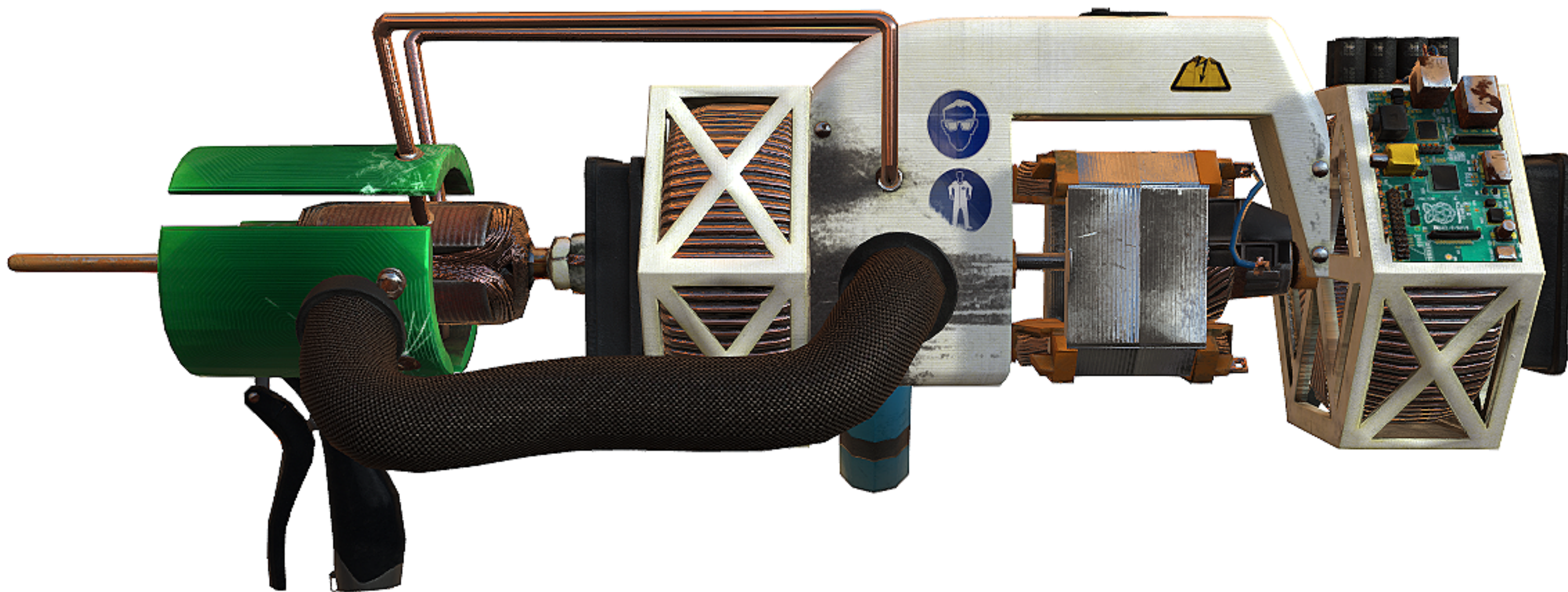# MATTHEW ISAAC ART TEST
FACEPUNCH STUDIOS

THE BRIEF @

We are asking you to design and build 3D art assets for a game.

Pick 2 out of these 3 to build and texture, choose the 2 things that suit your strengths. Tell us why you are choosing what you're choosing - and why you aren't choosing the other.
Additionally, make one LOD version for one of the assets of your choosing.

Environment / Scene
Human / Animal / Creature
Vehicle
Gun

You are to estimate how long the creation of each asset(s) will take - then spend that amount of time to deliver them. Afterwards write a brief post mortem on what went right, what went wrong and what you would improve or do differently.
This task is to show us that you are proficient in planning and creating 3D assets, managing your time effectively, your understanding of topology, uv space, sculpting and texturing ability within your chosen applications; Photoshop, 3ds max/maya and zbrush preferably.

1. Design Phase

Make a document describing your project.
What style are you hoping to achieve?
Nominate how long it will take you.
Describe what challenges you will face in the creation of the assets.
Note down what programmes you will use.

2. 3D art

Spend the pre-allotted amount of time to create your assets.
Prepare your assets as a rendered png, along with separate FBX files with accompanying textures.

3. Post Mortem

Make a document describing how you feel your project went.
Are you happy with where it's at?
Did you change direction? Why?
What would you change if you had more time?

4. Send it to us (jobs@facepunchstudios.com)

Design Document
Zip file
Post Mortem

UNDERSTANDING THE BRIEF @

Sometimes easier said than done, understanding the brief is the most important first step in the development process.

However I also want to use the opportunity to show as much about developing a style and the reasons behind the result as I hopefully show artistic and technical skill.

This is a fantastic opportunity to get really creative in such an open brief. It also has dangers though, so I will have to be professional and dedicated.

My first thoughts upon reading the brief were pretty much "wow this is quite open". Usually in art tests there is instruction to "make this WW2 character" or "design a fantasy sword", however the Facepunch brief simply requests you to create two of the preceeding assets. This is definitely both a blessing and a challenge. A blessing because I can create objects of my own choosing; objects I feel passionate about, objects I can really explore the development process on. However it's a challenge because with a topic so open there are no benchmarks to place yourself against in time or scale, no scope to train yourself to in terms of design or technical aspects and let's not forget; a blank canvas is an artist's nightmare!

I think in reality the brief is pretty smart. After reading this blog post by Garry http://www.facepunchstudios.com/2014/06/28/what-we-look-for/ the philosophy behind the brief is obvious. It is designed to challenge the dedication and ingenuity of the application as much as their technical and artistic abilities. It is a BIG test and any two of the four options quite an undertaking. But as Garry points out: "And there should be a lot of it. If you love doing this – why aren't you doing it right now?" From what I can gather Facepunch is all about employees taking the initiative and working hard in all aspects in a much less structured (corporate?) way than I've been used to at my current studio. More like Valve than EA basically. This test sits you down in a corner and says "ok go have some good ideas and go make it and come back to me when you've got something to show" and that's exactly what I plan on doing.

So what to make? I decided I wanted to achieve a few goals when creating my two pieces:

- Show I understand and can implement a wide range of techniques and skills
- Show I understand maps and materials and material definition
- Show I understand topology and have a decent standard of optimisation and efficiency
- Show I can create a new object in the style or over arching theme of an existing universe
- Show I can create an accurate and realistic portrayal of something

As to why I want to do the last two points, it is because I want to cover as many bases across the two models as I can. I want to demonstrate utility and my ability to work on new and existing projects, and I want to show that I can create accurate representations of real things as well.

I think bearing that in mind, and considering my latest project at work was to create a realistic (on mobile) environment I think the other three are more appealing and suitable.

I would like to create a gun as my first asset as it will enable me to demonstrate techniques such as hard-surface modelling and material definition; and test my skill and invention. I think this would be a good opportunity to create my own "gun" and not just do the same AK47 as everyone else out there.

For my second asset I have decided to make a character. Characters are a lot of work but I can use it to show I understand topology and flow, accurate modelling, modelling for animation as well as texturing and high-poly sculpting. To get the most out of my asset will portray a realistic person or character to demonstrate these things.

THE GUN Reference gathering

I don't think I'm overstating things when I say there are many different types of guns. The question is where to start and what should I aim for. The first thing that sprung to mind was that I didn't just want to make another AK47. In retrospective perhaps an AK47 would be the best gun as it shows I can create content that most people would expect to see. I think though I'd rather create something new that people could get excited about, something that has a back-story just looking at it, something that could seem like a real thing. I also want to demonstrate as many different techniques as I can, from hard-surface modelling to showing multiple material definitions. So what kind of guns are there that could fit that brief?

The Fantasy gun. You can be really inventive whilst making an "accurate" model. Could be a bit cliche and by nature is unrealistic and hard to judge. Also not to everyone's tastes.

The WW2 gun. A staple of video games! The pros of this is everyone is familiar with it and knows what it looks like, the cons are it's a bit overplayed and some people might find it boring.

The Sci-Fi gun. Similar to the fantasy gun but looks more techy and believable. You can be really inventive with it but it still has to read and function well.

A BIG gun like a rocket launcher might be a nice idea. It's different enough to stand out but can be modelled on a realistic or adapted version. It could end up being a bit generic though.

A Small gun. Sounds a bit silly but it could be a good way to demonstrate solid modelling and work-flow without getting too carried away. Might not be enough chance for material definition or scope (excuse pun).

An Historic gun. I quite like the idea of this as it's a bit different to the normal guns you see and you can work some real character and authenticity in to them. They do have the problem of often being a bit simple though.

An AK47. AKA a standard video game gun. Great to demonstrate technical ability and ableness to re-create an accurate weapon. Only downside is everyone and their dog has already made one. I want to be inventive and to stand out.

An existing game gun. Bear with me. I could adapt one of my favourite weapons. This would let me put my own slant on a "real" weapon yet have fun with it too. Potential downsides are it could lose authenticity and might not be different enough from the original.

THE GUN Coming up with an idea

So I've explored a few different ideas for a gun and have already formed some opinions based on this. Going back to what I said earlier I want to create something that I can invent or adapt, something that demonstrates a set of core skills and something that is fun and interesting. I have decided to go for reinventing an existing video game gun and the sci-fi otions. Why? Well I want to demonstrate that I can take an idea and make it my own. I want to reinvent it so it could work in a new or modern title and work out a back-story to it. I want to take something that people are familiar with and change that perspective. Why sci-fi? This is because I want the asset to be a demonstration of sub-d modelling and material definition and I think I can get some really interesting shapes and materials from a gun that is both a little bit inventive and fantastical but also looks real enough that it might be a real thing one day.

THE GUN   Coming up with an idea

I went and though about this for a while and tried to think what could fit that plan. Then I thought about my favourite gun in my favourite ever game, the Tau Cannon in Half Life 1. A gun that most gamers know by sight (or sound..) is iconic yet hasn't been done to death and could let me create a really interesting version of it. It looks firmly grounded in reality despite its crazy design and I should be able to have my own take on most aspects of it. Unsurprisingly I love this gun and will have a lot of fun making it. I probably sunk more time in to this gun than any other video game weapon, terrorising the HL1DM servers (or trying to). Hopefully I can do it justice.

THE GUN   Planning and Estimates

So that's the style I want to achieve. There are several challenges that face me in creating this asset. The first is coming up with a decent concept. It has to be believable and authentic yet fun. I need to then model some quite difficult shapes with Sub-D modelling and then bake out those difficult shapes on to a low-poly. Perhaps the hardest challenge is bringing this model in to a program like the new Quixel Suite to texture up to Physicalled Base Rendering quality to really show off the materials. I've never done this before so I need to factor learning the software in to the development time. It's a risk but I think it's worth it to show I have the capacity to learn new software packages to a deadline and still produce a quality asset.
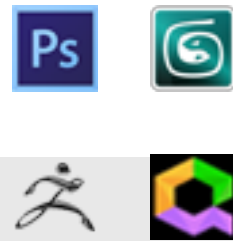
I think this asset will take about two days (evenings) for the conceptual phase, four to create the high poly and one for the low poly and unwrap. I then think texturing the gun as well as learning the software will take about 3 days. All in all around 10 days (evenings and weekend). In a 9-5 job this would be less, but I'm already doing that!

Concepting: 2 days
High Poly: 4 days
Low Poly and Unwrapping: 1 day
Texturing (and learning software): 3 days

Total: 10 days.

The software I will need to use to create this asset are Photoshop, 3DS Max, Zbrush and the Quixel Suite. The Quixel Suite is for the fast creation of PBR materials as well as being a subsitute for an engine. This is to show that I can get the mesh game-ready.

THE GUN Developing an idea

After deciding to re-create the Tau Cannon from Half Life 1, I had to go back and look at the model.

The original Tau Cannon is aquired from the scene of an accident in a Lab that has been set up to create the weapon. It's clearly un-finished and a bit unpredictable, it kills the scientists just before you find it!

Looking at the gun, it looks like it's been made in a lab. It has exposed copper parts, circuitboards and metal coils. It looks like it fires some kind of electric charge.

Here we can see different versions of the weapon, ranging from the original HL1 through to the fan-made Black Mesa Source. It's interesting to see how faithful they have stayed to the original design, although I guess it is unsurprising considering they are doing a literal adaption.

It does should however that the model can be updated to a modern standard and look authentic enough to work. I like the im-provements to the shape they've made and their interpretation of elements such as the black insulated pipe leading to the front of the gun.

From this screenshot it looks like there is no stock as well which leads to an interest-ing perspective. The gun actually feels better without it and it's something I'll need to explore.

From a side perspective we can see that it is laid out like a rifle, with the traditional stock and has some kind of barrel but that is pretty much where the resemblence stops. It hs no ammo clip except for the spinning device in the middle and it looks more like a lab scrap invention than a finished weapon. I love the work-in-progress of it. You could find it any-where and guess to its origins and properties.

THE GUN Looking at other versions
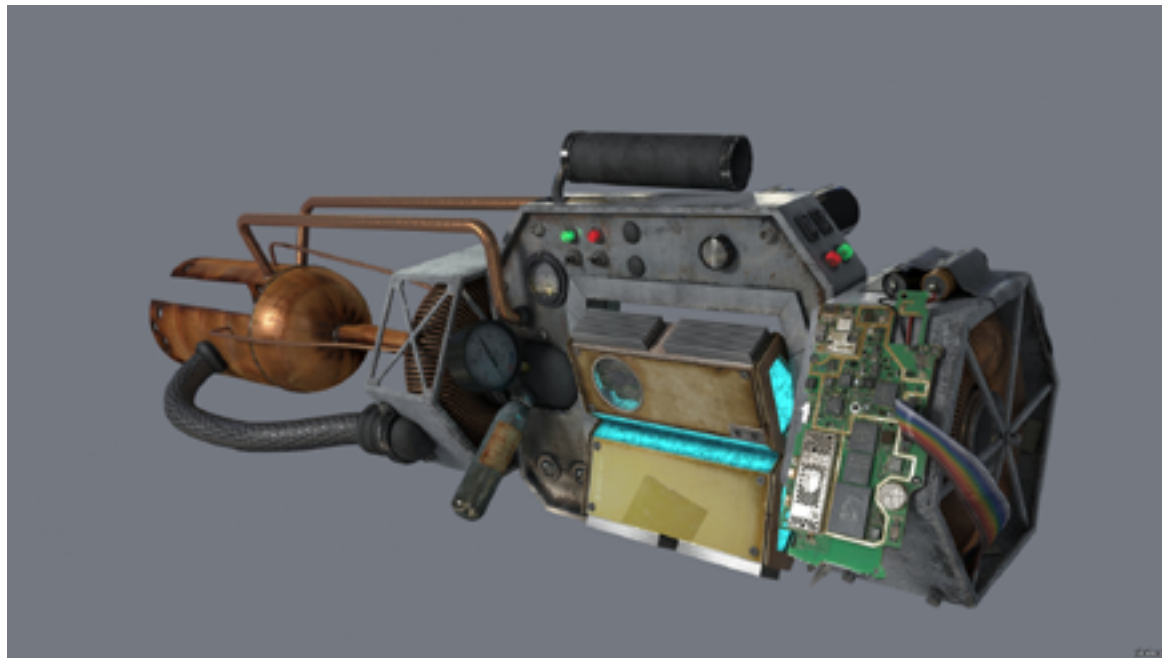
I managed to find two other versions of the Tau Cannon other than the Black Mesa Source fan-made gun. First is this Russian version (http://pikabu.ru/tag/tau%20cannon/new) that has an interesting take. The artist has made it actually look a bit Russian with the dark grey metal and rough feel to it. It also looks used which is nice. I think the colours seem a bit off, it's a nice idea to make it something other than green but it conflicts with the glowing blue cells. Also what are those cells? I never knew. A nice idea although it possibly feels slightly more junk-yard than lab.

I think that my gun should retain it's "lab-made" feel to it, but get rid of the stock and unify the mesh a little better. I like the idea of changing the materials quite a bit and need to develop this idea. I want it to still seem unfinished, but the battle-worn look works as well. Perhaps a mix of the two?
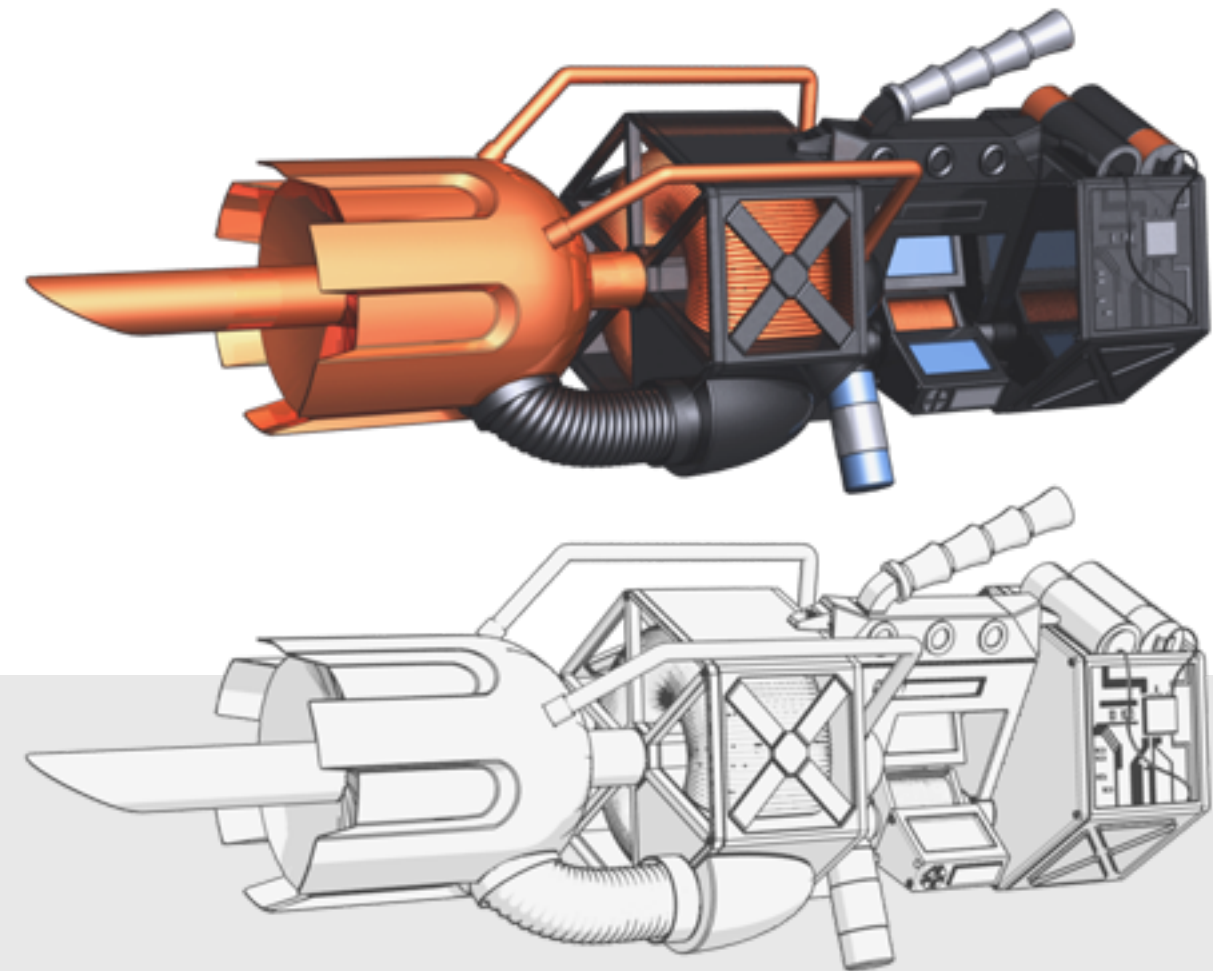
I really liked this cocnept (http://www.deviantart.com/morelikethis/294610516/digitalart/3d/objects?offset=198&view_mode=2) because it takes the original gun and modernises it. I guess it finishes it too as this looks like a production version. I like that they have removed the stock, it makes for a much more cohesive model. I'm not too keen on the handle though and the overall chunkiness of it, it feels a bit "micro machines". I think there's quite a lot to learn from these two versions as well as the original.

THE GUN Concepting

Firstly I need to work out what my gun is going to do that is new.

I have decided to go a more "pc equipment" route with the Tau Cannon as it fits the lab theme really well and could be made of stuff lying around.

I really want to keep the core elements to the gun like the copper coils and wiring, the spinning ammo parts and the general look and feel.

I though about adding extra "pc" stuff like some cooling fans by the wires to suggest someone has had to consciously think about putting it together out of spare parts. I have replaced the batteries with capacitors as it feels a bit more authentic to me and made the circuit board in to a Raspberry Pi for a bit of fun and adding to the "mod" feel.

I have though long and hard about the main body of the Tau Cannon and have decided that if I were to want to make a quick prototype in a lab I'd probably want to 3d Print it. It makes more sense than some bespoke moulded piece of metal. If I can make the housing of the gun out of 3D printed plastic it could really bring something new to the table and make it feel more authentic.

I was looking for spinning ammo replacements as I have always disliked the blue glowey chambers of .. something. I guess it's plasma but it makes the weapon a bit fantastical. After subbing in the capacitors I stumbled across a device known as a commutator which is used to temporarily reverse the flow of electricity. It sounds and looks perfect and you can almost imagine it working. The coiled copper wires should look really cool too!

I need to block it out and play around with shapes.
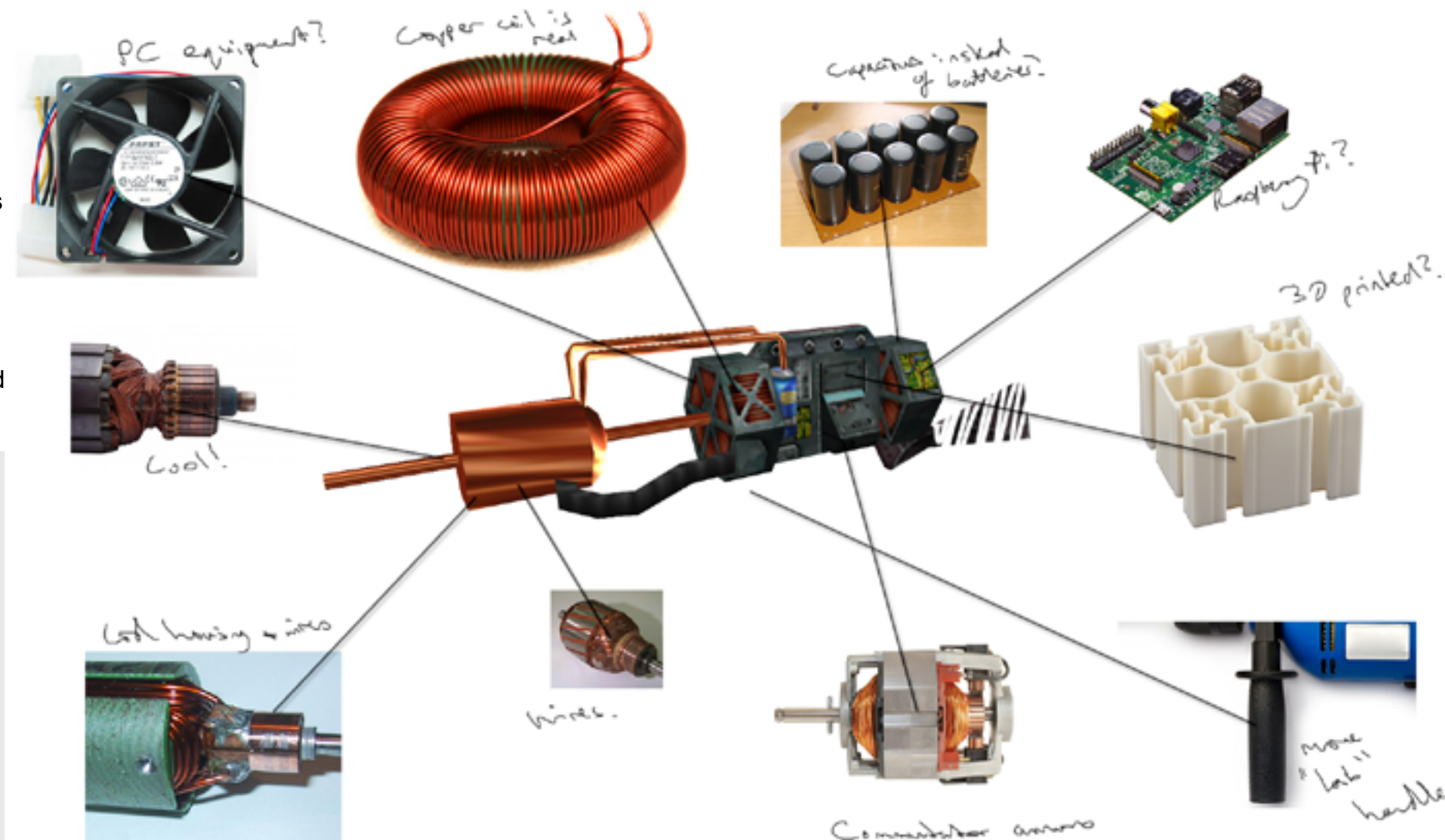
THE GUN Concepting materials

I decided first to do a break-down of the original gun (minus the stock) and block it out in to possible materials types. I think eventually I'll end up with more but this could give a nice angle on things.


White plastic

Circuitboard

Copper metal

Black rubber/ plastic

Cannister metal

Steel metal
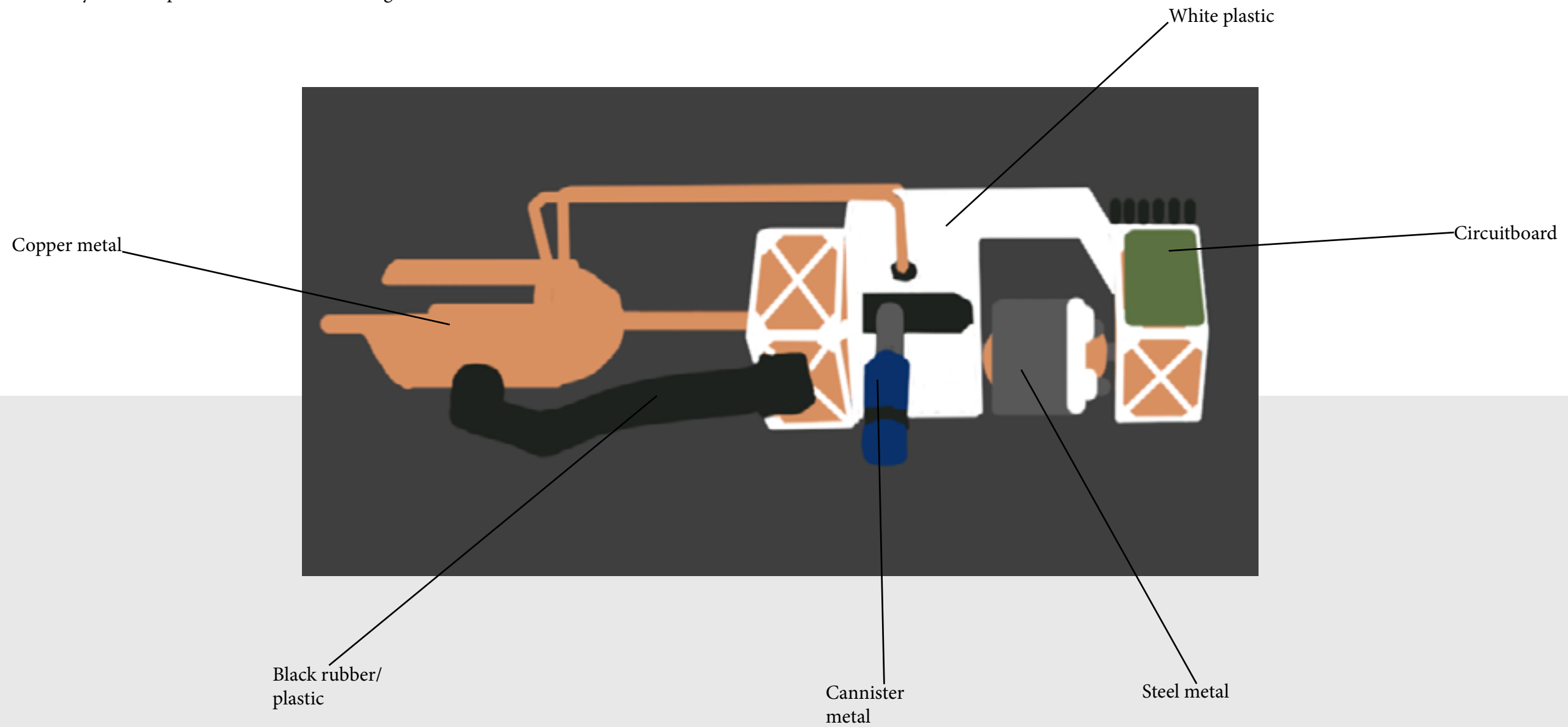
THE GUN   Concepting and blocking

I decided to start painting out my own version of the Tau Cannon using the reference I had gathered and ideas I'd formed. I like the idea of using that green housing instead of copper as it makes it feel a bit more lab-parts-y. I quickly discovered however when placing the capacitors that as I was basically making this gun out of existing real parts it would be a much better use of my time white-boxing it in 3d and working out how it should look there.
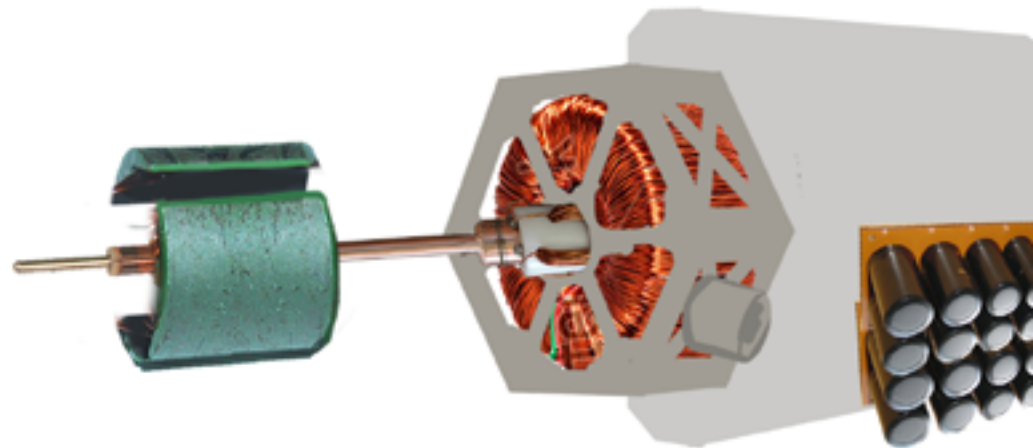
Starting out in 3d I removed the stock and blocked out the major components. I tried to block them out in to colour-groups so I could duplicate elements in a modular fashion. I felt that keeping the two coil blocks worked well and the capacitors look way better in the place of the old batteries. I tried two gas cannisters, one either side of the body, for balance.
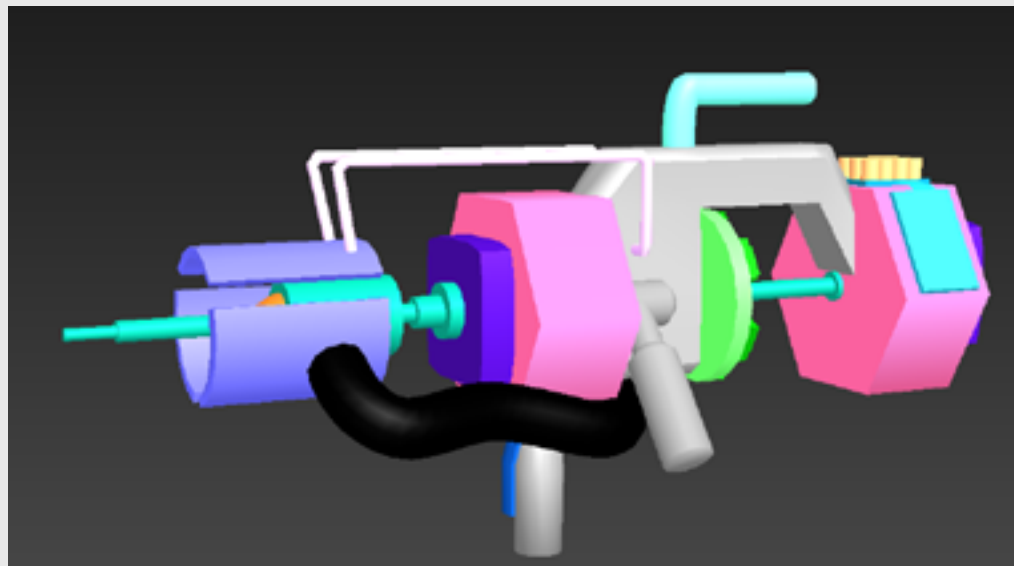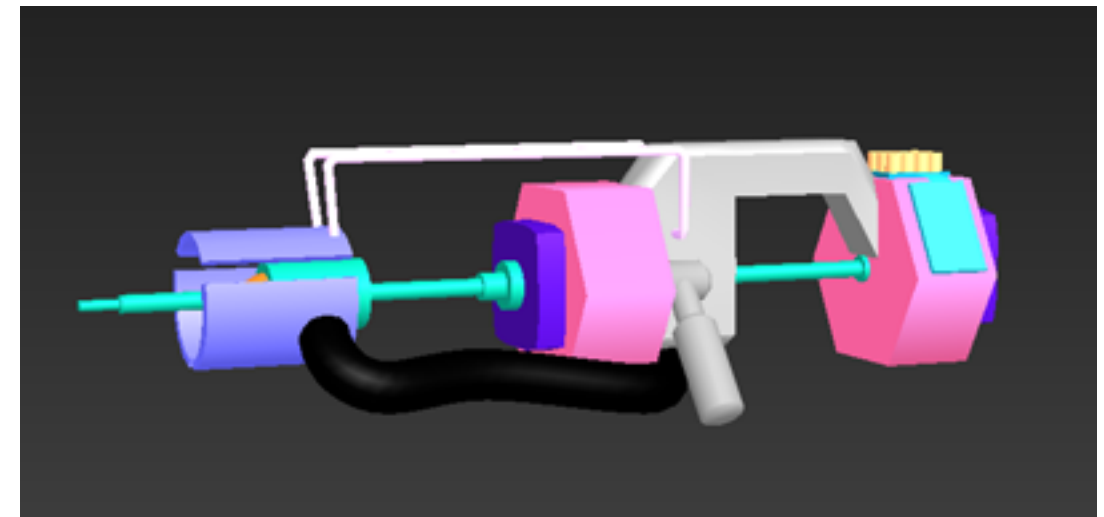

I quickly realised that removing the stock unbalanced the gun. It felt stretched-out and awkward. I didn't want to lose any components though so I shortened the length of the barrel and exagerated the size of some of the elements. This feels a lot more hand held, almost more of a shotgun than a rifle. I also added a handle at the bottom with simple trigger and have started on the ammo.

Finally I felt that the ammo container wasn't working so went with the commutator model. This looks great when it spins! I also removed one of the gas cannisters to give the weapon visual balance with the black pipe on the other side. Finally I removed the handle and shifted the trigger-handle up to make it feel more rifle-y again.
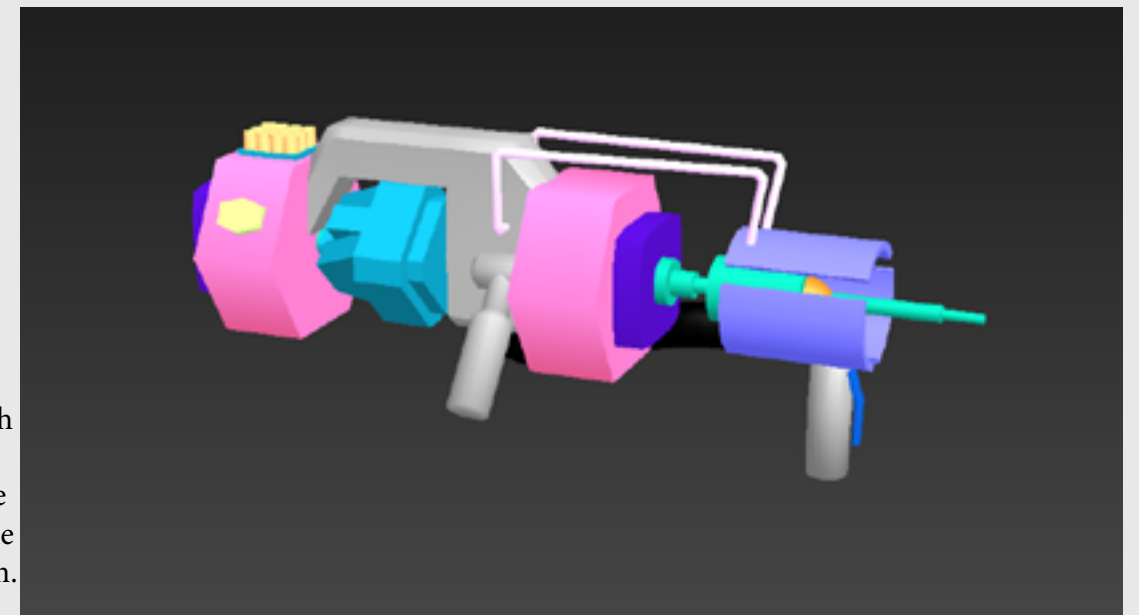
THE GUN High Poly Modelling

With my blocked-out model in place it's time to create the high-poly version. Thankfully as this gun really is made out of components I can model each relatively seperately and combine them all at the end. It works for a nice modular workflow and uncomplicates development. I decided to start first with the commutator as it has several key aspects: it has some tricky shapes to Sub-D model, I have to work out how to model the coiled copper wire, it has a lot of symmetry and it will set the overall tone of the model.
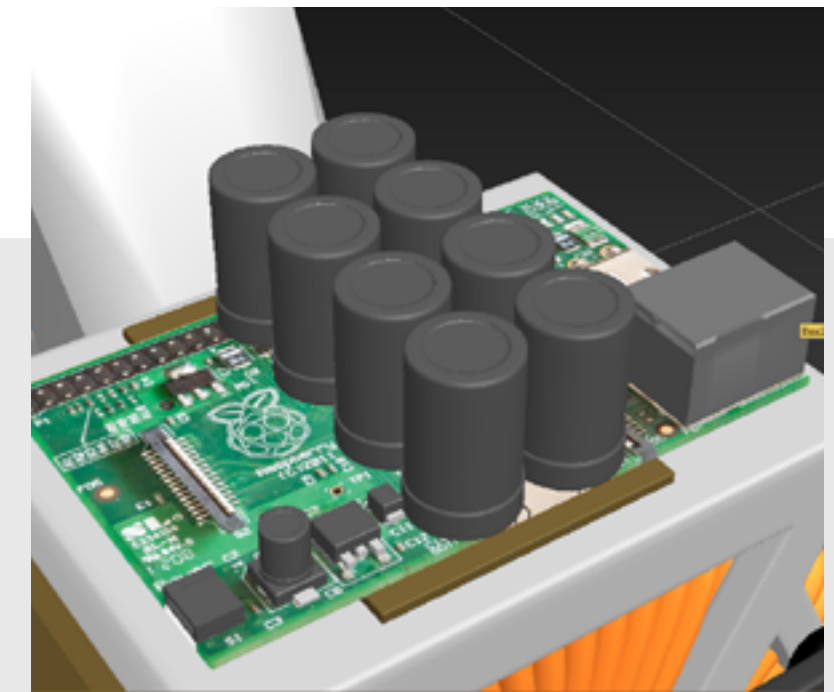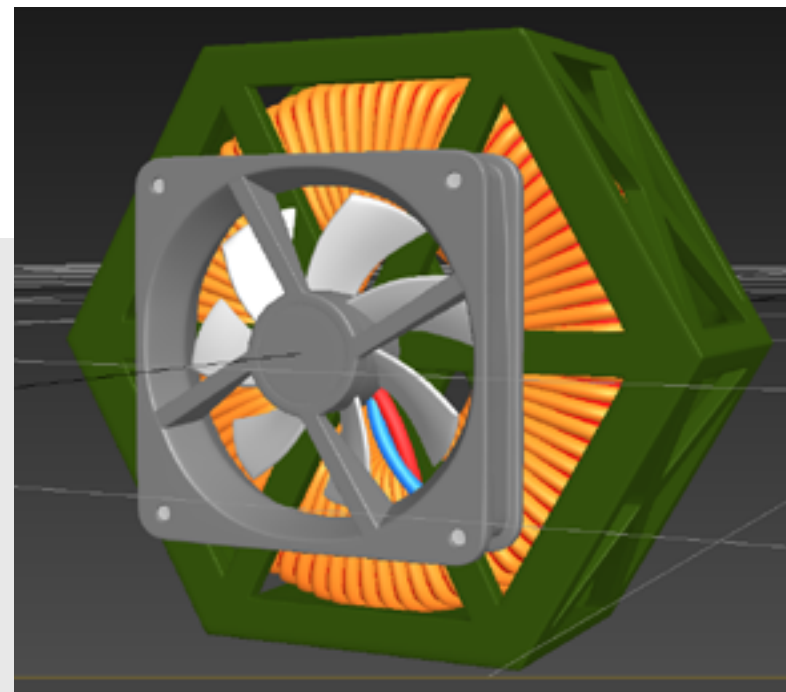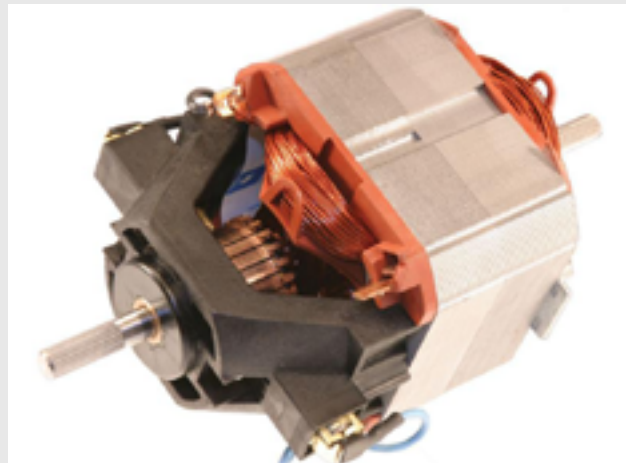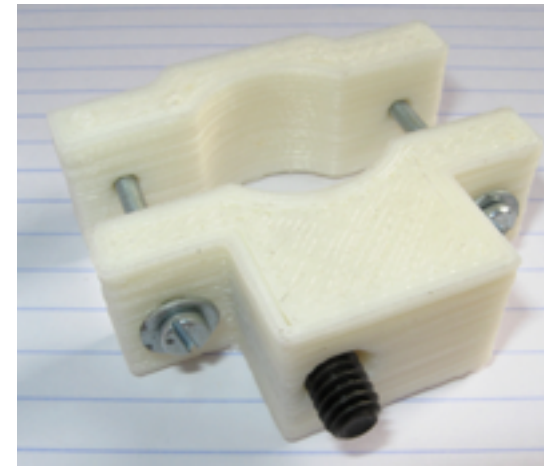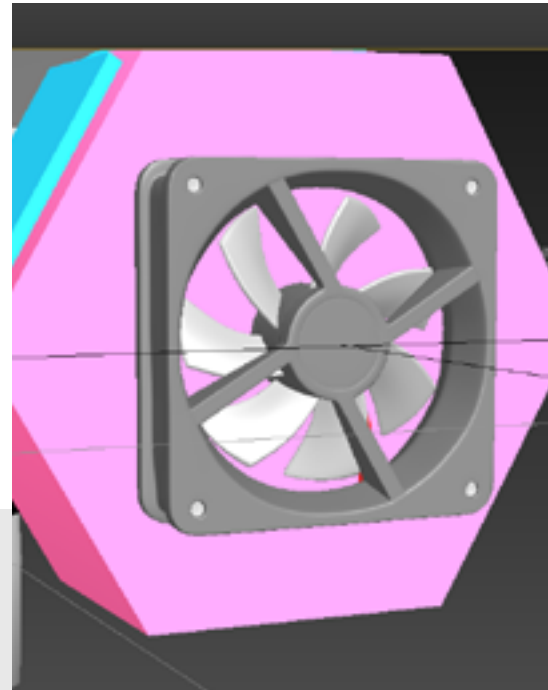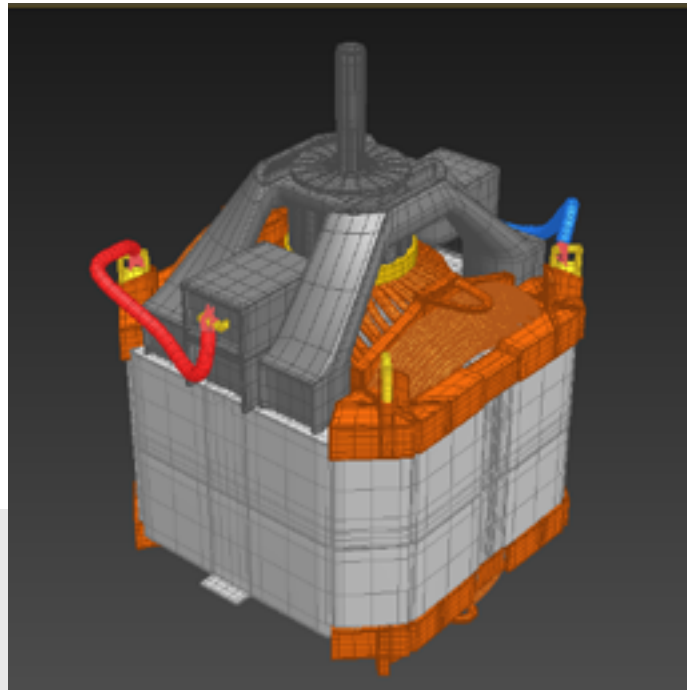
To model the copper wires I created splies that coiled around, then extruded them to shapes. After that it was just a simple job of selecting a ring of edges around them and twisting! After the commutator was finished I started on the fan, paying close attention to photo ref, and then the copper coil. I wanted to make the housing really blocky and solid as if it was 3D Printed. There are no seams or weld marks because it has been printed as one bespoke object.

THE GUN — High Poly Modelling

Next up was the handle. The design was quite tricky as I wanted something functional and recognisable yet nothing to techy and militaristic. I found this hoselock handle to be really suitable as you can imagine something like it lying around in a lab. It also has some interesting materials. The Raspberry Pi was quite straight forward, if not a bit of a pain to model. I decided to block out even the small details so it would bake down into a nice normal map. It think it definitely adds some fun to the asset.
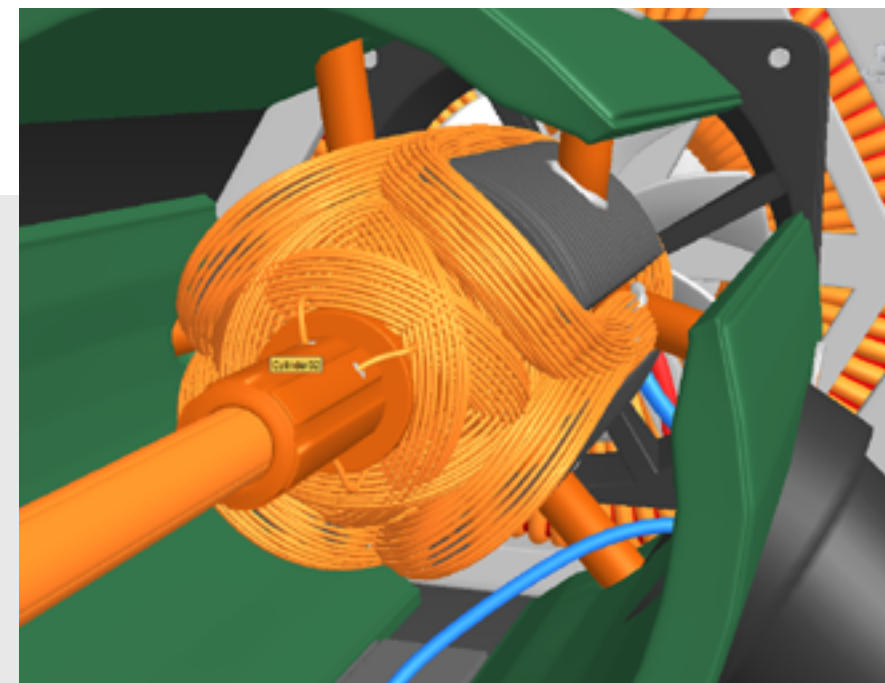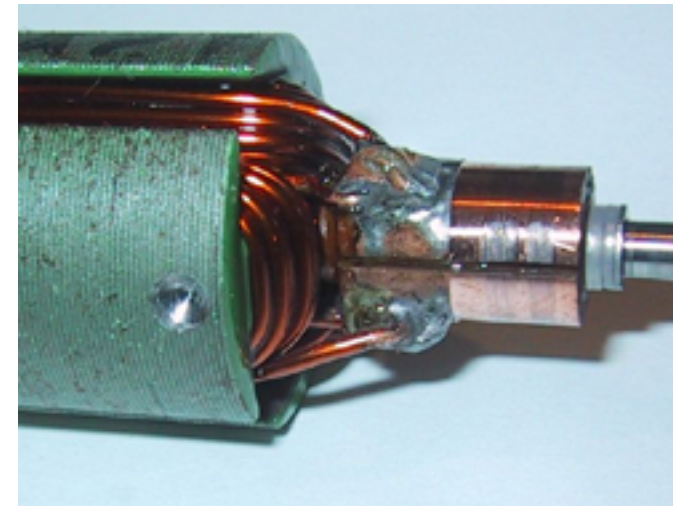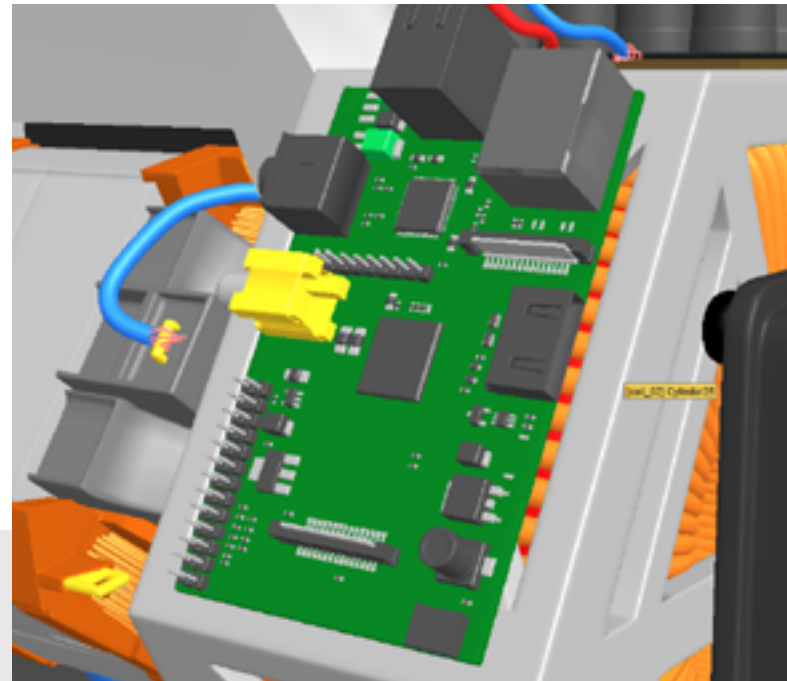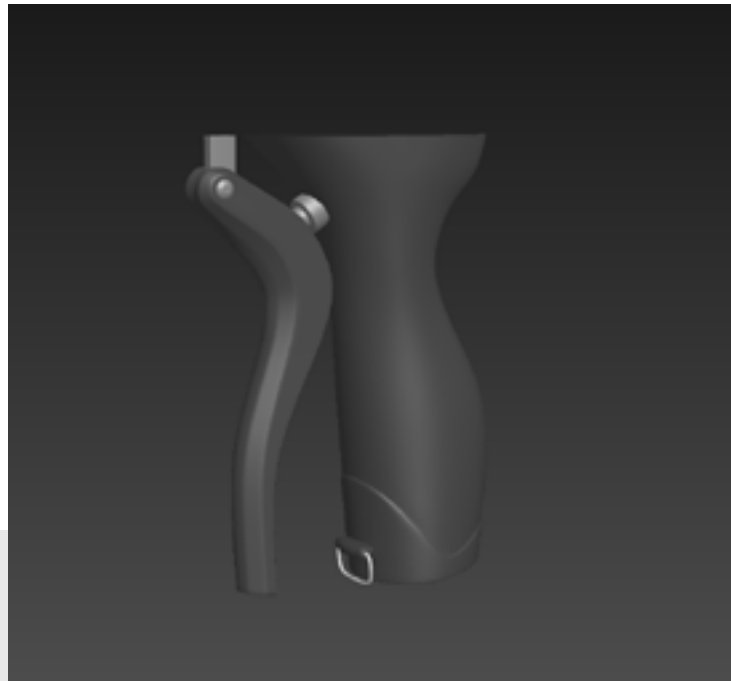
After working out how to make copper coils when making the commutator I applied them to the front of the gun like in the reference above. I was never sure what this was meant to be on the HL1 model, so I beefed it up a bit and made it look like it could concentrate a charge. Finally, just to keep with the "home brew" feel I added a mains socket to the top of the body for each recharging.

THE GUN High Poly Modelling
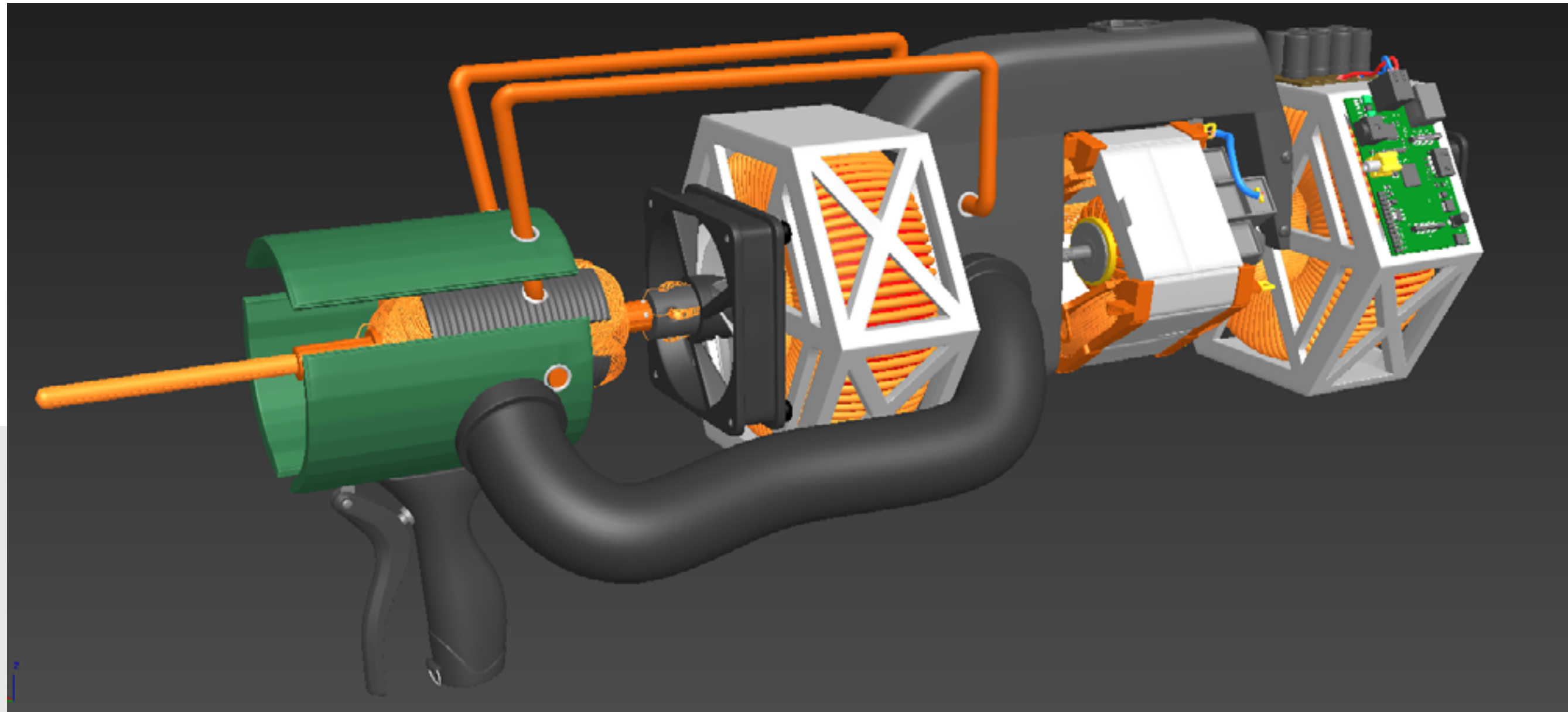
The finished High Poly model. It is seperated in to elements for an exploded Normal bake. I have also chosen to leave off some superficial detail such as the 3D printed plastic grooves and make those in Quixel Suite as it is far easier and less costly on time.

THE GUN Low Poly Modelling

Here we have the Low Poly model of the Tau Cannon. I simplified a lot of it down whilst keeping all the major shapes. At first I thought about using transparency for some of the copper coiled areas but after experimenting found that just baking it solid gave good results. On the right you can see the UVW map. There are a lot more components than I'd normally work with, owing to the design of the gun so that was a challenge. I've intentionally left quite large padding areas around each element as there are so many elements and any reduction might cause bleeding. Finally I had to decide which elements to have unique and which to mirror. I decided to mirror the main body as you never really see both sides at once. Most other elements were given unique UV space so that I could work in damage and variation to really sell the authenticity of the model. For a lower lod you could probably use a lot more symmetry,.
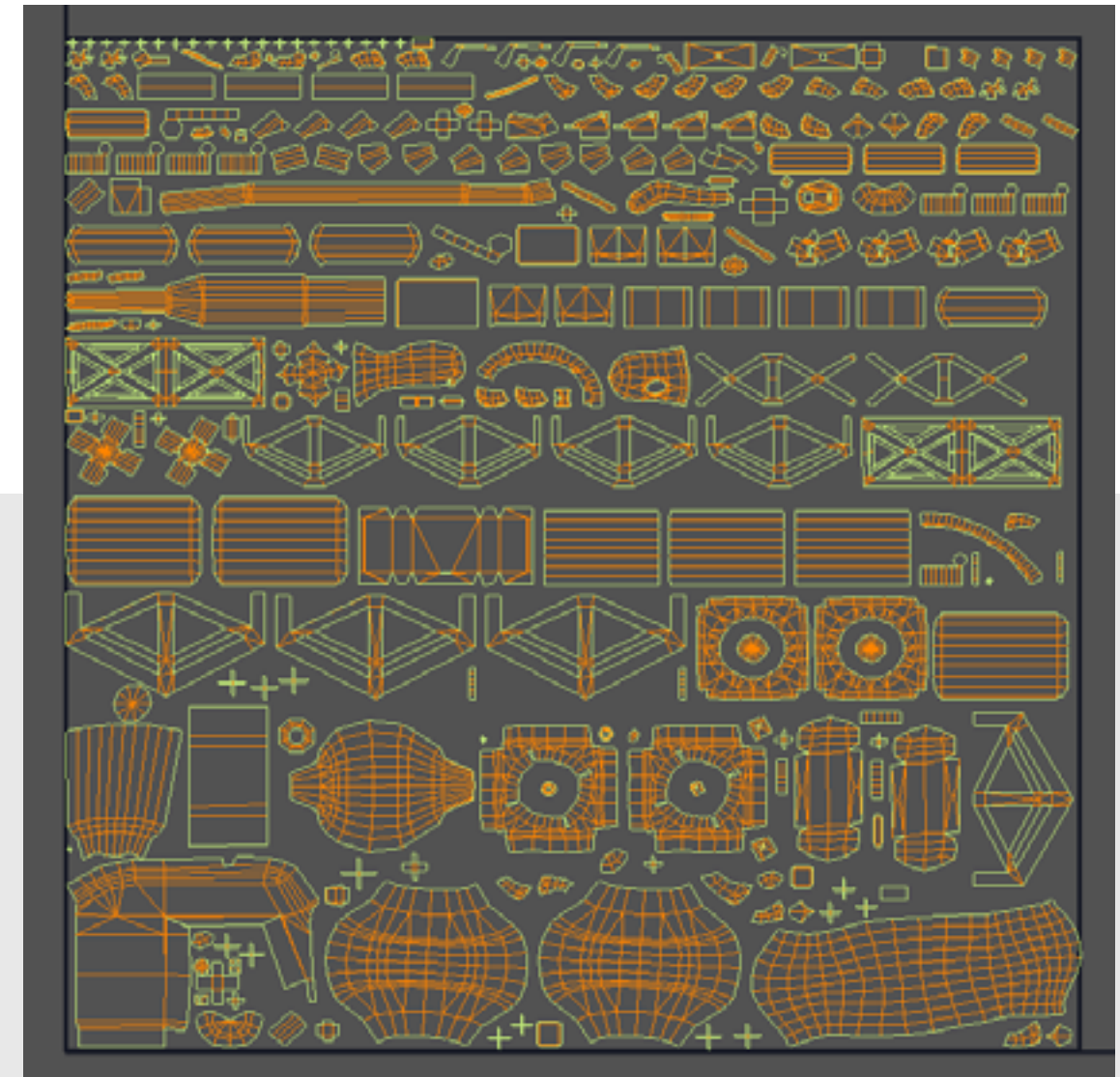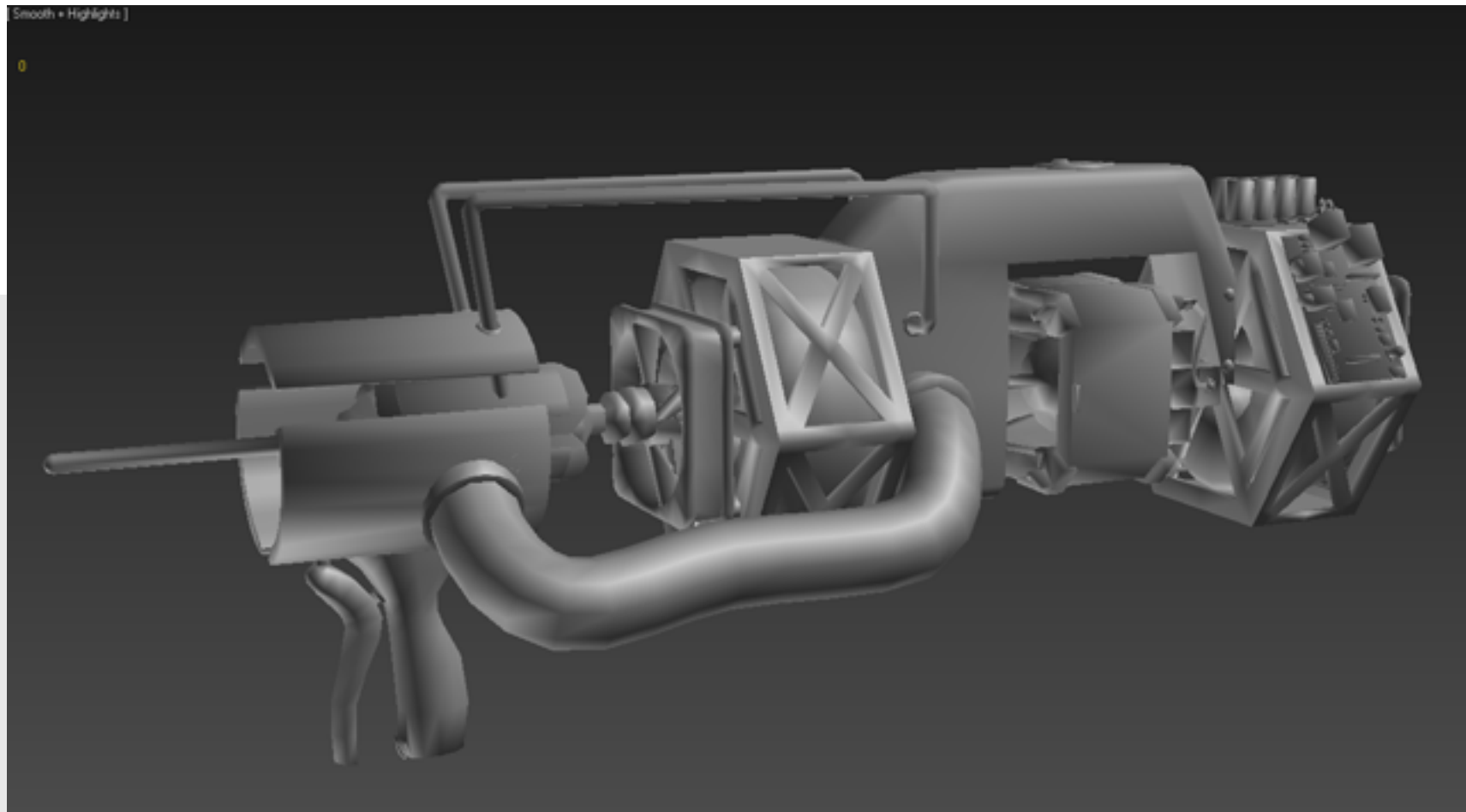
# THE GUN Baking and Texturing

I really enjoyed baking and texturing the Tau Cannon because firstly the bake came out reasonably clean thanks to exploding most parts, and secondly because it enabled me to learn how to use NDO, DDO and 3DO in the Quixel Suite. I had a lot of fun creating all the material types and using a PBR workflow with gloss and specular maps.
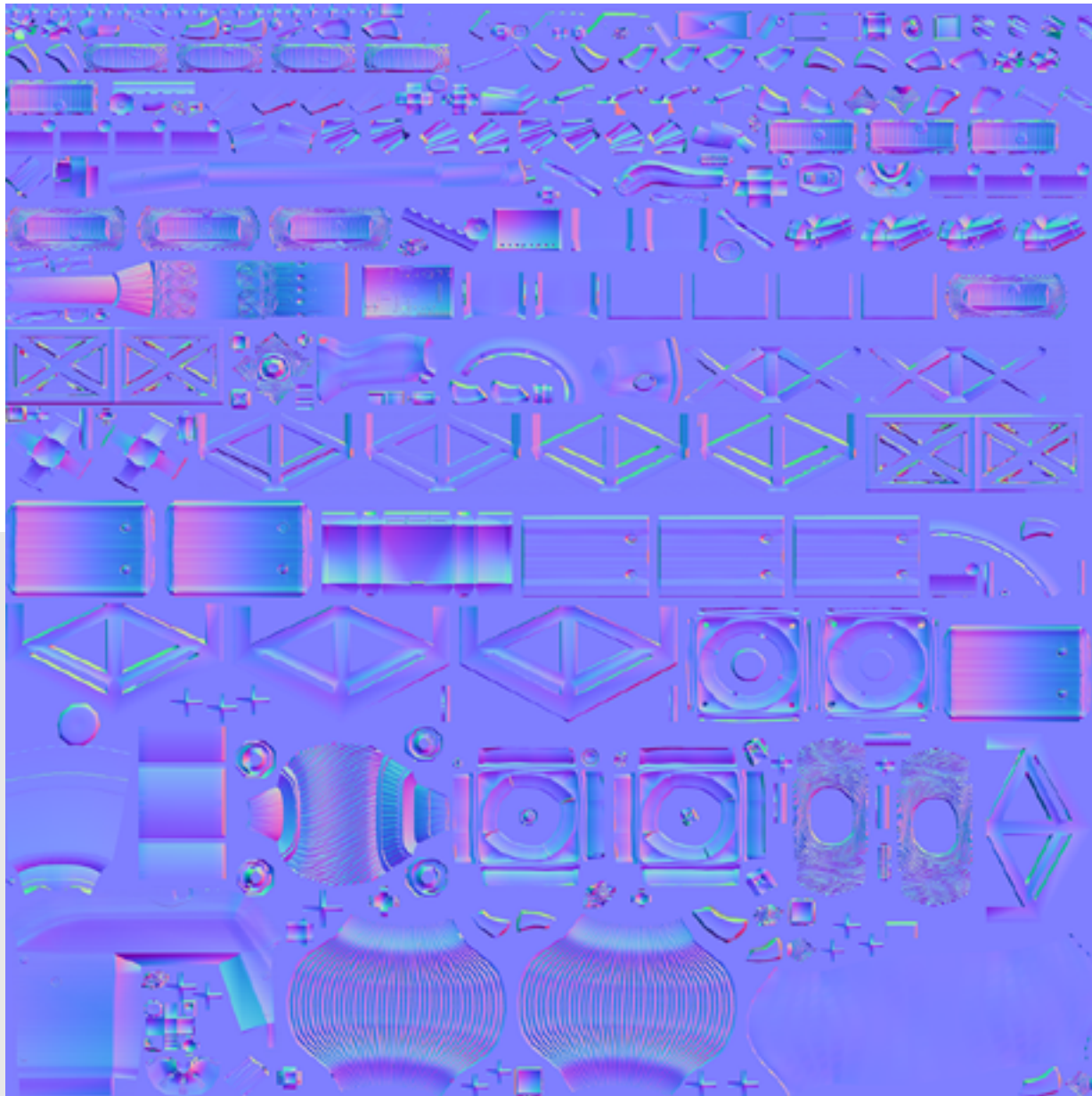
On the left you can see the original normal map bake of the Tau Cannon. On the right is the normal map once it has been passed through NDO adding details like the plastic ridges on the main body, rust and erosion on the metal and the carbon fibre texture on the main black pipe.

Working in NDO this was all extremely easy and adaptable. I was able to texture the model in half the time it would have usually taken, plus you get to see instant updates in the 3DO viewer.

THE GUN Baking and Texturing
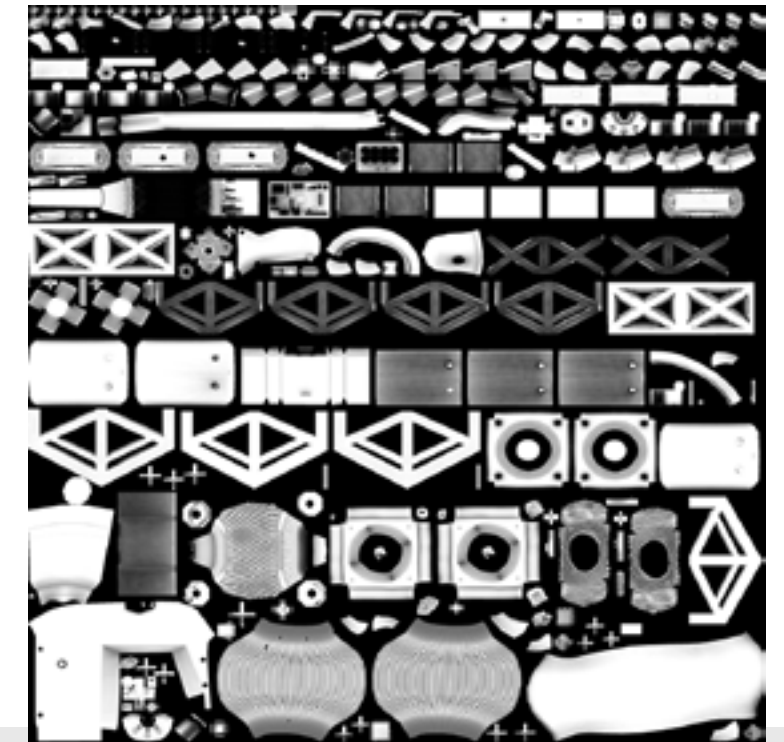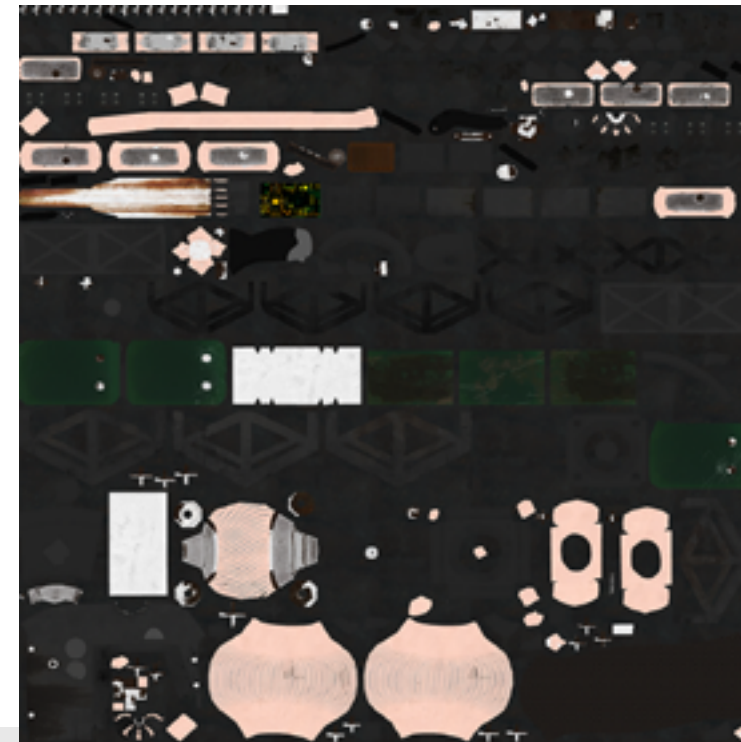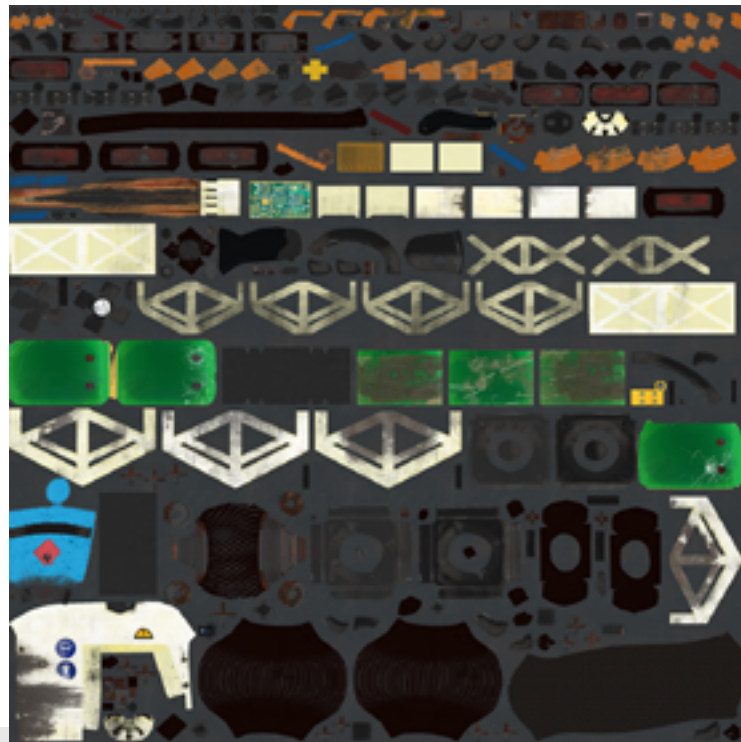
Here finally you can see the PBR maps for the Tau Cannon. You have Albedo (Diffuse), Gloss, Specular and AO. Working this was was extremely intuitive and fun and I felt I could really push the material definition a lot. I even ended up going back in and hand-painting elements because it was easy to understand the process. Some engines use roughness and metalness maps instead of gloss and specular but they are easy to adapt. The AO map is optional but helps with definition. For the renders I have left the maps at 4k as it is a key asset, but I would expect it to be reduced down to atleast 2k. On iPhone I'd usually use a 256 or less!
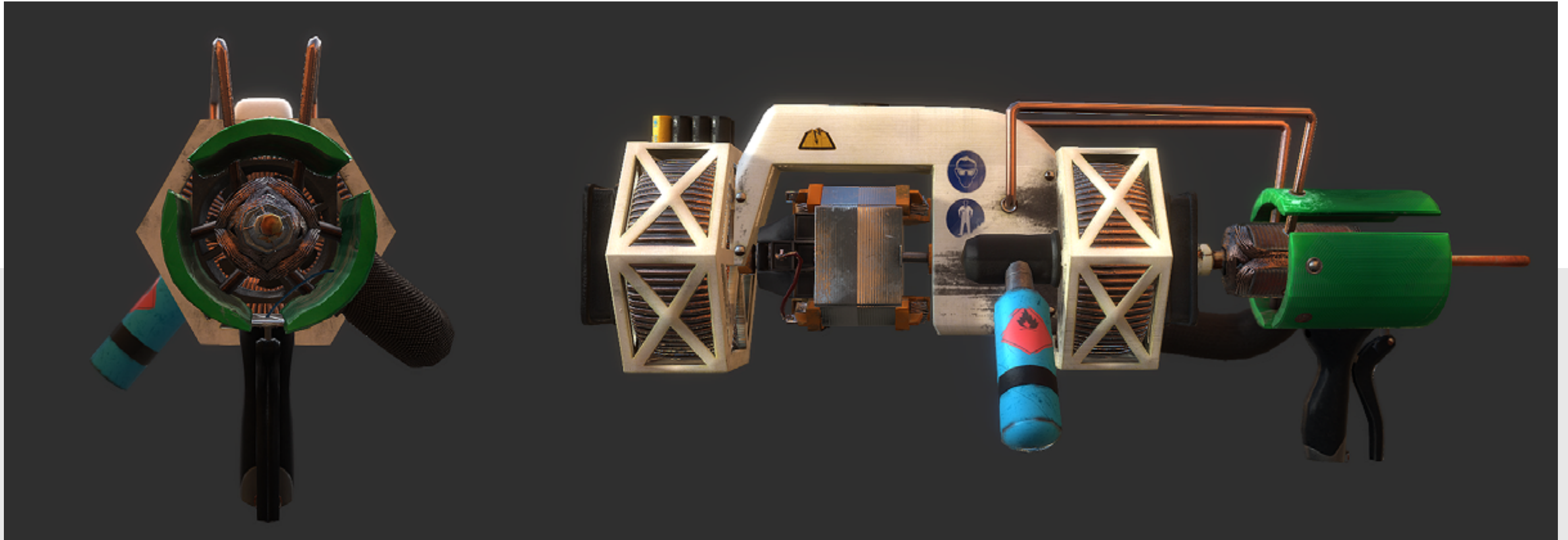
THE GUN Renders

Below are some renders of the final model. It sits in at 11.5k triangles which seems to be about standard for a next-gen console HUD weapon model. I have also created a lod that comes in at 7k triangles.
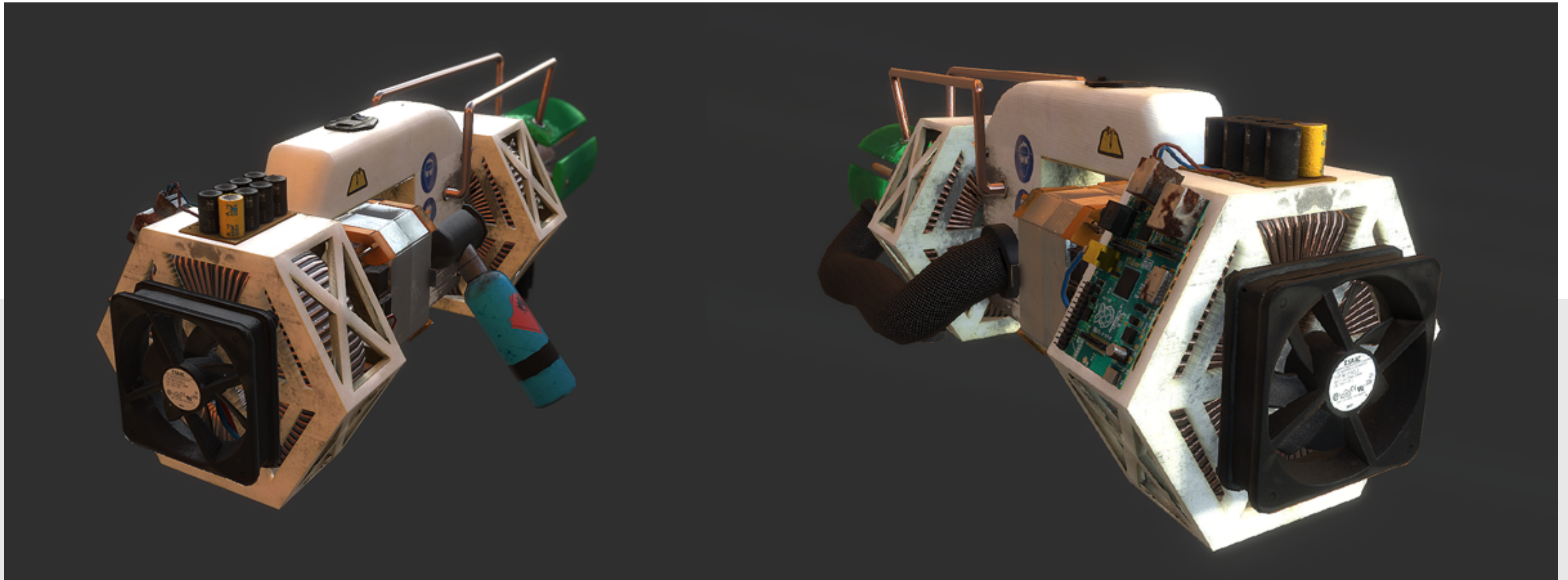
THE GUN Renders

Here are front and reverse side renders. You can see the copper coils and gas cannister.
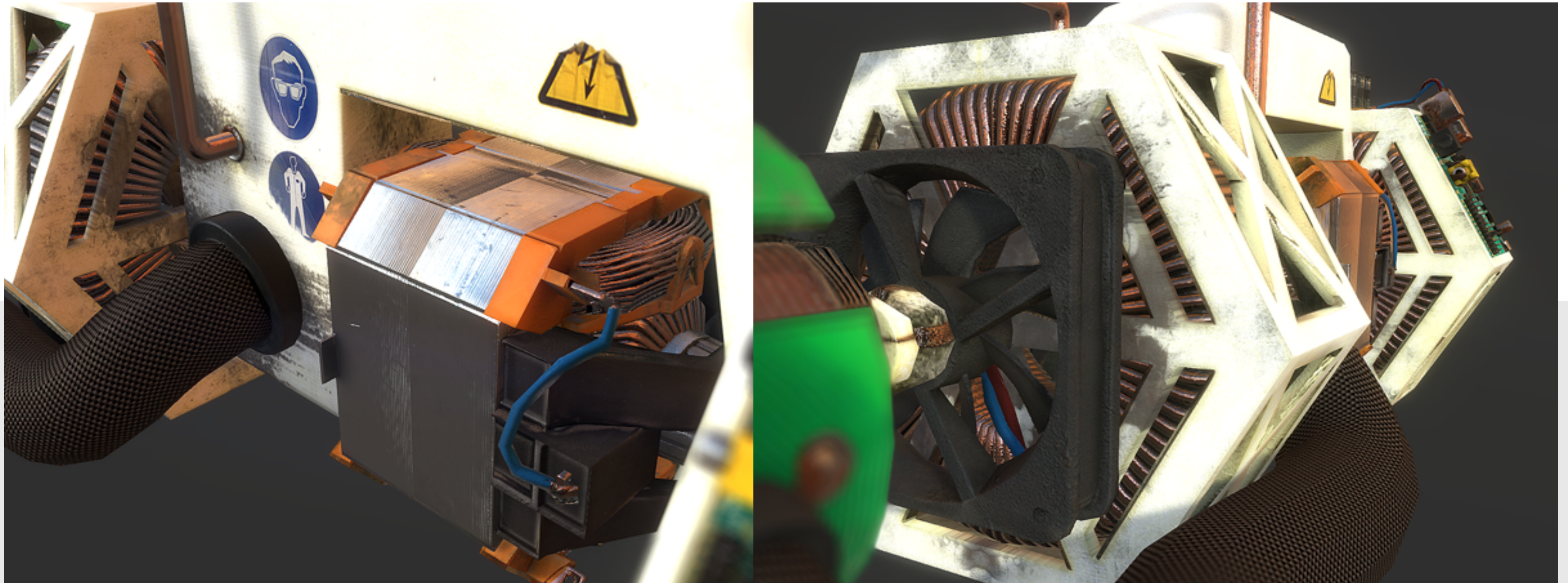
THE GUN Renders

Here are rear view renders showing the capactors, rear fan and Raspberry Pi. I tried to make the dirt and burn marks go from front to back to look like they are discharge from firing.
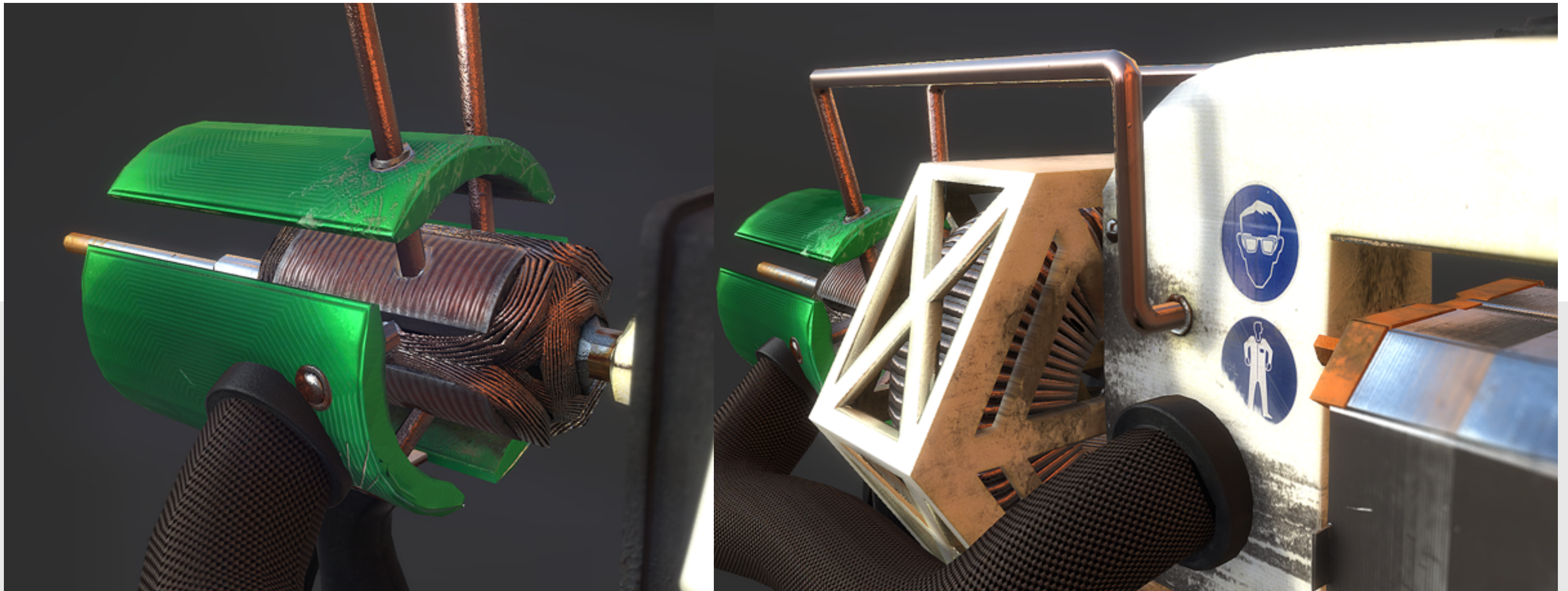
THE GUN Renders

Here you can see the commutator ammo clip and the front fan with plastic and copper wiring elements. The inner copper coil is a solid mesh, but the normal and gloss maps help make it look like it has depth.

THE GUN Renders

Here is more detail of the front-casing. I used a material similar to the Raspberry Pi circuitboard and added cracks and smashes to the diffuse and normal map. The copper coil is again a solid mesh. The AO really sells it as being more than it is. I also added decals to the plastic body to make it feel more like it has been created in a lab.

THE GUN Renders

Finally here are two Hud views as you could see the gun in game. You would be able to see the ammo spinning up and there's nothing too obtrusive in your view. I hope you feel I have done the Tau Cannon justice!
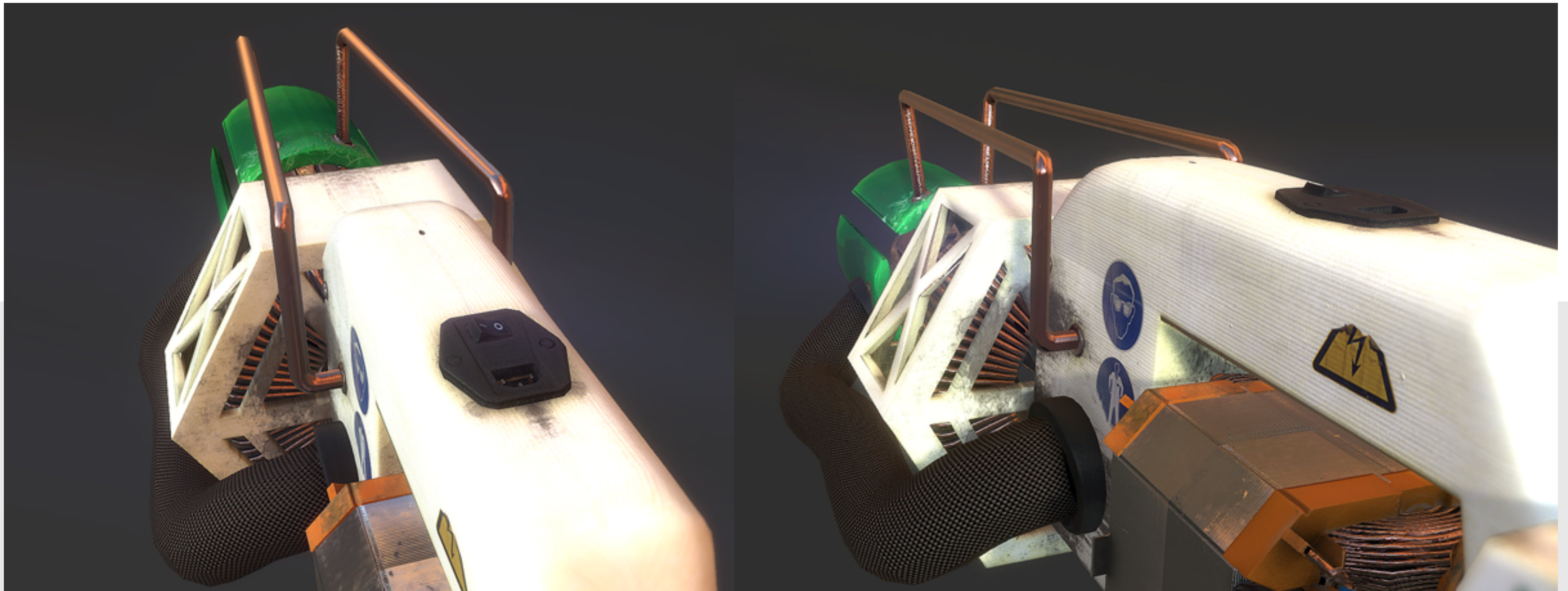
MAGUA   Reference gathering

After deciding to create a character I now need to come up with an idea. I have already stated that I want the character to be realistic and an accurate portrayal of some existing art or a real person. This is because I want to show that I can model a likeness of somebody or something. I want the model to show decent anatomical modelling and show good loops and flow. Materials are not so important to me on this asset but I want to be able to demonstrate them anyway. Hopefully I can do a character justice in the time! I keep an inspiration folder on my computer with characters that I find interesting and a bit different. Perhaps I can find something there.
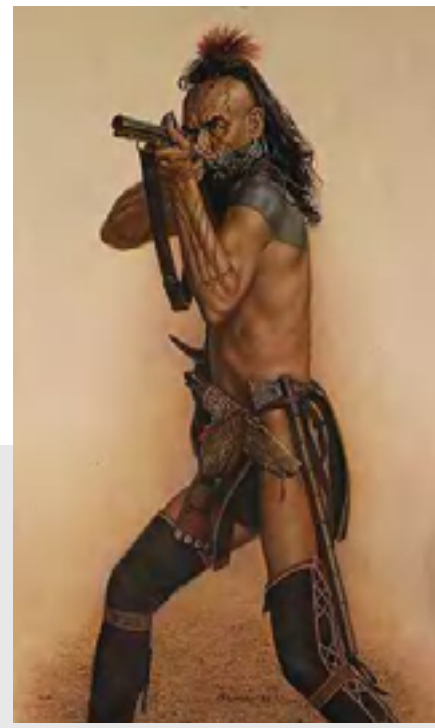
This character looks pretty cool and interesting. The facial hair could be a challenge and he really needs the bicycle.

I really like these characters as they have very expressionate faces. The materials look interesting too.

This guy has been doing the rounds for a while and I've always wanted to model him. The cloth folds would be a challenge but fun to do.

Magua from Last of the Mohicans is one of my favourite characters in a movie. He has a very interesting and recognisable face plus he is a bit different to the usual muscle-man.
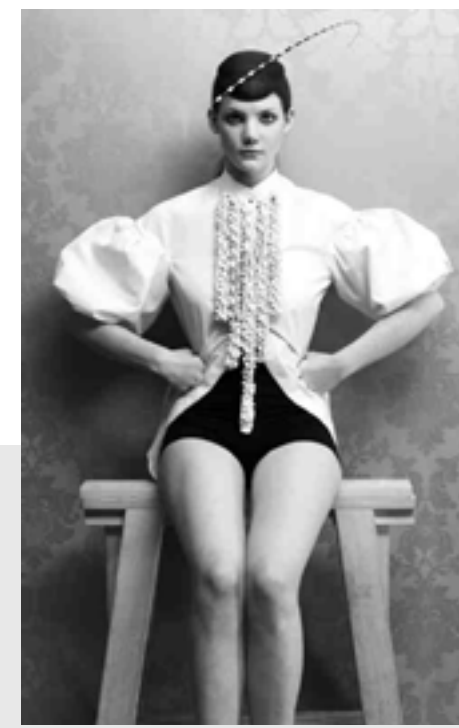
I love the clothing and design of this model. There is a really interesting symmetry and as it is black and white, the colours would be up to me.

Another really interesting character. I love the bright colours and expression on her face. The skin has a real translucency that would be great to texture.

MAGUA   Coming up with an idea

I think all the characters have their pros and cons. One really sticks out to me though and that's Magua from Last of the Mohicans. He's a character I've been wanting to model for a long time; but more importantly than that he fits a number of key requirements:

• He has an instantly recognisable face and likeness
• There is sufficient reference material to model the character from all angles
• He is half-clothed so I can get some good anatomical modelling
• He looks cool!

I feel that although the other characters could look good and would be fun projects to work on, there isn't sufficient photo reference to do them justice. I also feel that they are not recognisable enough for the purposes of this asset.

MAGUA   Planning and Estimates

Now I've decided on what character to make I need to do a development breakdown to plan out this character. Characters are always quite an undertaking and I don't think Magua will be any exception. Ok so he doesn't have armour or machinery parts but he has quite a lot of accessories and some tricky things to model like hair. I also have to watch that I don't leave seams on his skin UV elements. A lot of bare skin is a challenge at the least and I'm concious that the character in Rust starts out naked, so I want to be able to demonstrate my ability to model a similar asset.

I think this asset will take about one day (evening) for the conceptual/planning phase, six to create the high poly and two for the low poly and unwrap. I then think baking and texturing Magua will take about six days. All in all around 15 days (evenings and weekend). Clearly quite a bit longer than the gun and very long for an art test but I can only really work evenings on it like I would doing my personal/indie work and really would rather create something of quality that can hopefully impress. I'd rather give a realistic estimate here as without that what's the point in an estimate at all!

Concepting: 1 day
High Poly: 6 days
Low Poly and Unwrapping: 2 day
Baking: 1 day
Texturing (and learning software): 5 days

Total: 15 days.

The software I will need to use to create this asset are Photoshop, 3DS Max, Zbrush and the Quixel Suite. I will also need to use Marmoset Toolbag to render the final character as currently Quixel's 3DO does not support alpha-sorting.
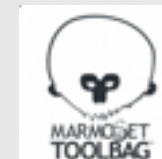
MAGUA   Developing an idea

After deciding to model Magua, I decided to go back and look at the model.

This is the first time you see Magua in the film. He is weaing quite an elaborate and expensive shawl-type cloth. It helps to break up the character quite a bit.

This is perhaps one of the most iconic depictions of Magua. He has full battle-paint on that obscures his face. I think this one would look really cool but it doesn't worry me that you could potentially hide a poor likeness behind the paint.

This is the "standard" Magua near the end of the film. He has all his accessories here and still looks really recognisable.

Similar to the first image, this is Magua with another shawl on. It's not much different to the other.

MAGUA   Looking at other versions

There are quite a few othe versions of Magua on the internet and all seem to have their own take on him. Reference is actually quite hard as the movie is old (1995) so even the HD screencaps are small and grainy. I think people also want to do their own take on the character.

Bearing that in mind I think Wes Studi's (actor who played Magua) face is a hard one to model because it is asymetic so you need to model all aspects of the face individually after an innitial setup.

I like what this person has done with their model. They've gone for the typical war-paint and have rigged the model. Perhaps I should do something like this (but try to improve on the likeness.)

This version appears to just be the face. They've taken an interesting direction with the feather and face-paint. They don't appear in the film. I think he is still obviously modelled on Wes Studi but has lost the likeness to a certain extent. His chin and jaw is too shallow.

An interesting bust sculpt that is obviously Wes Studi because of the crooked nose and grimmace but hasn't captured the likeness perfectly.

I love the skin material on this model. There is a real depth to it. Sadly the actual model has lost the likeness despite the fact that it has still obviously been modelled on West Studi.

I think I clearly have my work cut out to get a likeness. It's the most important thing on the Magua model to get right!

MAGUA

Concepting materials

I have differed the development of Magua from the Tau Cannon in that I don't really need to concept this character. I think I still need to do a material breakdown though. I have decided on making the un-painted Magua as it appears to be much less common in people's work and I'd like it to stand out. Additionally I want to be able to show the likeness without the black getting in the way.

Hair

Skin

Eyes

Metal

Horn/nails

Wood

Cotton

Leather

Suede
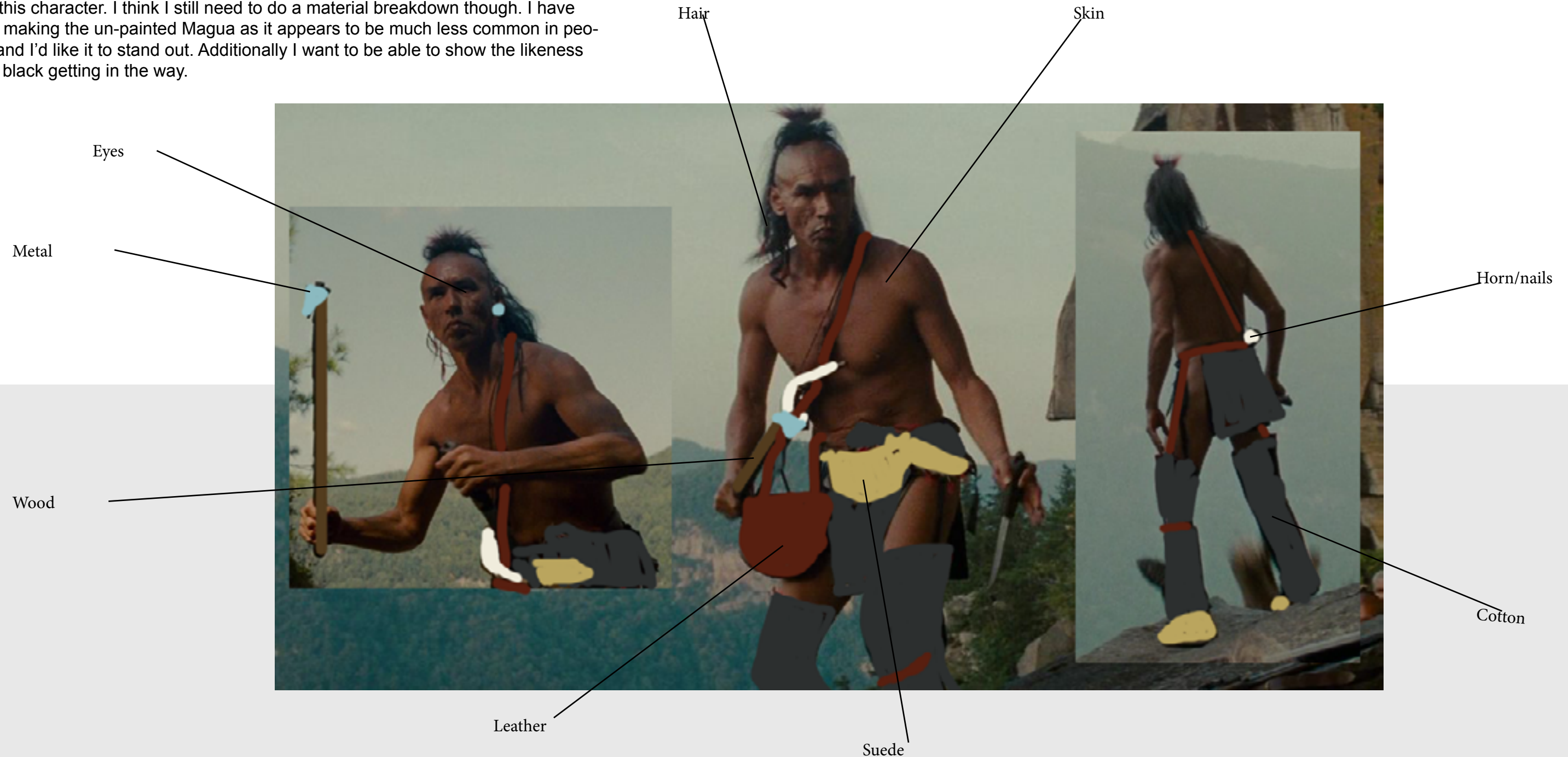
MAGUA   High Poly Modelling

Because I am creating a movie character I don't really need to concept any more, so it's time to create the High Poly model. I think at least half the time spent on this model will be getting the face up to a standard I'm happy with. There is a lot of anatomical work to be done!

Here you can see my first take on the face. I think most of the proportions are in but he has too thin jowls and possibly too high and prominent cheek bones. I think his mouth looks pretty good though
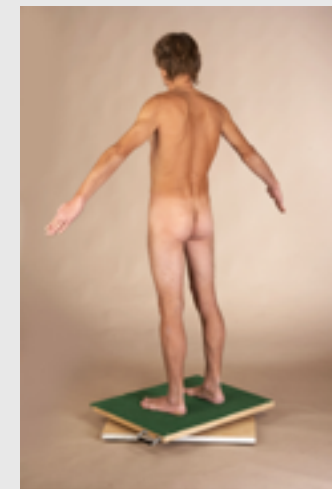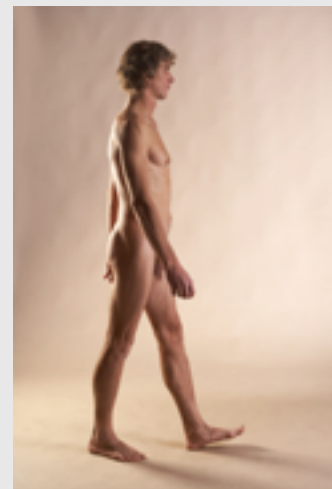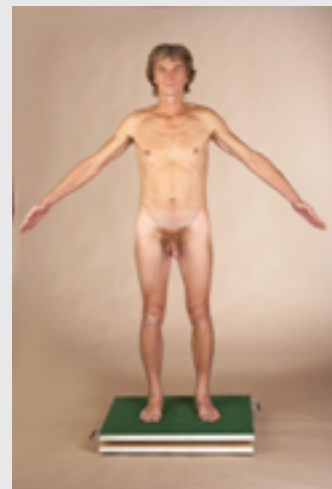
MAGUA   High Poly Modelling

For the body I decided to use reference of a similar aged man on the photo website 3d.sk. This is because the screencaps of Magua were really not good enough to model all his body accurately. I picked a lean and muscular middle-aged man's body as a substitute. I obviously didn't work up the areas that would be covered like the legs and feet.
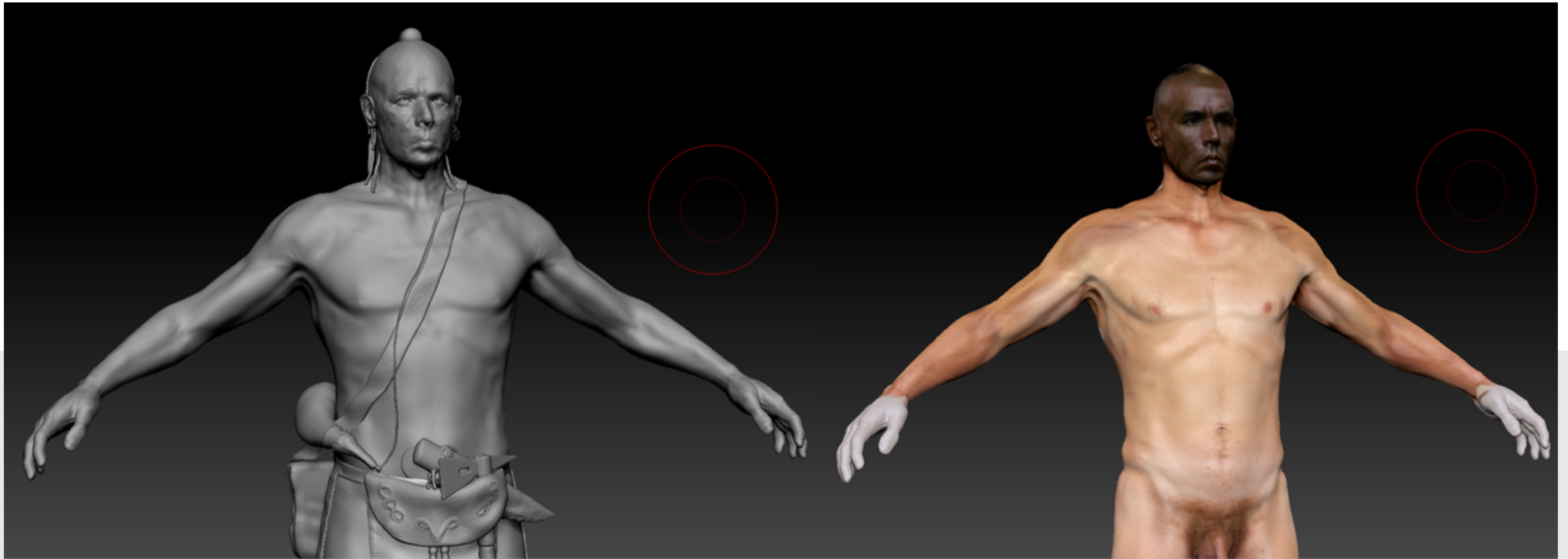
MAGUA   High Poly Modelling

MAGUA High Poly Modelling

In these last two shots I have reworked the face to be a bit less extreme and then projected a rough magua texture on to the face to test out the proportions. It seems to work pretty well. There's a lot of texturing to do though!

MAGUA   Low Poly Modelling

Here we have the Low Poly model of Magua. He weighs in at 15,683 triangles so should fit well within a next-gen triangle limit. I have tried to pay close attention to topology and flow. For instance his face is set up for morphing and should deform well. I have modelled his chest to bend accurately at the rib cabe and his arms and shoulders to deform properly when flexing.

I decided, like the Tau Cannon, to give every part of Magua's UV's a separate element instead of using symmetry. On iPhone and on most other projects I make use of symmetry extensively but I wanted to give this character authenticity and variation. Real people aren't symmetrical!
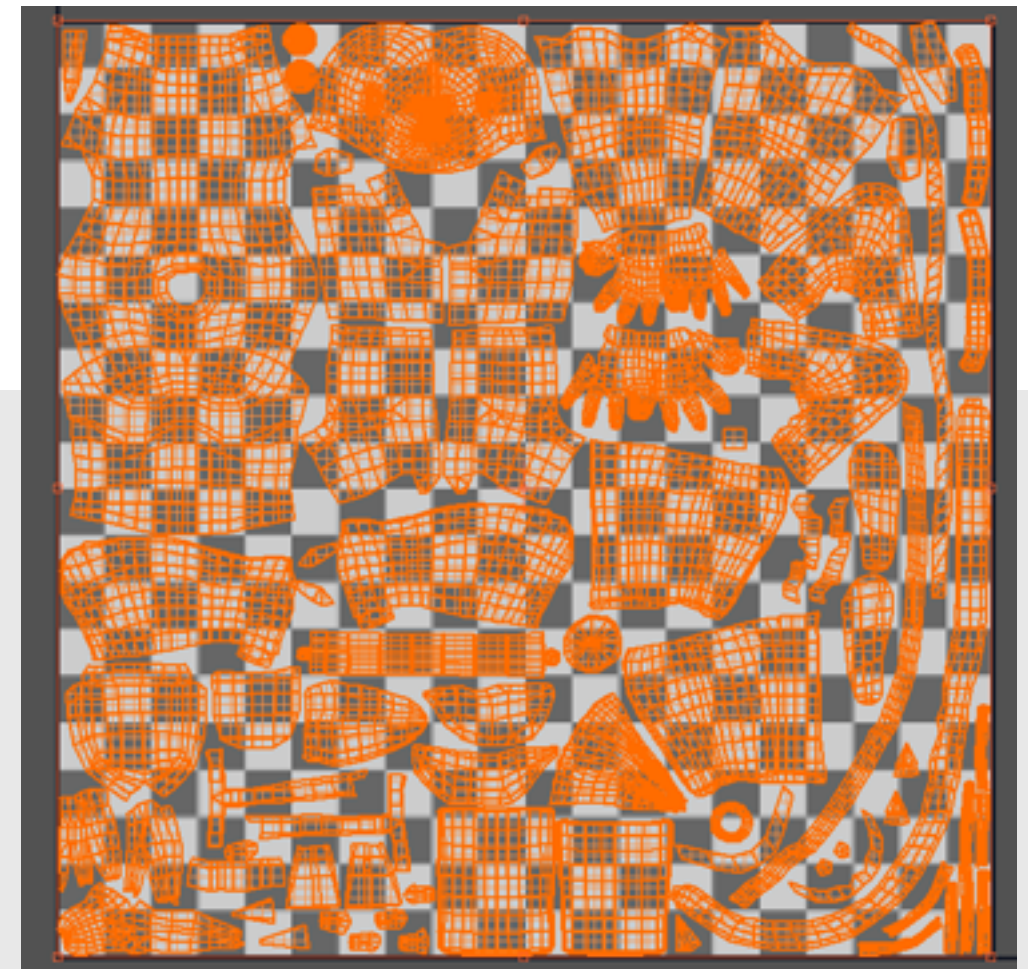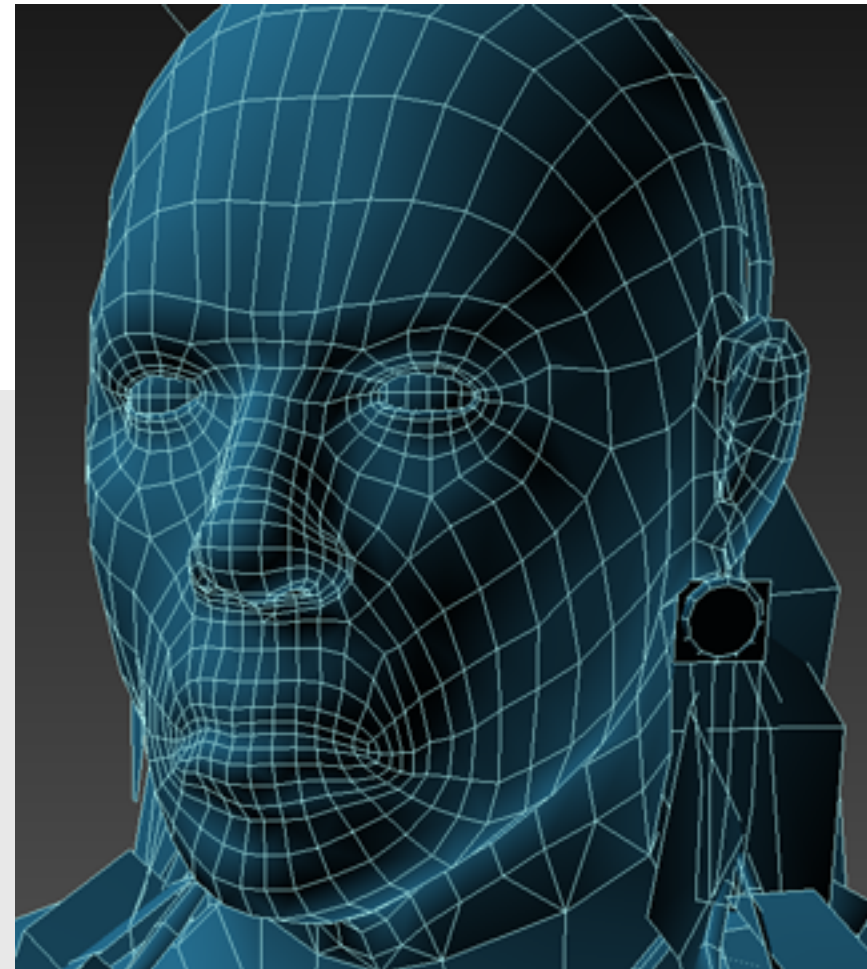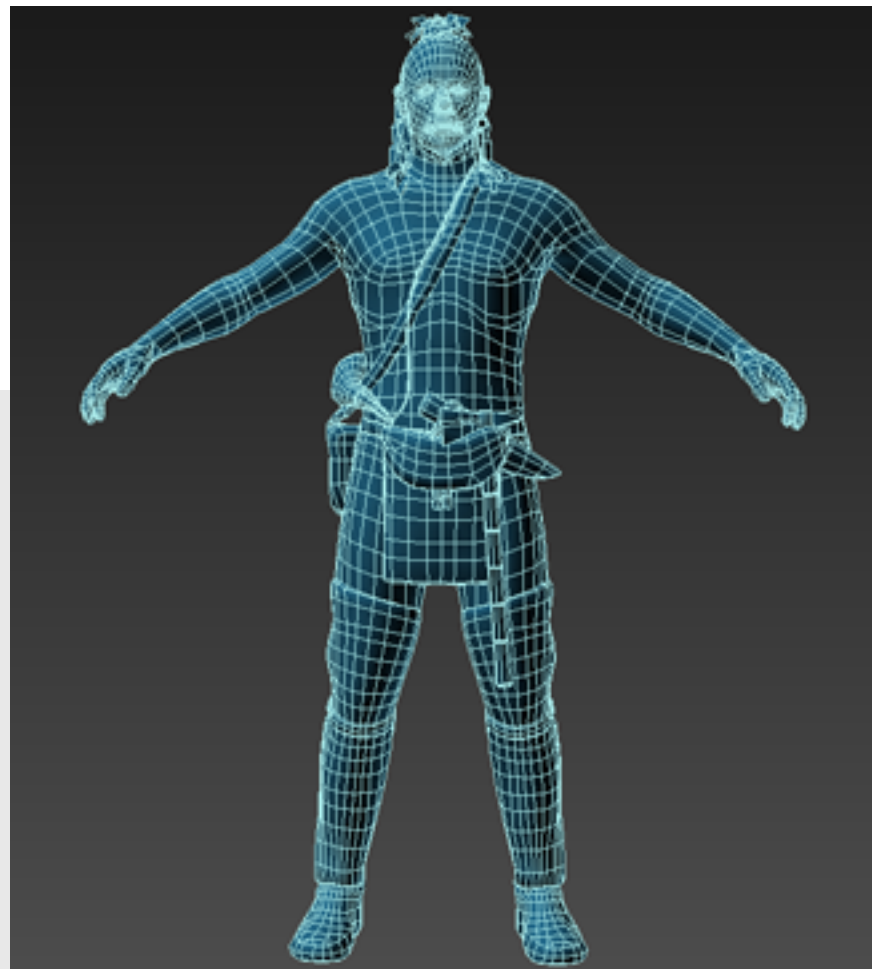
MAGUA   Baking and Texturing

After exploding the main elements of the Magua model I baked everything in Xnormal as it gives good cage bakes. This was then bought in to Quixel Suite after an initial tidy-up in photoshop for the base skin. When texturing for PBR everything needs to be totally flat, or as close as possible because all the lighting information is worked out in the scene.
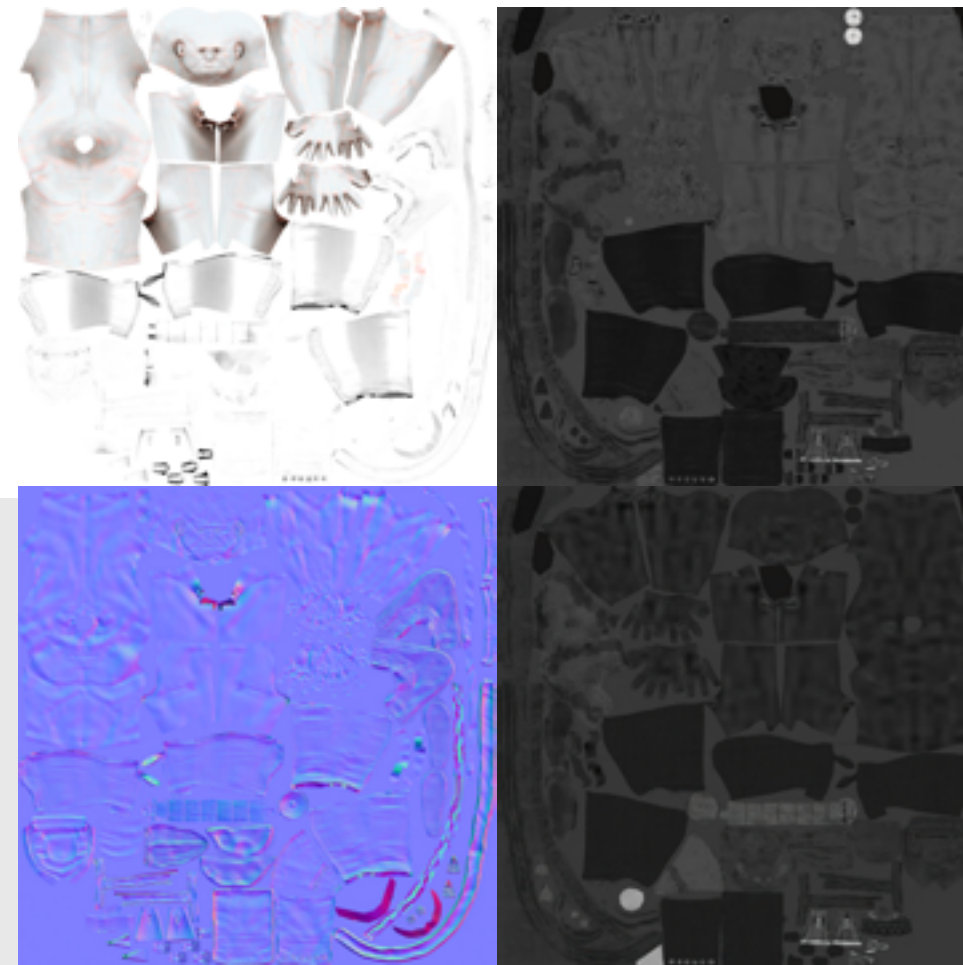
MAGUA Renders

MAGUA

Renders

MAGUA Renders

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MAGUA Renders

ADDITIONAL MATERIAL @

Please find all the FBX and Texture files here:

www.mattisaac.co.uk/facepunch

POST MORTEM

This has been a long and challenging experience. But it's also been a lot of fun and rewarding. I have created two new assets that use PBR techniques and have learnt new software (Quixel, Toolbag) in the process. I think on the whole, the project has gone well.

I think I have come up with a nice twist on a traditional weapon to make it my own and I'm happy with the goal of making decent material definition.

Similarly I think I have created a character which is recognisable and has a decent likeness. I think the topology is good and the anatomy holds up.

RETROSPECTIVE

HAPPY?

Overall I think yes I am happy with my final assets. Of course there is a lot I would change or improve if I had more time. As always with tests though there is a finite amount of time to get a lot done.

I think as I said before, I have met the brief and the challenges I imposed myself. I think the scheduling and time management went reasonably well. Perhaps both projects went over by a few days especially when hitting technical hurdles (alpha sorting in Quixel etc). It's been a large undertaking for me. Usually projects at home are quite small and reigned-in like my TF2 hats or work on indie game Johnny Dynamite. This is so I know it can get finished despite life getting in the way. On an art test you have to finish and take on a bigger project than you're accustomed to. I think like any artist I'm a bit of a perfectionist and there is a lot of stuff I'd like to go back and tweak or add to.

As of now though I have an engine-ready gun and rigged-character. I have to be happy with that!

Did I change direction? I think yes and no; in small doses. During the research and concepting phase it can be quite hard to nail down an idea. Especially when the brief is so open. However once I had my ideas firmly ingrained I kept on track pretty much the whole time.

I think it's fair to say that as you're working new ideas can spring up and that can affect and influence direction but really if the design phase is comprehensive enough you shouldn't need to change direction too much.

If the models were not working that is another story, but I feel they have achieved what I set out to do (hopefully..!)

DIRECTION?

POST MORTEM

CHANGE?

What would I change if I had more time. Well a lot of stuff. I guess that is always an aspect of games art. We work to a deadline and always have to scope the project a little.

On the Tau Cannon I would have liked to have rigged up the gun and had the ammo commutator spinning up. There is currently no way to get bones and rigs in to the Quixel suite so it made this difficult. I would also like to have explored more map types such as a depth map to give the 3d-printed plastic more of an SSS feel.

I think also that the hand/trigger doesn't really work too well where it is. I put it there for aesthetic reasons but really it's quite impractical and would probablt break easily. If I had more time I'd go back and rework the way a person would hold the gun, putting the handle/trigger back to under the front coil and adding a make-shift padded section to the back coil to rest on the user's trigger arm.

For Magua there are a few things that I would like to add and change where I ran out of time or they were just outside the scope of the project. Although I have modelled the face for expressions and morphing, there is no internal mouth so he would not work amazingly at cutscenes. If I had the time I'd go back and add a mouth with teeth to make more of the character. I'd also like to explore different clothing and paint options for him to bring out the variation.

I think the materials could have been pushed a little bit more. Marmoset Toolbag rendering was as a result of Quixel not being able to alpha-sort the hair. If I had more time I'd have learnt Toolbag in a much more in-depth way to get the best out of my renders.

Overall I'm happy with my assets and have learnt a lot from the experience. I hope to be able to make more for you in the near future!