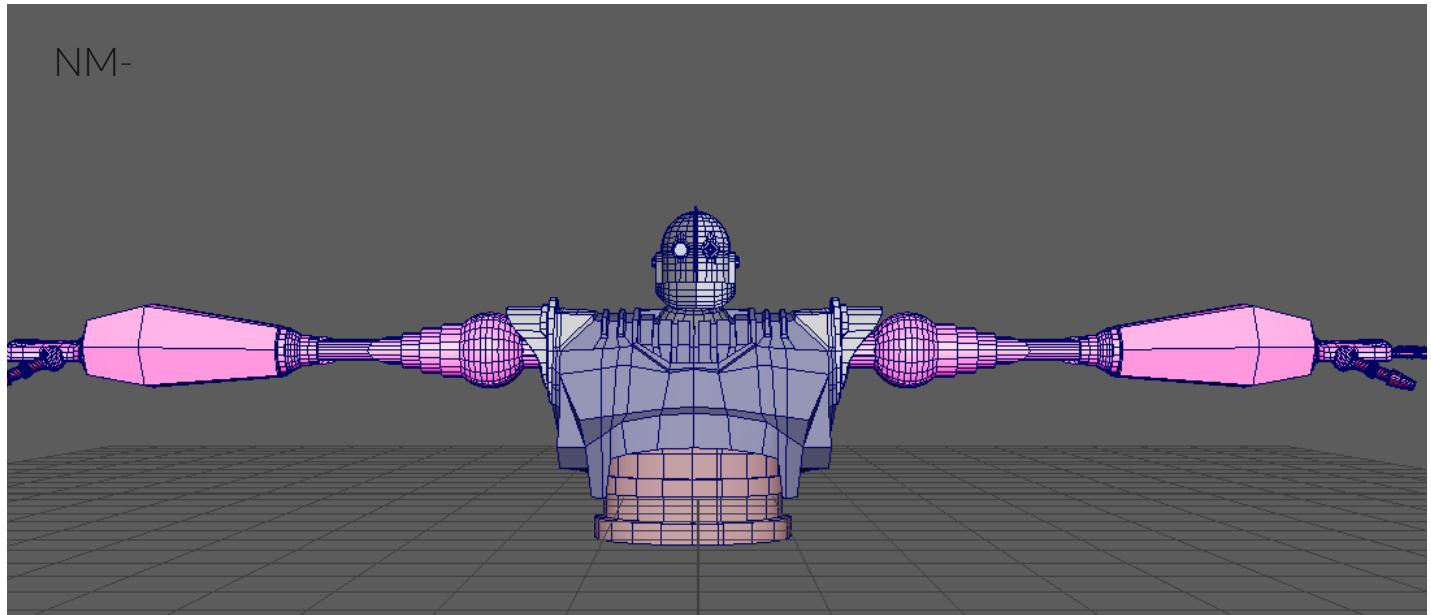


After I added details to complete the body as per the initial blueprints.

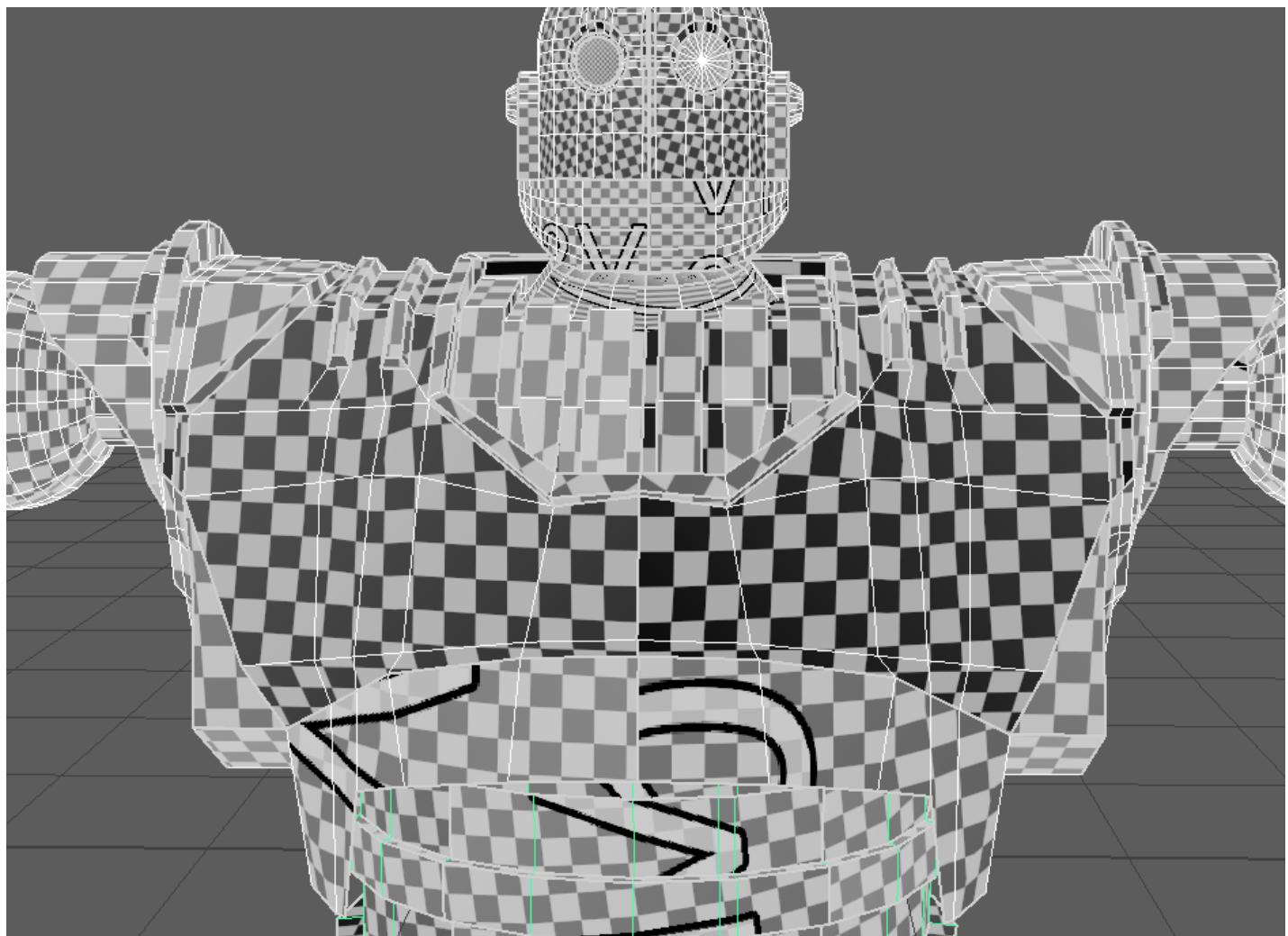
①



①

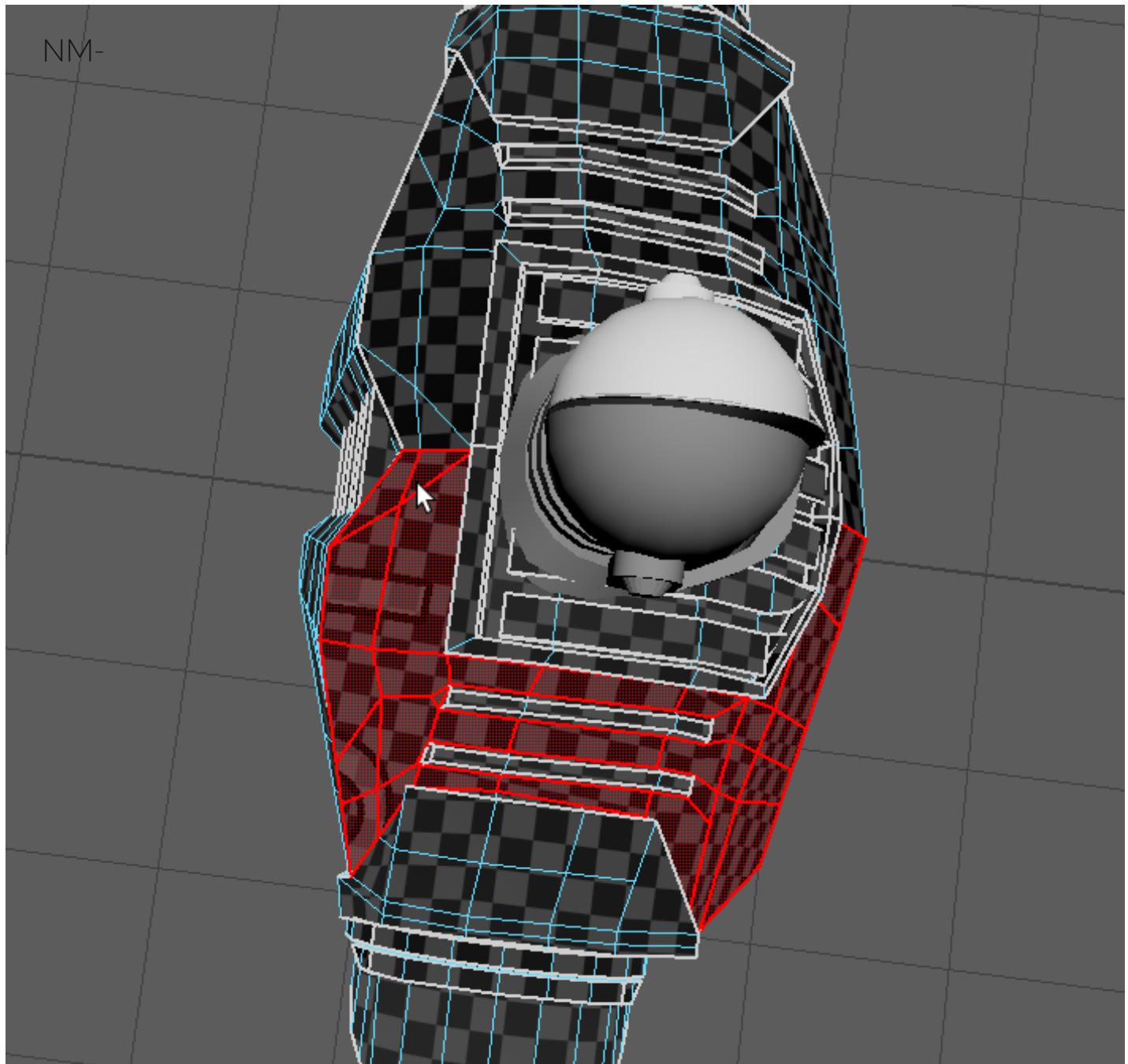


I added the base of his body, and additionally the existing arms. I separated him into different materials based on his head, neck, body, shoulders, and torso.

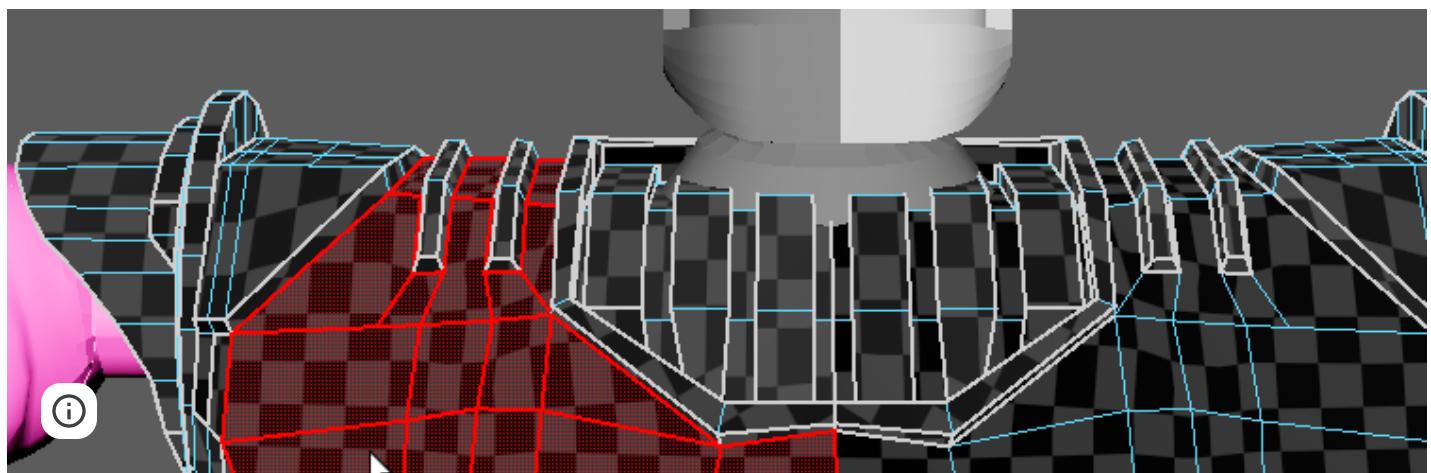


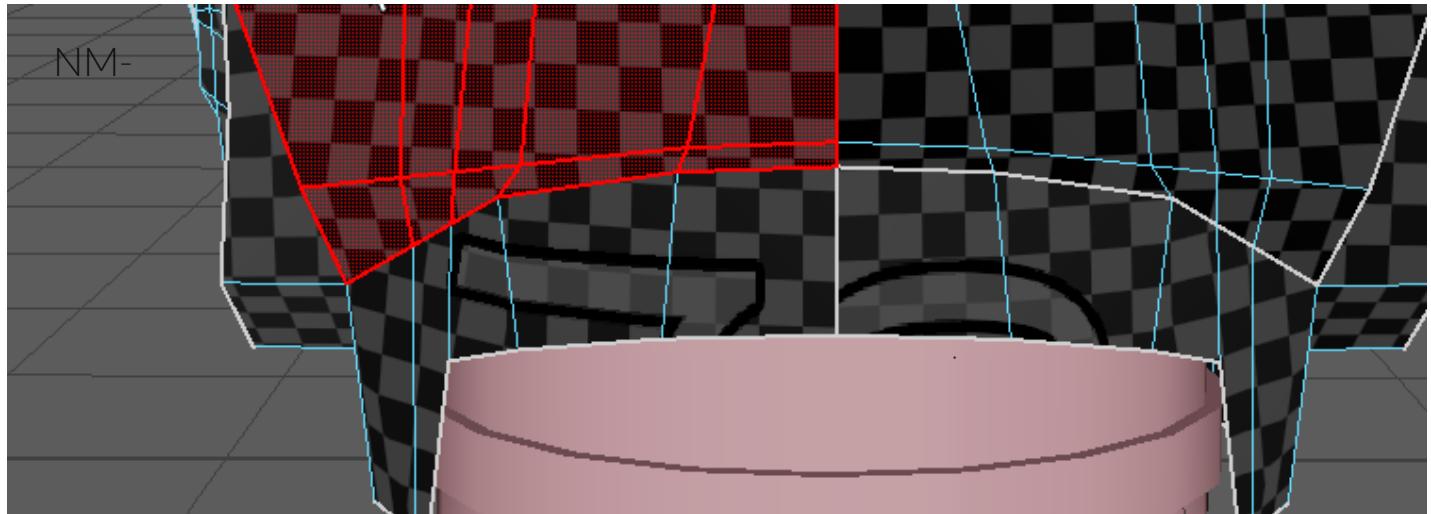
UV wrapping. The robot was separated into his armour plates at the front, his shoulders, his head, his neck, his torso, and various separate components such as his "ribs". Large components such as his armour plates were given the largest resolution, while less visible components were given lower resolution and UV space. As per the tutor's feedback I applied the same texel density to all the shells by sampling one shell and applying it to all the others.



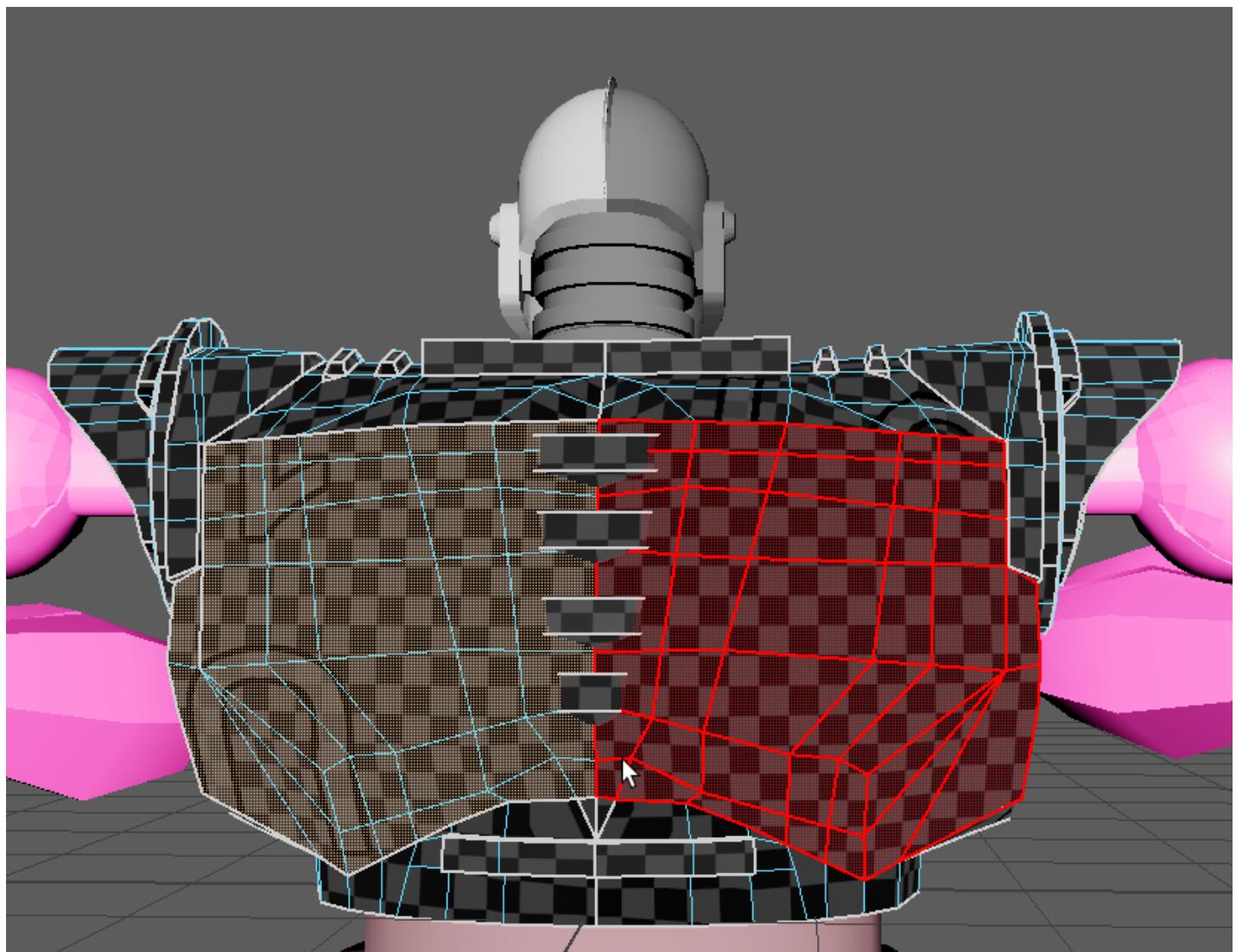


Front plate top view



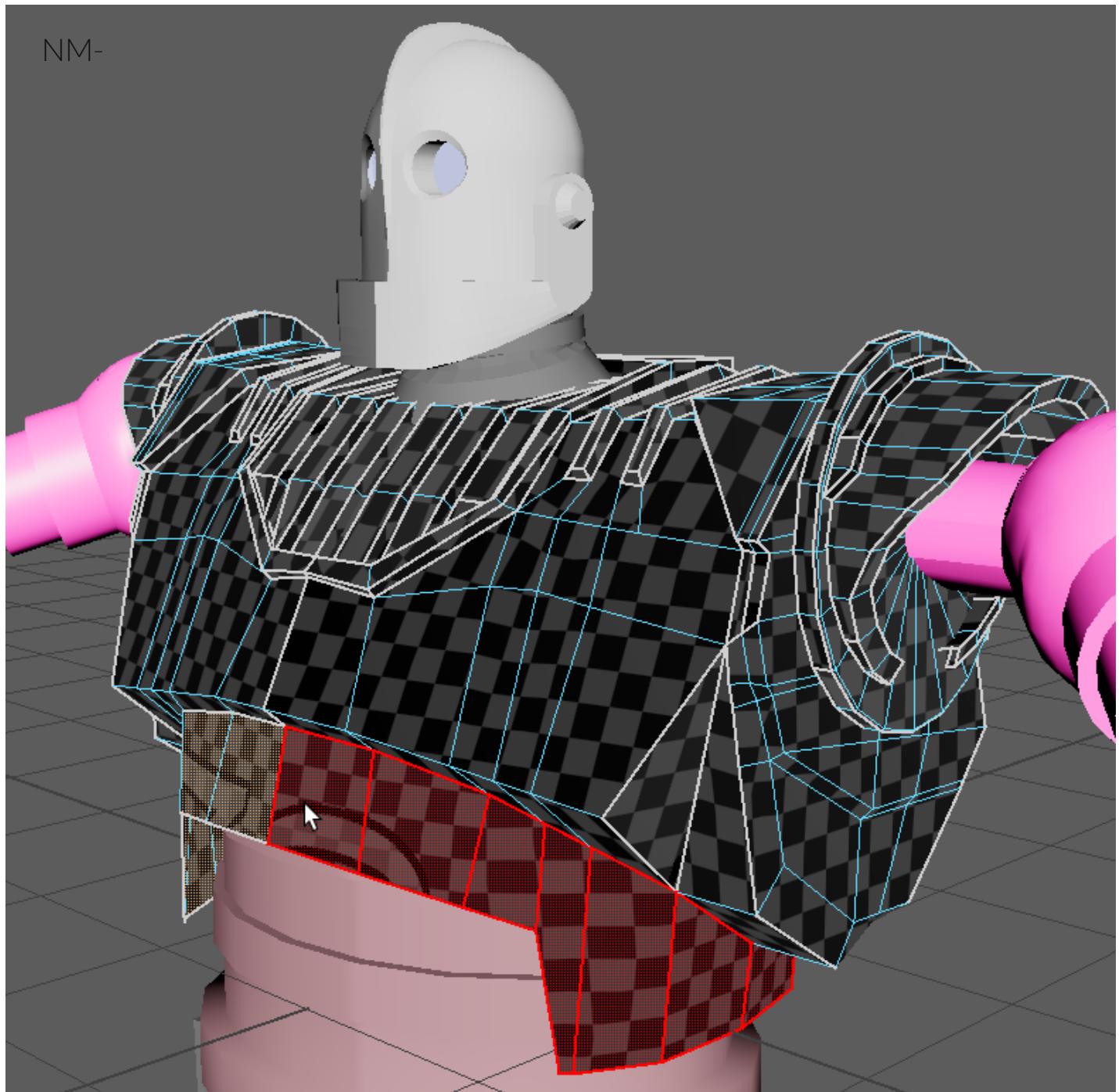


The Front plate for the Iron Giant



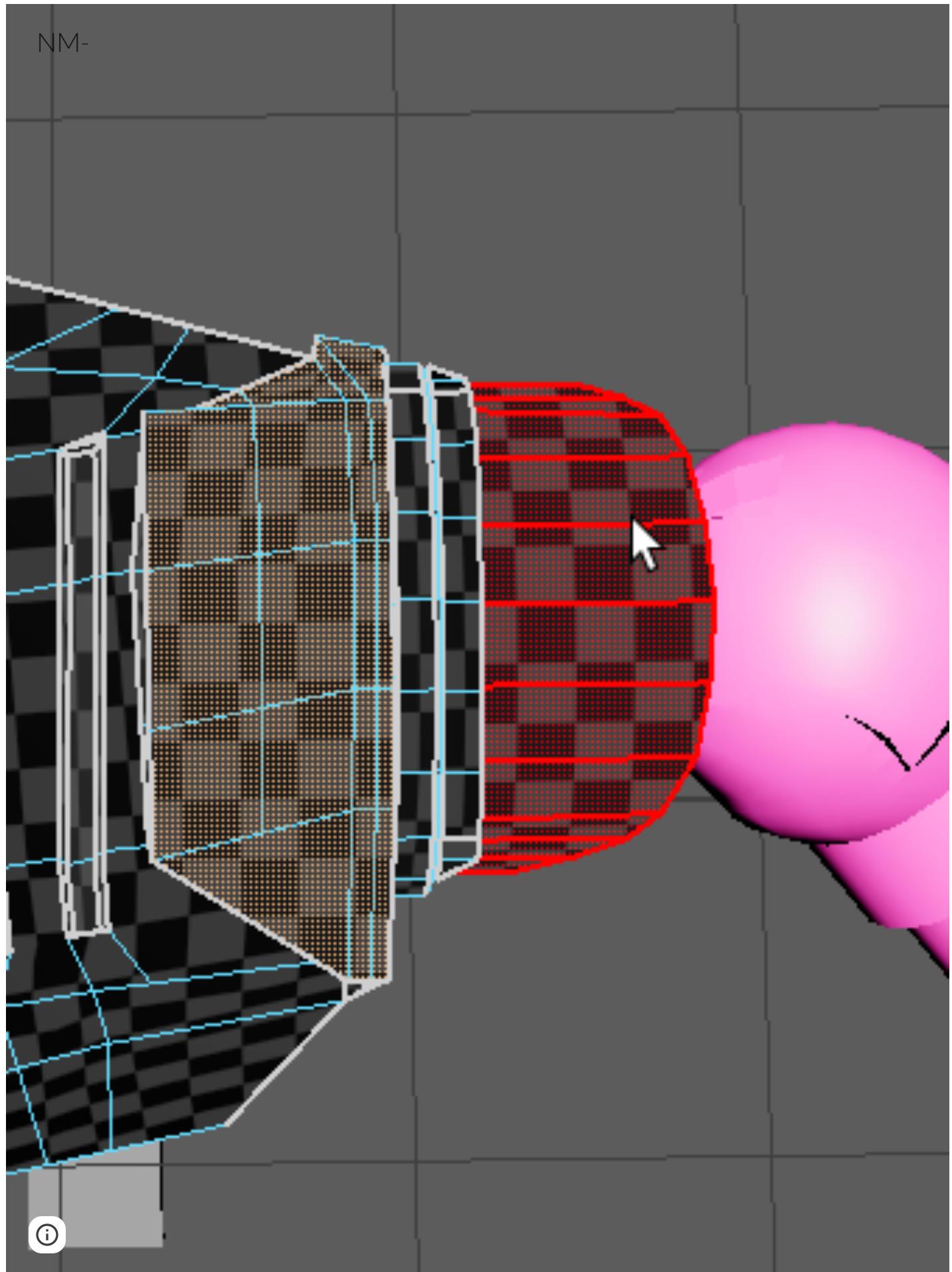
Back armour of the iron Giant



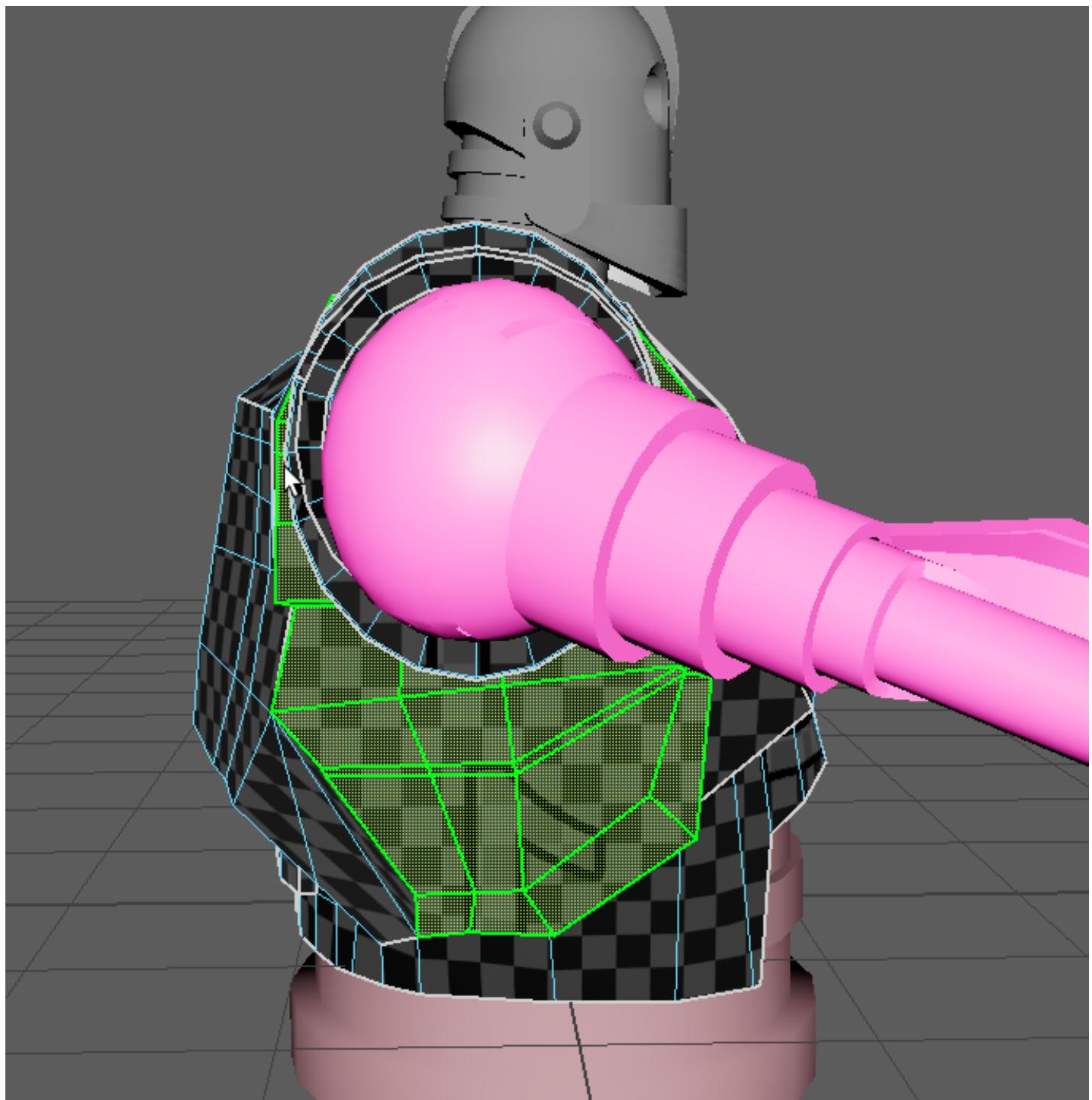


Front cylindrical plate

(i)

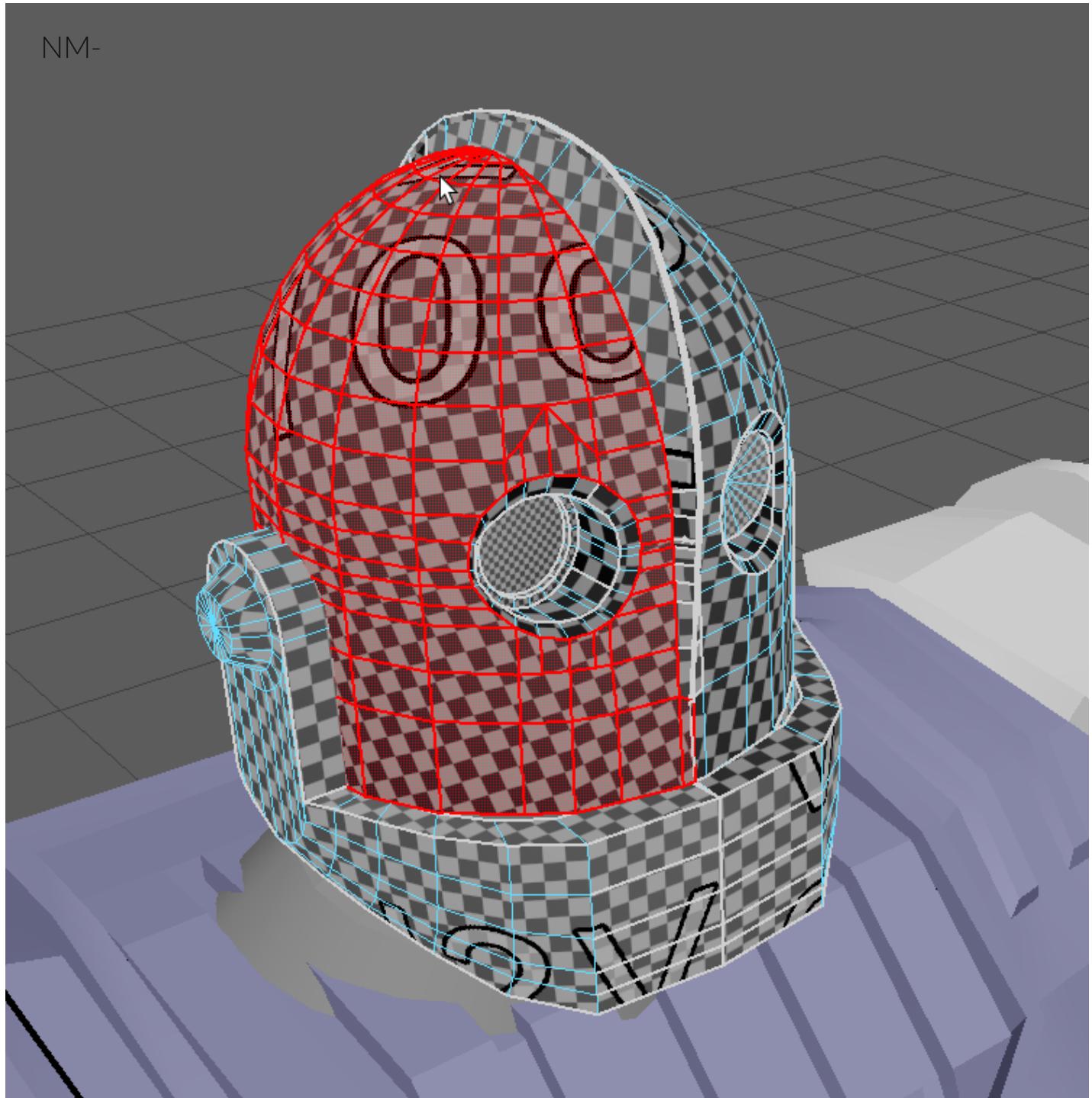


Shoulder guards  
NM

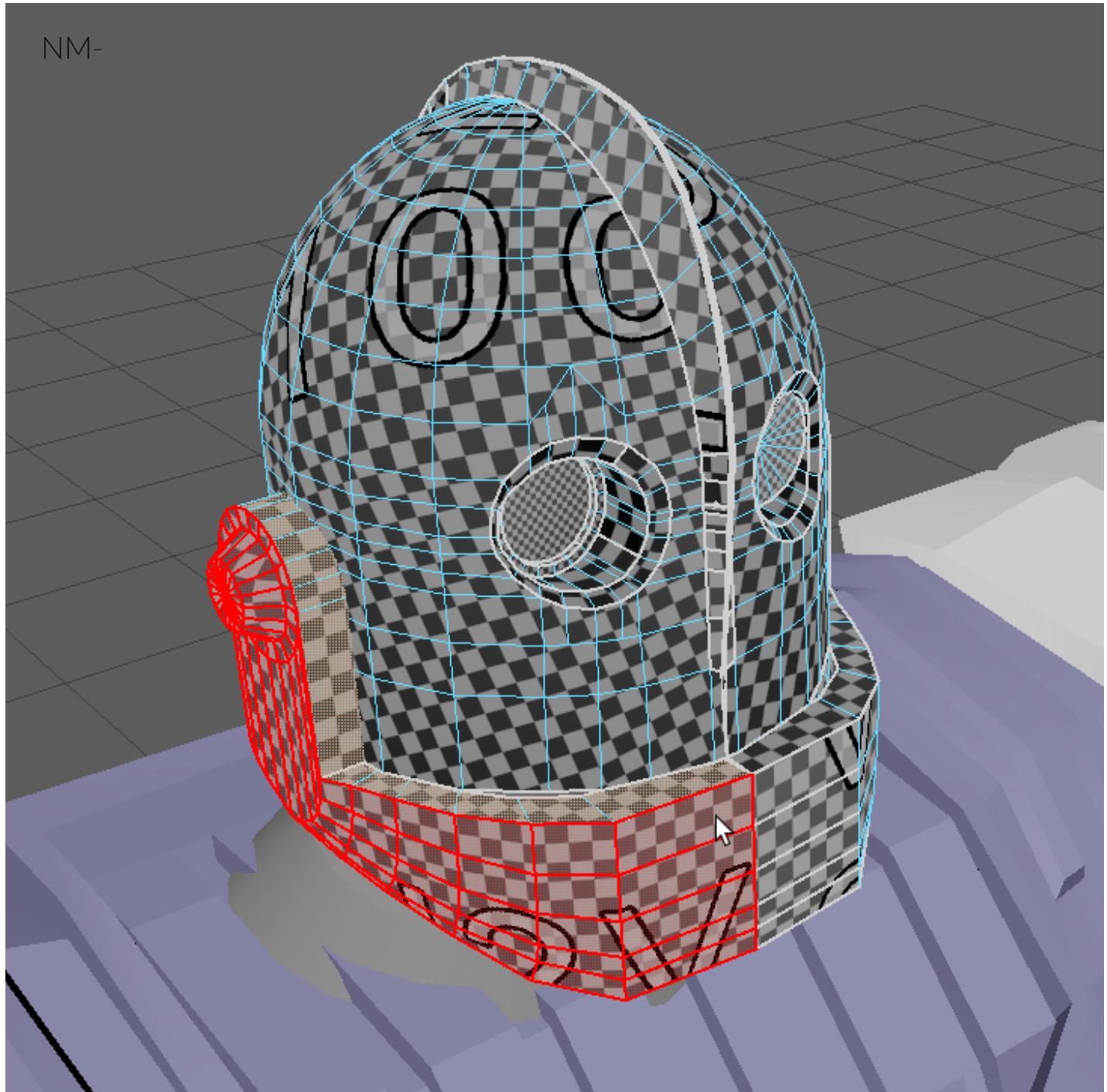


Side armour

①

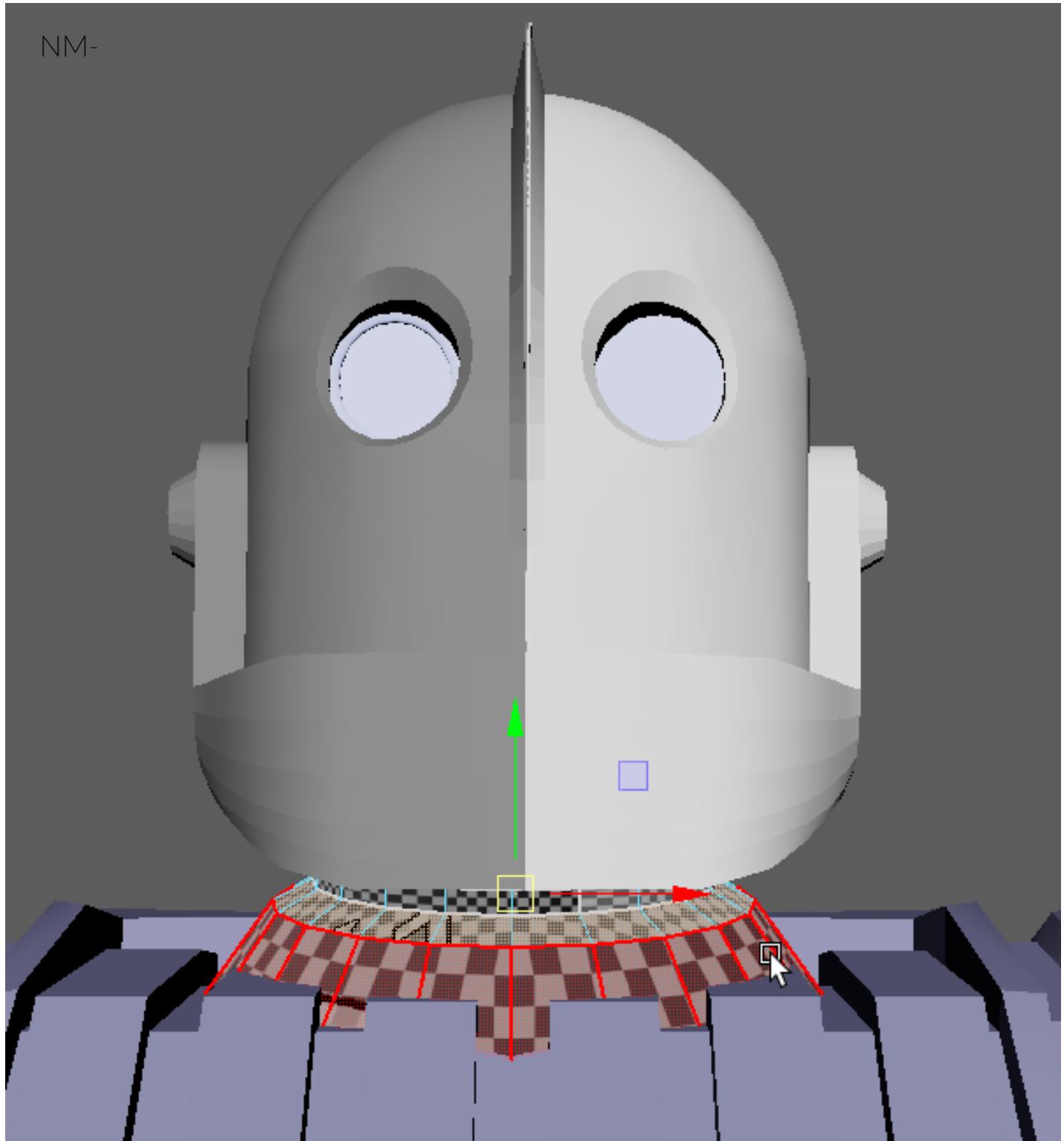


i



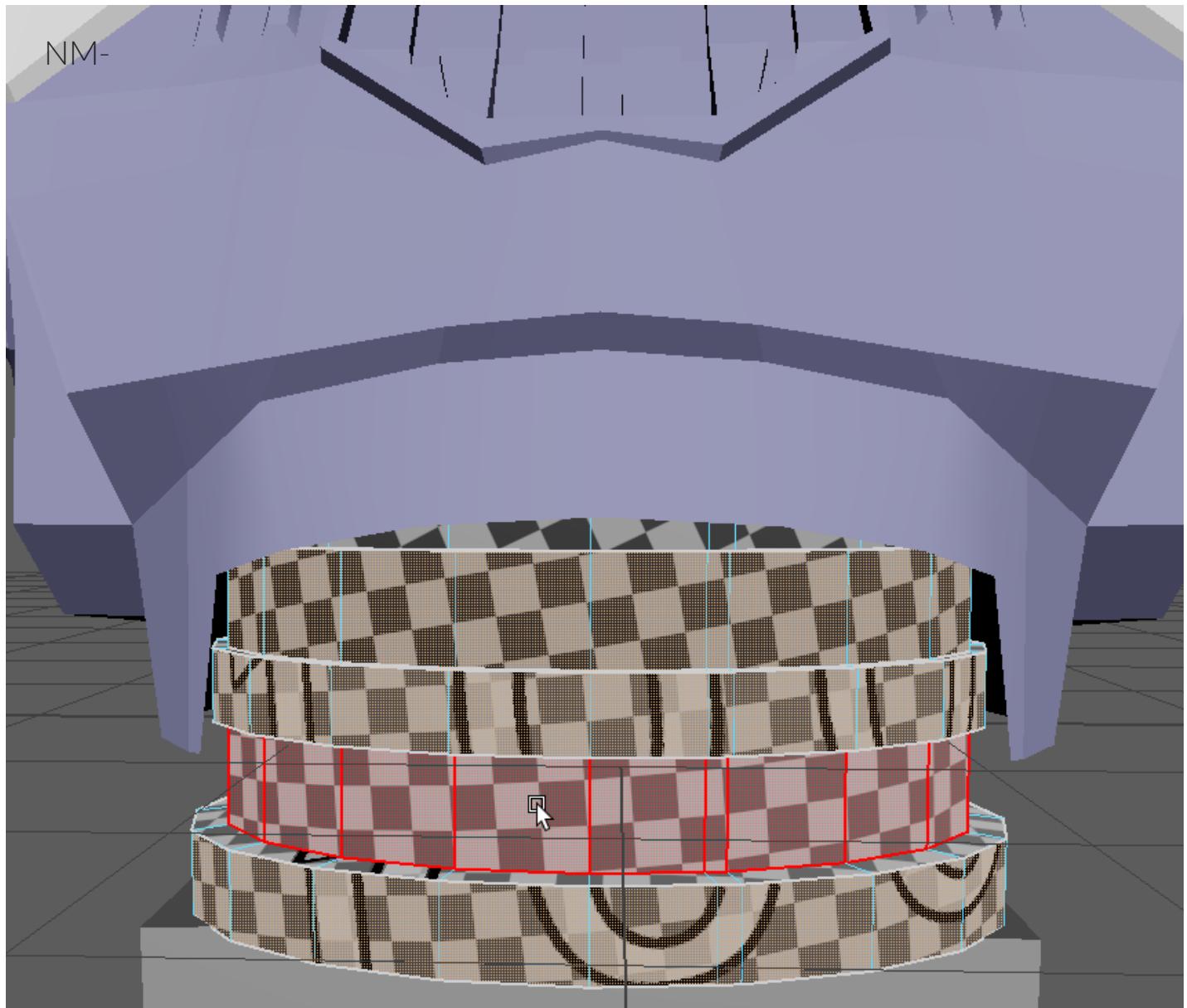
The jaw was separated into strips from the top, front, and bottom





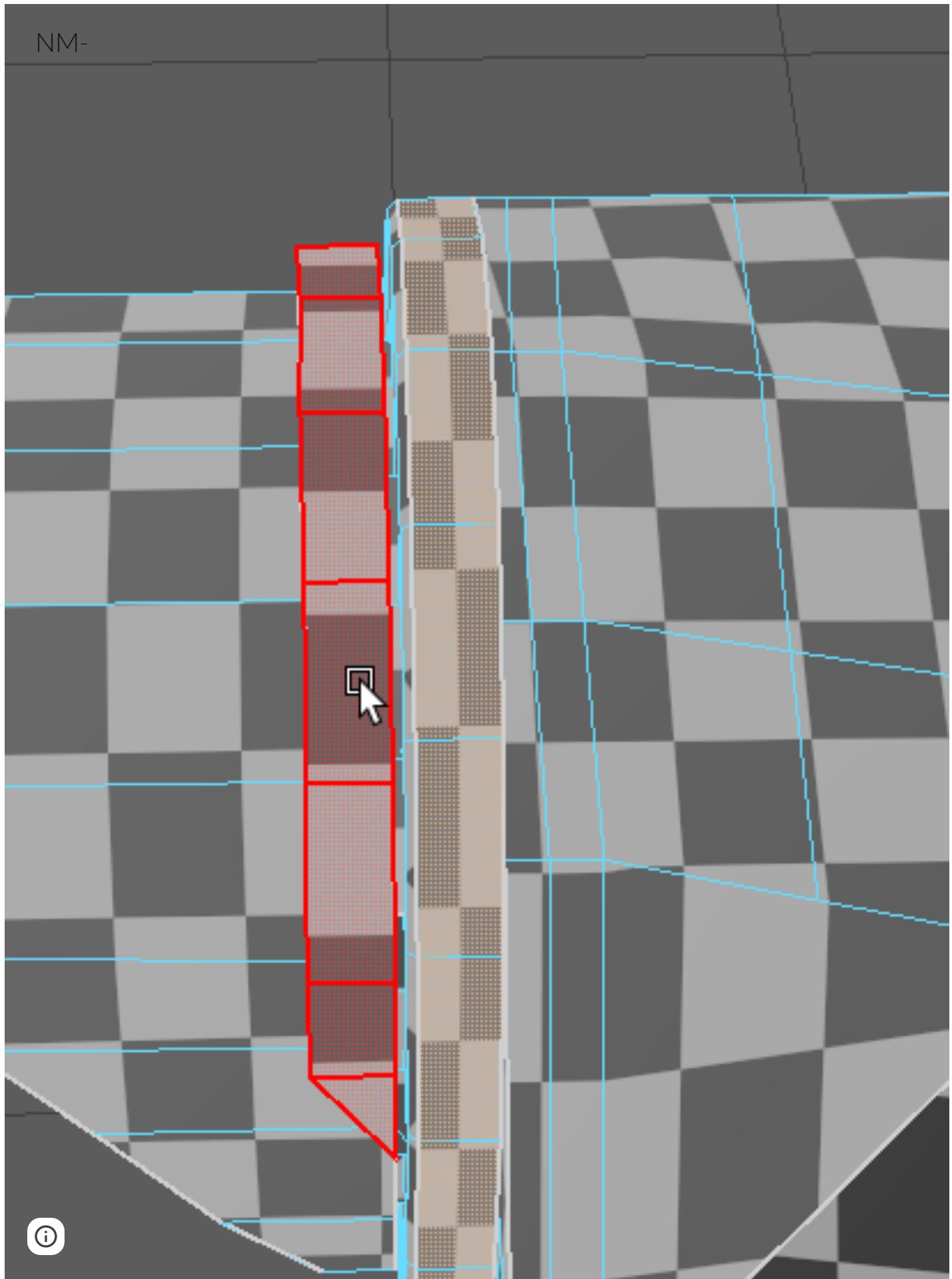
Iron Giant neck separated by cylindrical strips

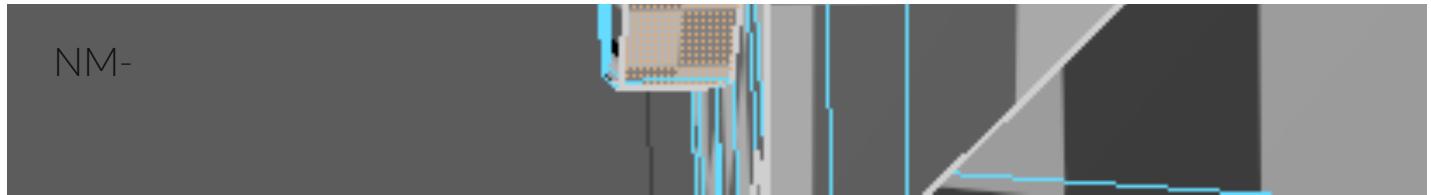
(i)



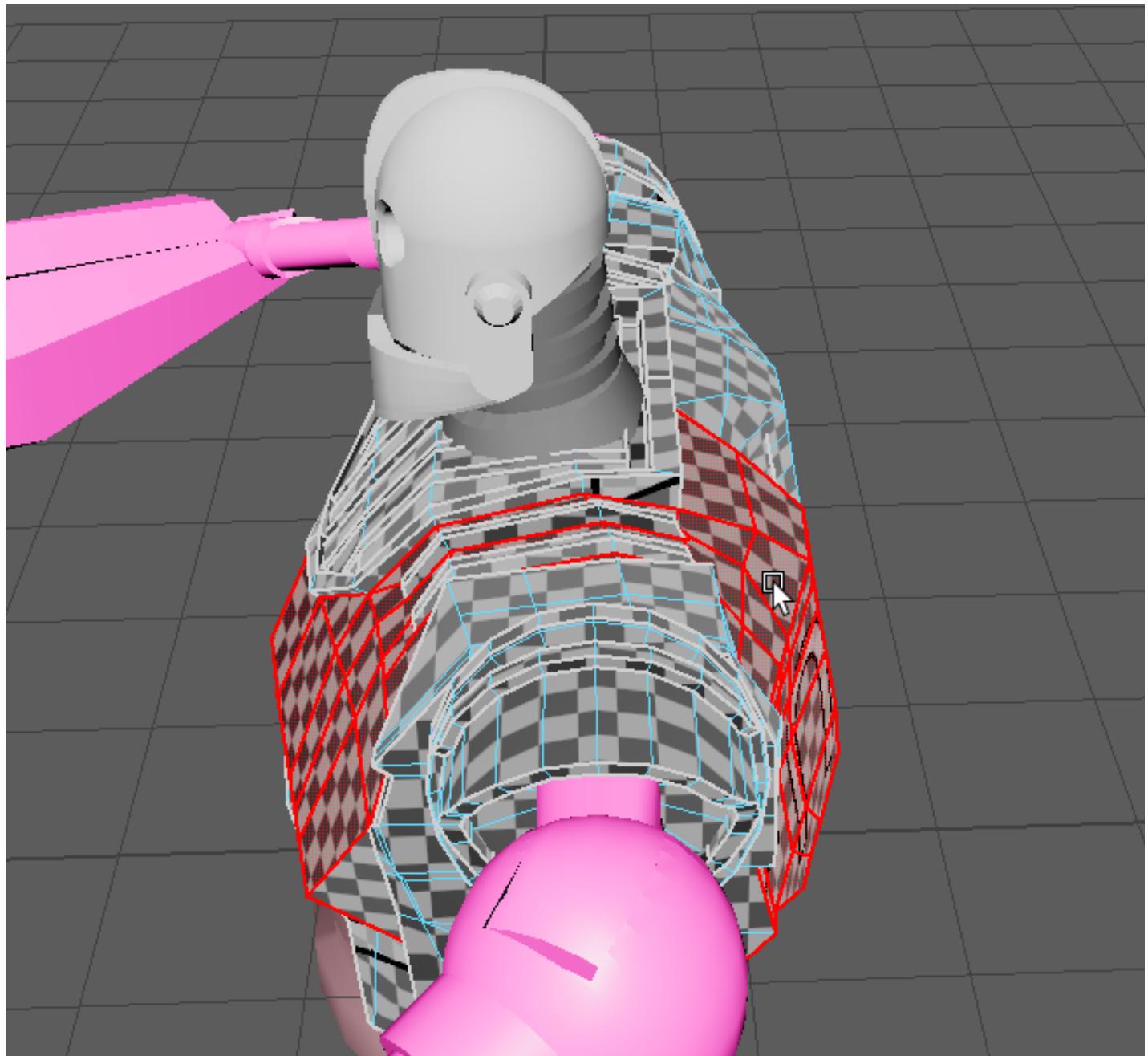
Torso separated into cylindrical strips

(i)



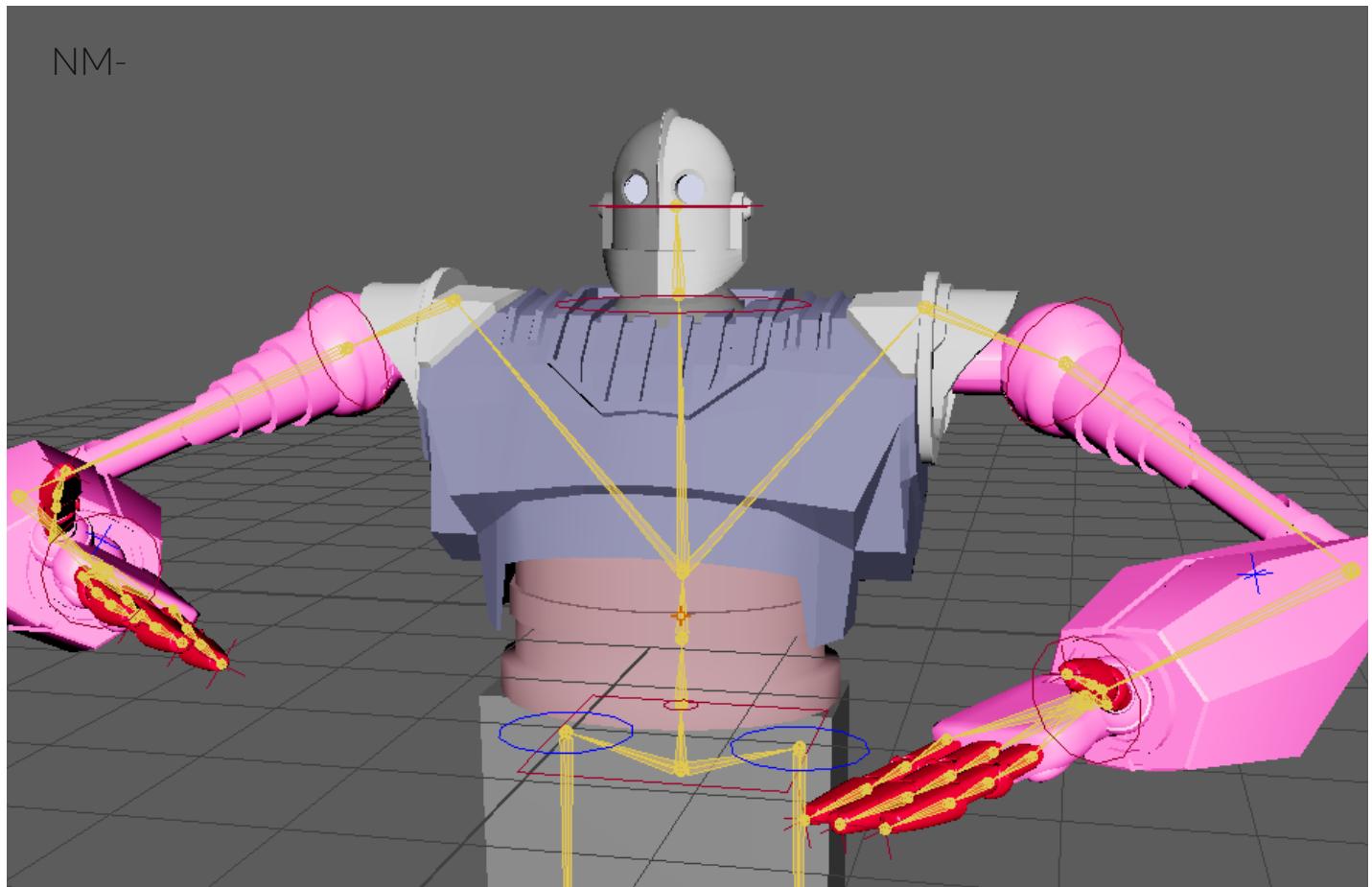


NM-  
Iron Giant shoulder details

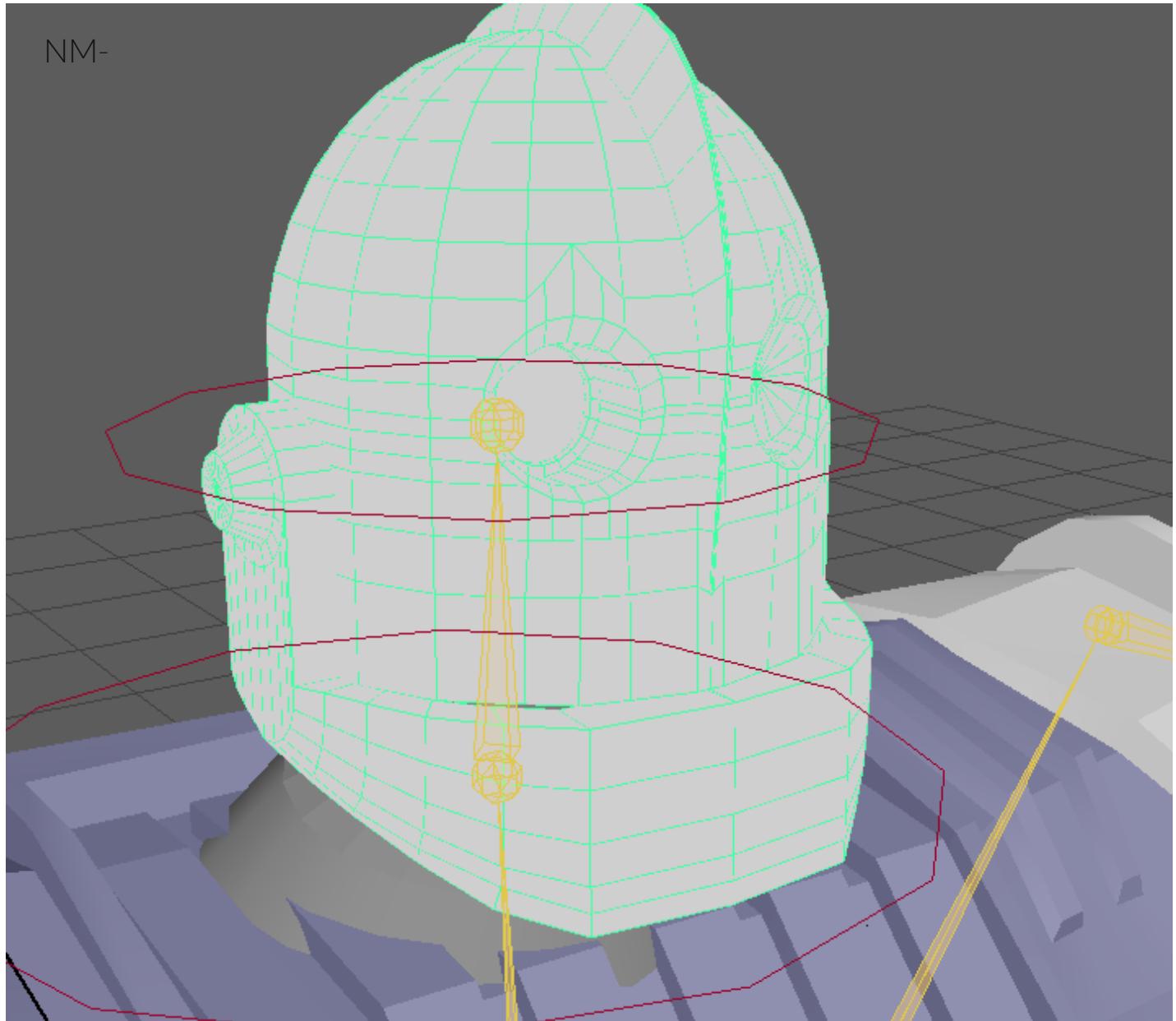


I turned his entire Front and Back armour piece into single cuirass, instead of two pieces. Initially I had it as two separate pieces that would look welded together, however instead his armour is now made from a single sheet metal and folded into shape.



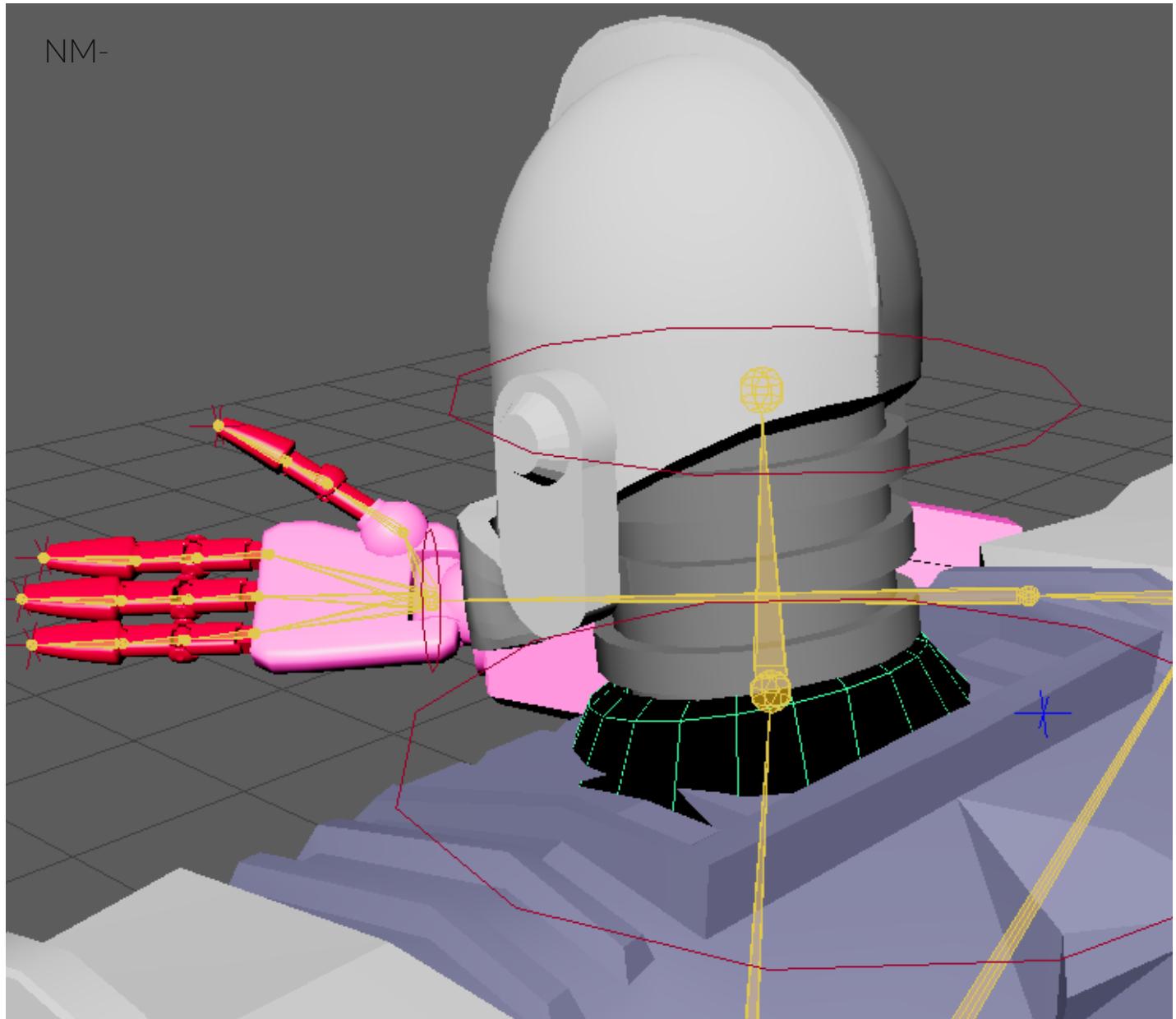


I rig the Iron giant to a humanoid skeleton. I add some temporary legs and set the guide points to create a skeleton based on his joints.



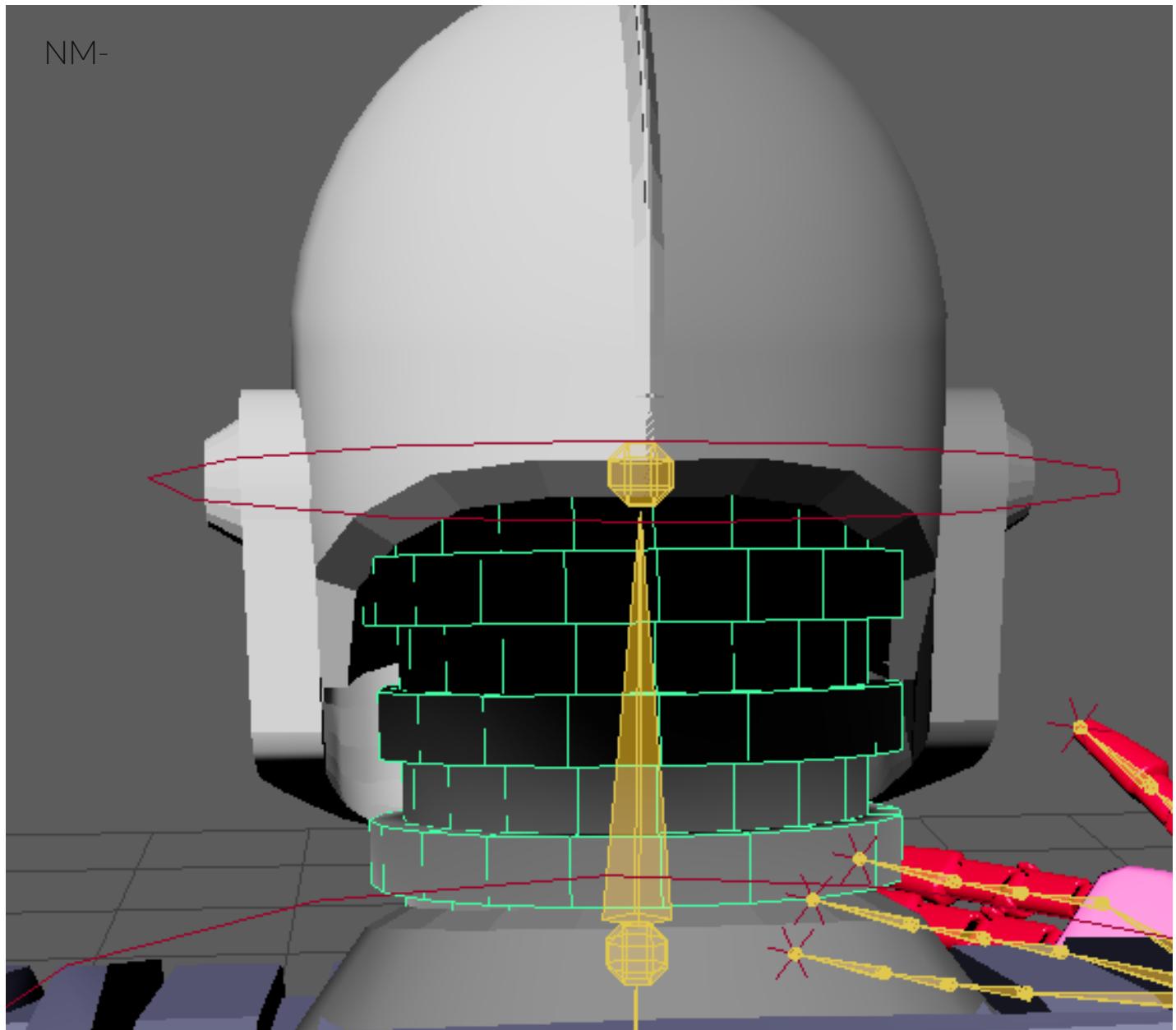
Initially the head deforms upon turning. To make it so the head turns as one object and does not deform, the entire head is flooded with a value of 1 for Influence by the Head. This prevented deformation when turning.

(i)



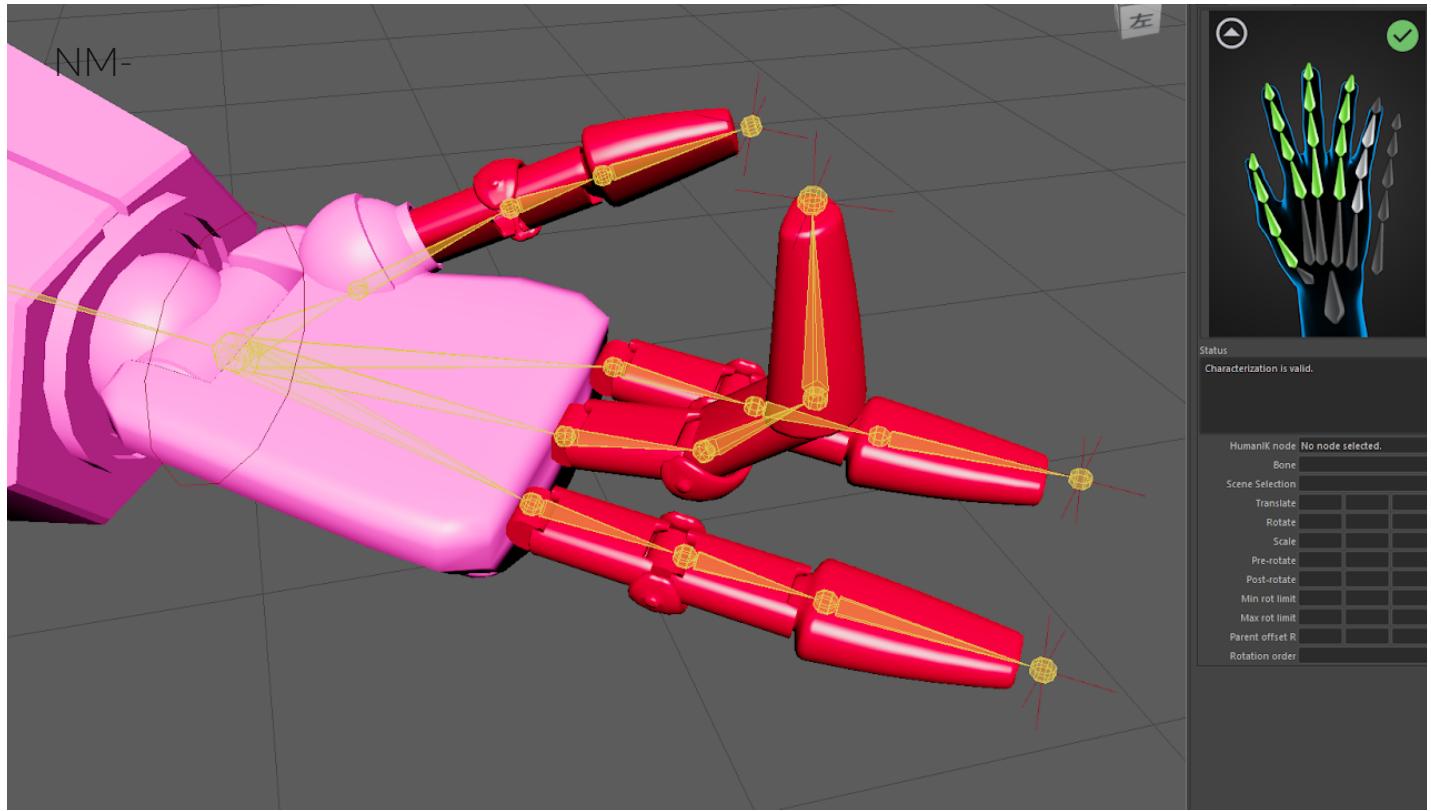
I paint skin weights for smoother movement. E.g For the neck, I set the value to 0 to prevent any movement from the base of the neck when moving the spine.

(i)



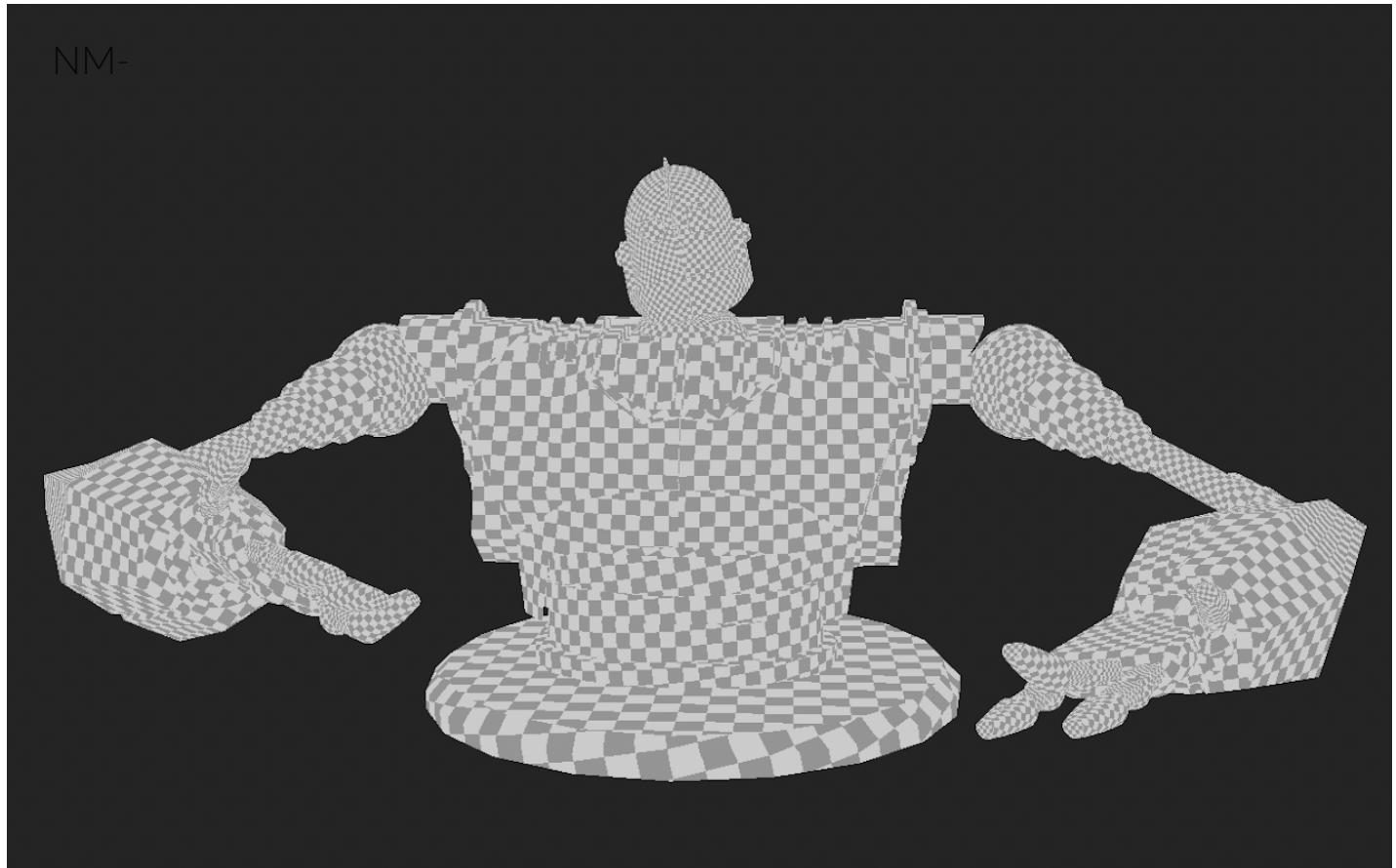
For the neck, only the base of the neck is painted to move with the spine.

(i)



I create joints for the fingers and set them as children to the main rig. I add them in the Human IK and set each parent for each finger object to each finger bone.





I exported to Substance painter.





I added textures and details to the Iron Giant. I added an emissive layer and made his eyes glow red.





Front View





Side View

①



Back View

I experiment with lighting in Substance Painter to achieve the desired feeling.





The Iron Giant fiercely attempting to UV map and paint skin weights

(i)



The Iron Giant after completing his task

①



The Iron Giant falls into a deep slumber

i



I sent the Iron Giant to Substance Stager to do some renders. I add a few spotlights, as if he is an attraction at a museum after becoming a casualty in the great UV mapping and skin weight painting war.



The Iron Giant's reaction to Maya crashing for the hundredth time - "What do you mean Maya has stopped working!?"

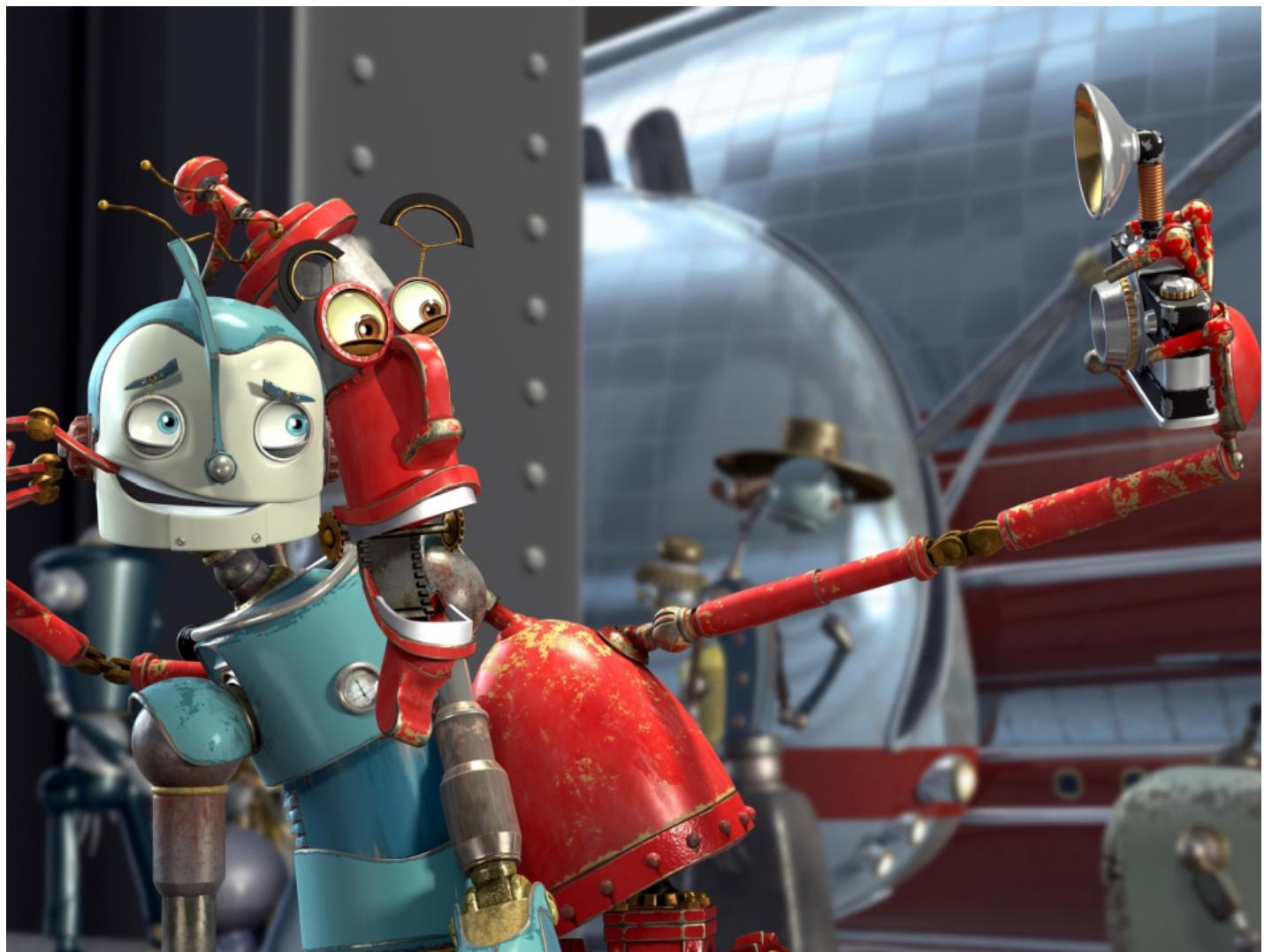


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Once the museum shuts down... A faint red glow illuminates the darkness. The memory of Maya's error screen still forever engraved into his cold, robotic soul... The Iron Giant sits on top of a pedestal that is one of substance stager's default objects.

Reflection:

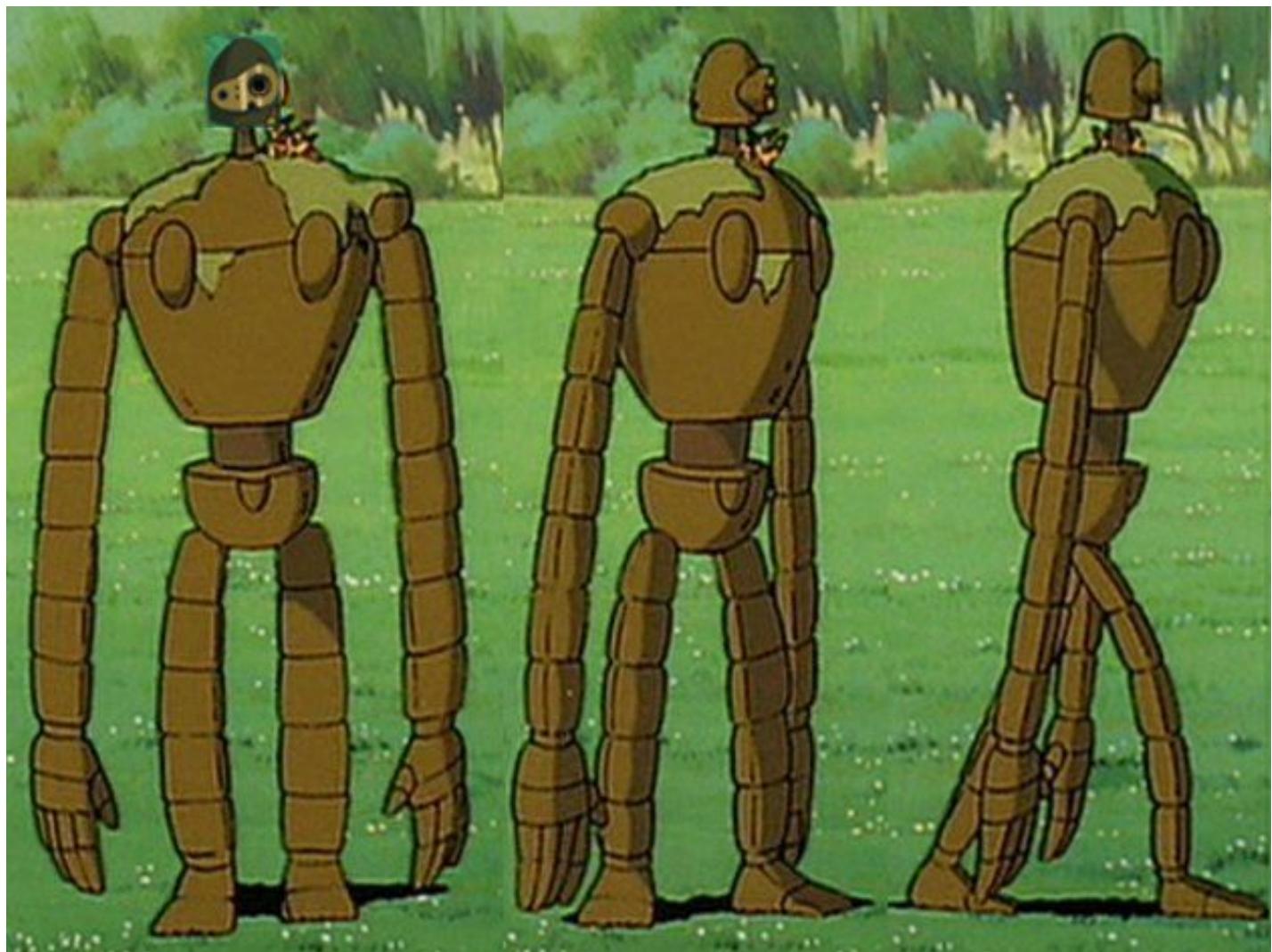
The overall theme for the Iron Giant was similar to the mail box, which was a forgotten and neglected robot. The Iron Giant's shiny metal armour is old and corroded, and has damaged patches of his once bright red paint. His fingers give a contrast to his once bright and friendly red paint, along with his shiny and corrosive resistant fingers.



The red robot from the movie "Robots" is how the Iron Giant's paint would have initially appeared - an uplifting red.



This gives an impression that the Iron Giant is very old and neglected. The work dark red paint almost looks bloody, and is an aggressive colour suitable for a battle worn soldier. I added a clean base to again contrast with the Iron Giant's armour that looks deteriorated over time. The top of the Iron Giant has undisturbed leaves sitting on top, just like the forgotten robot in Laputa (Castle in the Sky - 1986 Japanese animated feature film produced by Studio Ghibli):



The Iron Giant has bullet holes, with his largest hole at the back. The holes show that he is a battle hardened robot. His eyes gleam red with anger, as he isn't finally destroyed by his enemy, but is stabbed in the back by his trusted tool, Maya, which has crashed on him yet again (maybe because he kept complaining about avoidable crashes). Someone has also rudely gratified their initials onto the back of the robot, as if it was just another pile of rubble before it was retrieved to be placed in the museum.

NM-

(i)