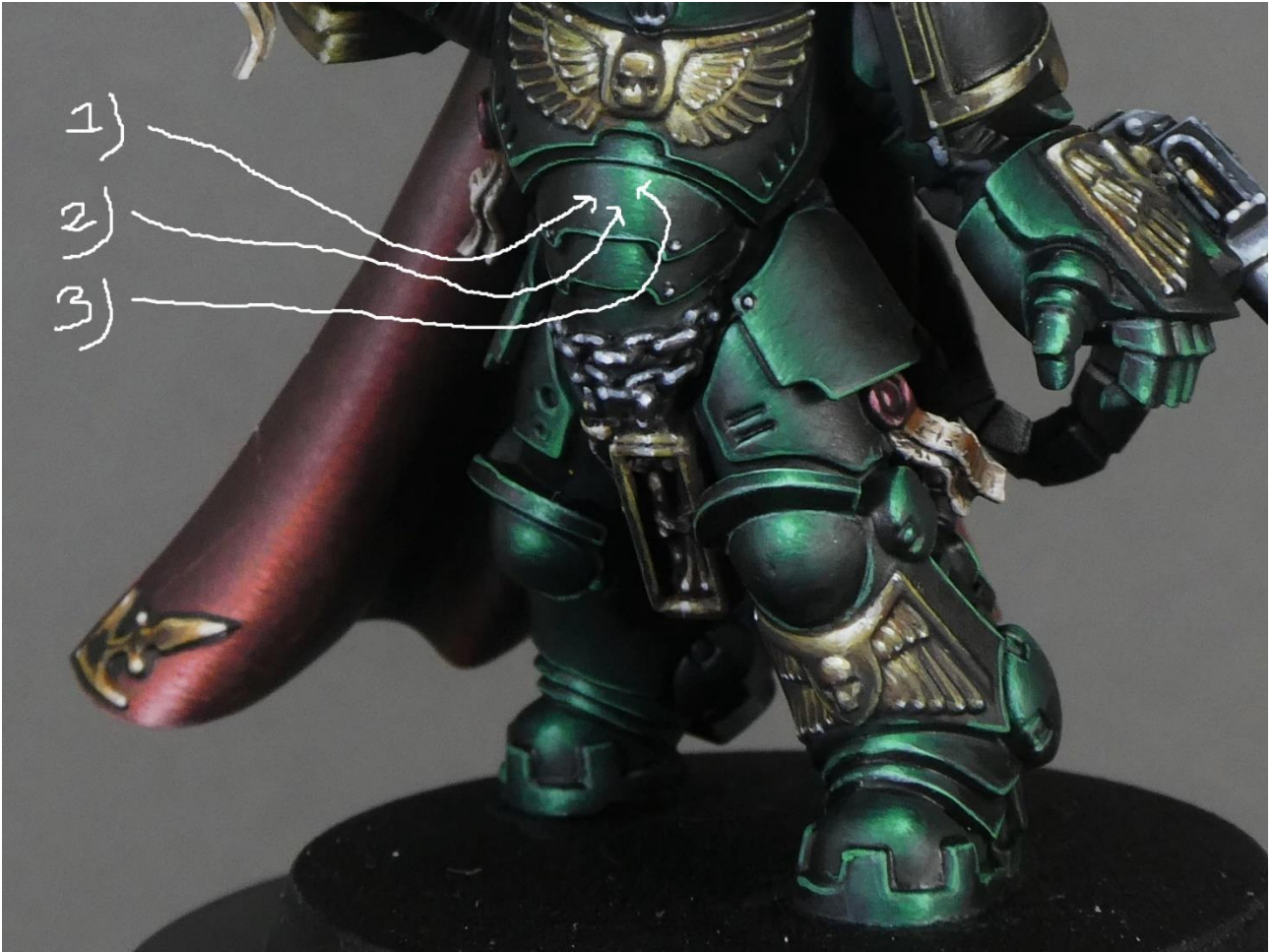# Topic: Light reflections

What is a light reflection ?

A light reflection, is the reflection of a specific light source, hitting a surface. For example the light of a desk lamp hitting the surfaces of a miniature in a specific angle. I have pointed out the light reflections from my desk lamp (1 light source) , hitting the surface of a Salamander captain below.

Why do we need light reflections in miniature painting & how are they build up? As you can see on the picture, the light reflections are hitting different shapes, like cylinders & squares. We can therefore see how light reflections act, when they hit these different kind of shapes on a miniature. We can furthermore see how wide the light reflections are & where the strongest point in the light reflections is. In my tutorials I work with terms like 1) "the frame of the light reflections", 2) "The middle of the light reflections & 3) "The very middle of the light reflections".

1) The "frame of the light reflection", is the area or transition between our basecoat & the first glaze of the light reflection. So , for example if the basecoat is Caliban green, & we want to start on the light reflection, we add a brighter green to the Caliban green, like Moot green, and start glazing a transition between these two colours.

2) The middle of the light reflections, is the new area or transition between our first glazed area (The frame) & the very middle of our light reflections. So for example if our light reflection frame is a 1:1 mix of Caliban green & moot green, the middle of the light reflection will be pure moot green. This means that we now have a basecoat of caliban green, the frame of the light reflections wich is a 1:1 mix of Caliban green / moot green, the middle of our light reflection wich Is pure moot green & now we move on to the last step wich is the very middle of the light reflections.

3) The very middle of the light reflections, is the brightest point in our light reflections. As you can see on the upper picture, it is the small dot we can see in the very middle. This is where you want to add a brighter colour to the pure moot green as we have in the middle – for example if it's moot green, we want to add a brighter yellow or ivory/white. Add bit by bit a brighter colour to the previous used paint (moot green), until we have the pure

concentration of this brighter colour. This is what gives the shiny feeling to our light reflection.

Besides painting the light reflections, we can also push the contrast on the overall look by adding a darker colour to the basecoat, in all the areas that would be naturally shaded. This is where you look at your picture again, and locate where the areas are, that are less exposed of light. If we for example have a basecoat of Caliban green, I would add bit by bit of abaddon black, until its pure abaddon black, in the most shaded areas. The last step is to edge highlight the areas we have painted – I useally just add a bit of a brighter colour to the paint that is used for the middle of the light reflections – so for example, I add a bit of ivory to the moot green, and add 1-2 parts of water. We don't want a glaze kind of mix of edge highlighting, we want a strong pigment, as we want a clear & sharp painted edge. Remember that upper edges will usually be more exposed of light, than the lower edges – so this means that we want a stronger pigment on the upper edges of an armour.

Wich primer is best to locate light reflections?

I can highly recommend to use a primer that has a bit of shine in it. I use Chaos Black from Citadel – this is good because it has a shine to it, wich makes it much easier to locate the light reflections – as it is a black primer, it also gives us a high contrast, wich makes it easier to locate where the light reflections are but also where the darkest areas are.

If you use a grey or white primer, because you want a brighter paint job, I would recommend you to go to your picture filter, and push both the shadows & contrast of the picture. You can see on the picture below, that I made the picture darker & pushed the contrast, in order to make the light reflections more visible. On this model , I have primed it with Mechanicus standard grey from Citadel

How many lamps (light sources) do I need to locate light reflections?

Depending on how many reflections you want on your mini, you can use as many lamps as you want. I usually just use 1 light source , wich is my desk lamp. The lamp is just a Tertial desk lamp from IKEA (its very cheap) & a daylight bulb – you can get these bulbs many places on the internet, but I have bought them locally where I live. Its just important that they are Daylight, as they give a natural light. Normal bulbs gives a yellow light, wich makes it a bit harder to see the different build ups of the light reflections. In general I can recommend daylight bulbs, when painting miniatures - also for taking pictures. It made a huge difference for me when I bought them!

Get started!

So, I would recommend you to first of all get a black primer like Chaos black – then prime your miniature, hold your miniature in the angle you want the light to hit the figure underneath your desk lamp (any light source) & take a picture with your phone. Now start locating all the different areas where the light reflections hits the miniature & now you already have a overview of how light naturally hits your specific miniature. ! It really is easier than the most people think, and when you have done it a couple of times, I am convinced that you will do this every time – because it really just makes a huge difference when painting the miniature!

I really hope this guide will make it easier to understand the theory behind painting light reflections – if you have any questions regarding this guide, please let me know! 😊

Best regards Nikolas