

# Custodian Guard NNM (Non Metallic Metal) Tutorial

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This guide is designed to show you how to paint NMM on a Custodian Guard, although the technique can be used on any model. NMM (Non Metallic Metal) is the painting method to represent metallic surfaces without using metallic paint, but rather colours such as browns and yellows. It is a method of painting that has been transferred to miniature painting from traditional 2D painting.

There are positives and negatives to using NMM; the most obvious downside of NMM is that there is no reflective element to the paint, so the lighting does not move as you turn the model around. This is the same as all other surfaces on a model however, so keeps everything in the same lighting context. The benefits of using NMM are that you have much more control over the lighting as it

goes exactly where you want it to, you are also able to paint on detailed reflections, colours and nuances that would be very hard with a true reflective surface as they would change every time you turned the model.

You will require the following paints for this guide:

Black Primer (Any)

White paint (Any)

Black Paint (Any)

Vallejo: English Uniform (GW XV-88), Heavy Goldbrown (GW Balor Brown), Ice Yellow (GW Dorn Yellow).

Games Workshop: Mournfang Brown Rhinox Hide (optional), Doombull Brown (optional).



Stage one is to prime the model black. In the case above the whole model is glued together apart from the head, which can be removed for ease of painting. In the case of this model, all areas are easily accessible with a paint brush so there is no harm to glue it all together. On other models it is best to have difficult to paint areas left unglued so that you can have easy access.

It is best with this style of painting to have the model at least held together with some form of putty (Blu-Tack) as it allows you to more easily paint on the lighting on the whole model.



In this photograph I have given the model a coat of Doombull Brown with an airbrush. This is completely optional. The benefit of doing this is that the colours of the armour will be richer. However, if you want a higher contrast NMM then it is fine to stick with the black primer as a base. Be aware that if you do airbrush the armour brown then you will have to go back and pick out areas in black by hand. If you do not own an airbrush then you can paint just the armour panels brown, ignoring areas that will not be NMM gold.



Now begins the first stage of highlighting the gold. This layer is done completely using English Uniform/XV-88. The paint should roughly be mixed 50/50 paint to water, although each paint pot is slightly different so it is advised to test the paint before you apply it. You will notice that as you apply the paint it will seem very bright, but it will get darker as it dries.

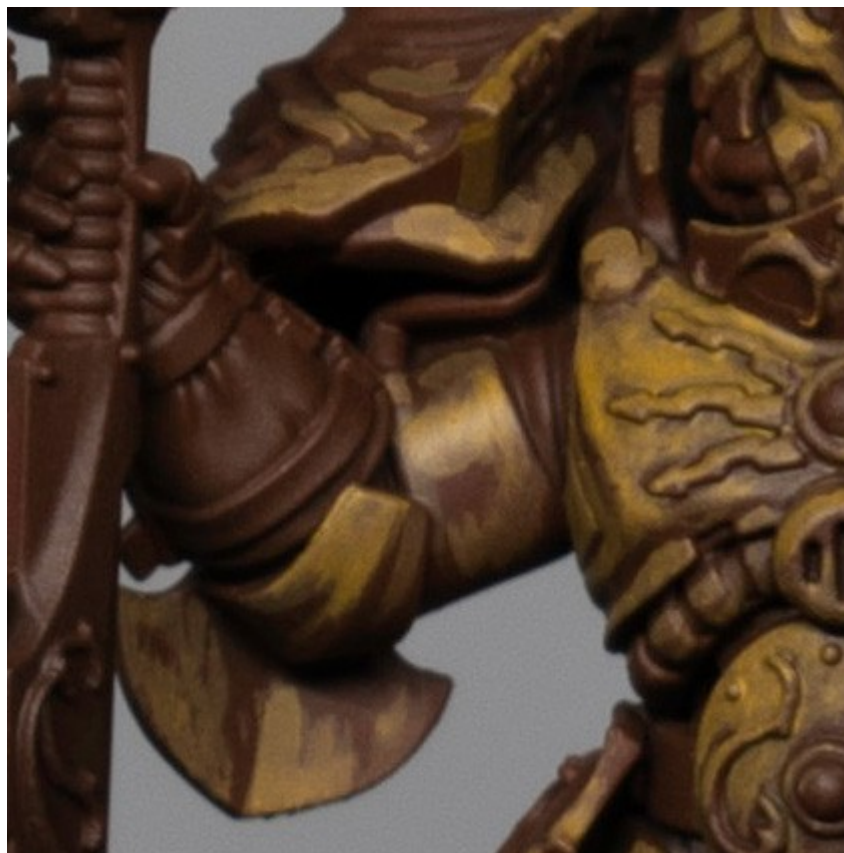
The translucency of the paint will allow the Doombull Brown to show through, this will allow you to create transitions with the paint without having to mix any colours. Start with very large highlights and then get smaller with each layer, which will increase the opacity of the paint and make it look lighter.

Highlight placement is the most important aspect to get right. If you look at the photograph above you should notice that the light is coming from the top left. This will show on the model with the left side being lighter, although that does not mean that you do not paint the right hand side, you

will use fewer layers of paint so that the highlights do not look as bright. If you find later on in the process that the right hand side of the model looks too dark or is lacking detail then you can go back and add more highlights using the English Uniform later on.

To help with highlight placement you can hold the model under your painting lamp to see where the light catches on the model. This process also allows you to choose which angle to have the light coming from. If you ever get lost just hold the model back in the original position to see how it should go. Another option is to set up the model with lighting and then take a photograph which you can use as reference.

One of the hardest parts of NMM is getting the position of bounce/secondary highlights as there is no reference for them from the two methods described previously. Generally speaking the secondary highlights will appear on the opposite side of a piece of armour to the direction of the primary highlight.



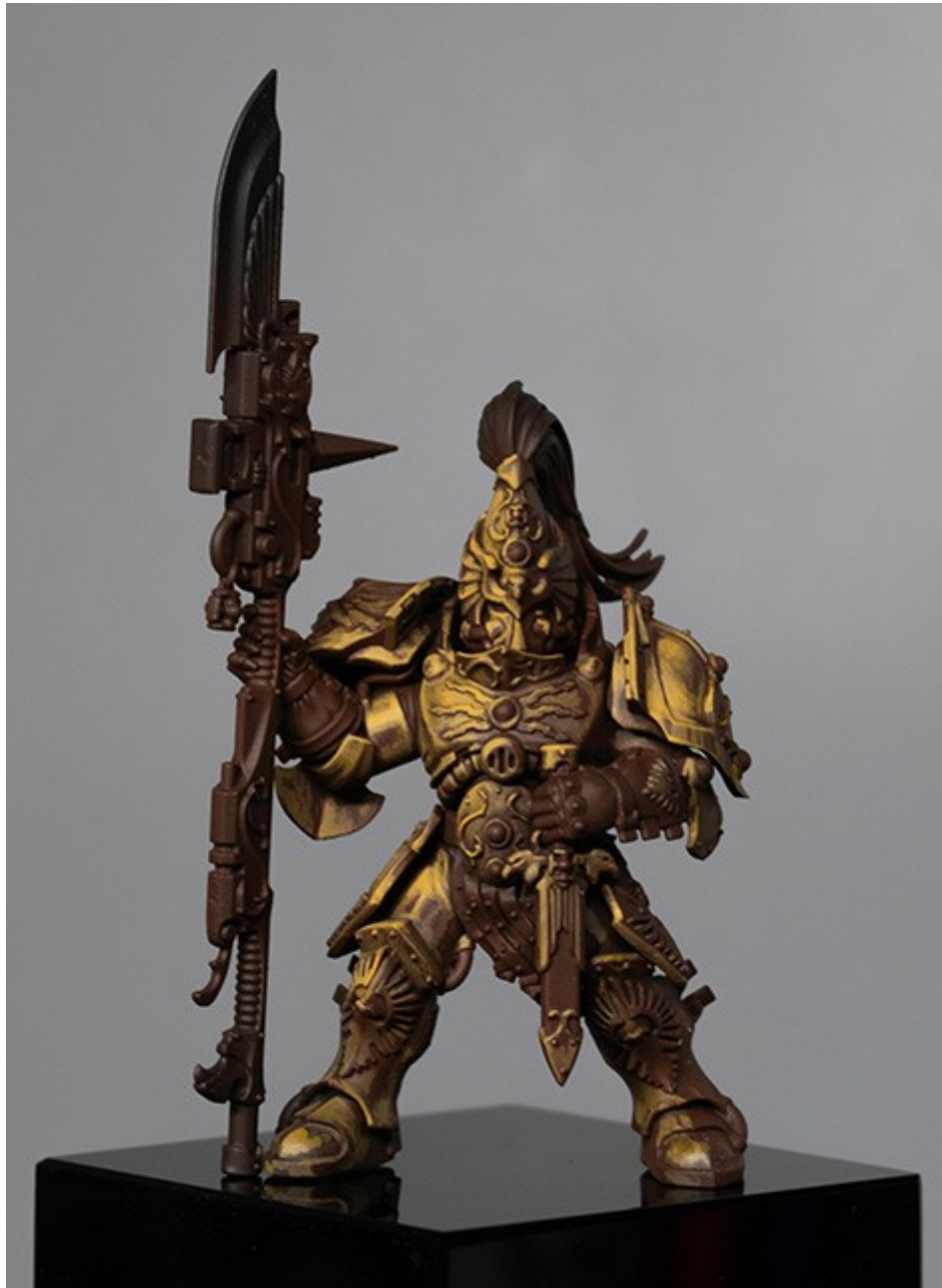
If you look at the photograph above you can see the zoomed in section with the upper arm armour. Go back to the previous photograph and put your finger over this section of the image and you will see that without this part of the armour the rest of the model looks a lot less believable for NMM. That is because the secondary highlight is strongly representing the material as metallic. Curved areas are much easier to represent as NMM, particularly when secondary highlights are added.

It is important to note at this stage that secondary highlights should not be as bright as the primary highlights. It won't be obvious yet as you have only highlighted with one colour, but as the highlights progress it should be much more obvious.



As the model progresses it is important to take the time to look at the model and see if there are any areas of lighting that you have missed or that need stronger highlights. In the above photograph you can see that the right shoulder pad (as viewed) and the lower legs have been picked out with more layers to make them brighter.

You may find at this stage that some areas do not look as bright as you would like, but this is due to areas on the model being Doombull Brown. Once they are painted black the contrast will look much higher, which makes the highlights look brighter.

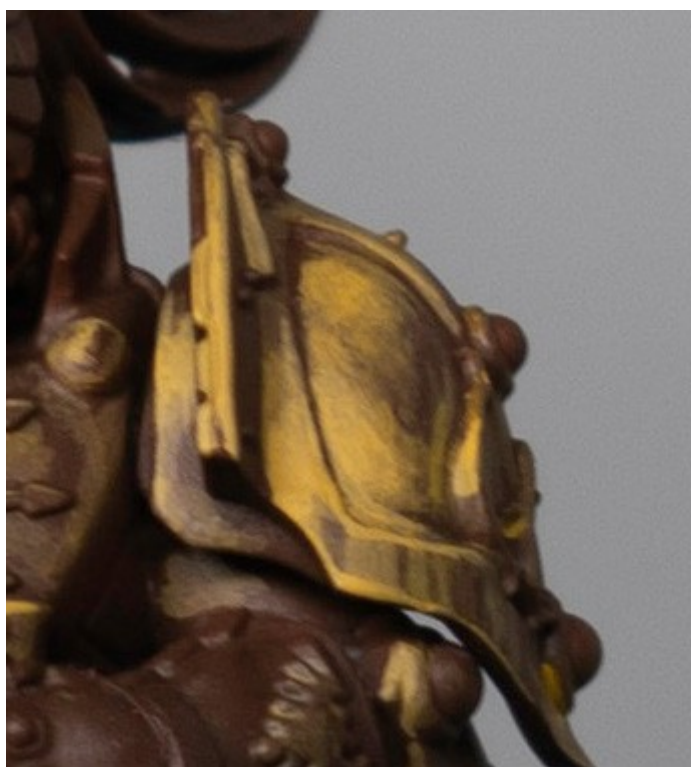


Here is where the armour starts to look much more golden. I have used Heavy Goldbrown and strengthened all of the primary highlights. Note that the secondary highlights/bounce highlights have not been brightened.

It is perfectly acceptable at this stage to not take the highlights any brighter, especially if you want to use the model for tabletop gaming. The contrast is high enough that the model will stand out on the tabletop but the colours are warmer and richer now than they will be once the brighter highlights are added, so it is down to personal preference.



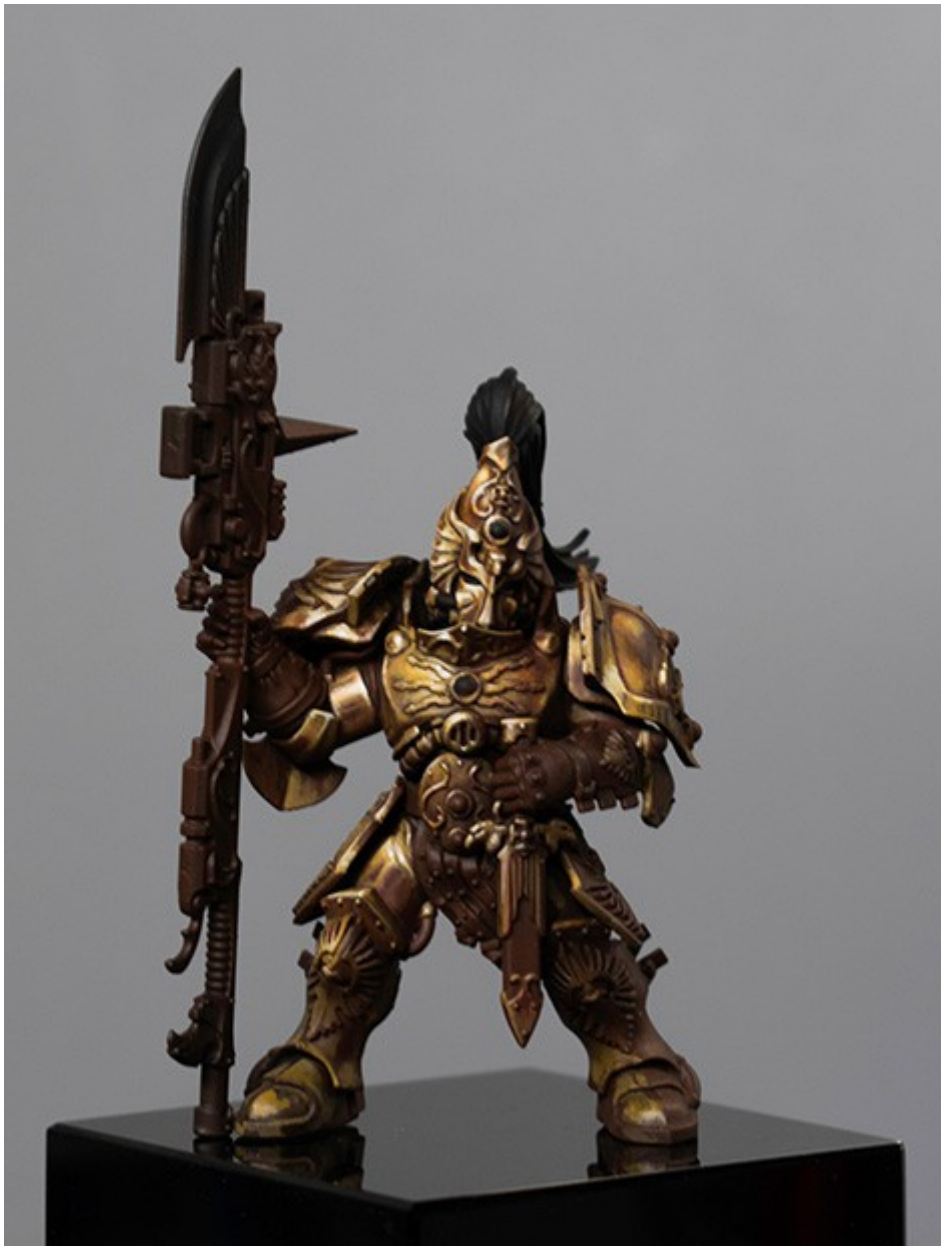
Previously we looked at this zoomed section to look at the bounce highlights. Here you can see how the primary highlight has been brightened with Heavy Goldbrown but the secondary highlight is still just English Uniform. In particular look at the brush marks, which are lots of vertical lines built up, resulting in the edges of the highlight looking soft and uneven. This makes the highlights look more blended with little work, whereas if you built up the highlights with horizontal lines, the edge would be very hard and could only be blended with lots of layers and/or glazing.



This shoulder pad shows another area that can be tricky with NMM. Reflected areas and images on the metallic surfaces have to be represented, but there again is no reference from using lights to help you. In this case you just have to make it up, but remember to keep the brightness accurate to the overall model, so if the area is on the opposite side to the primary light source, as in this case, then these reflections will not be painted as brightly.

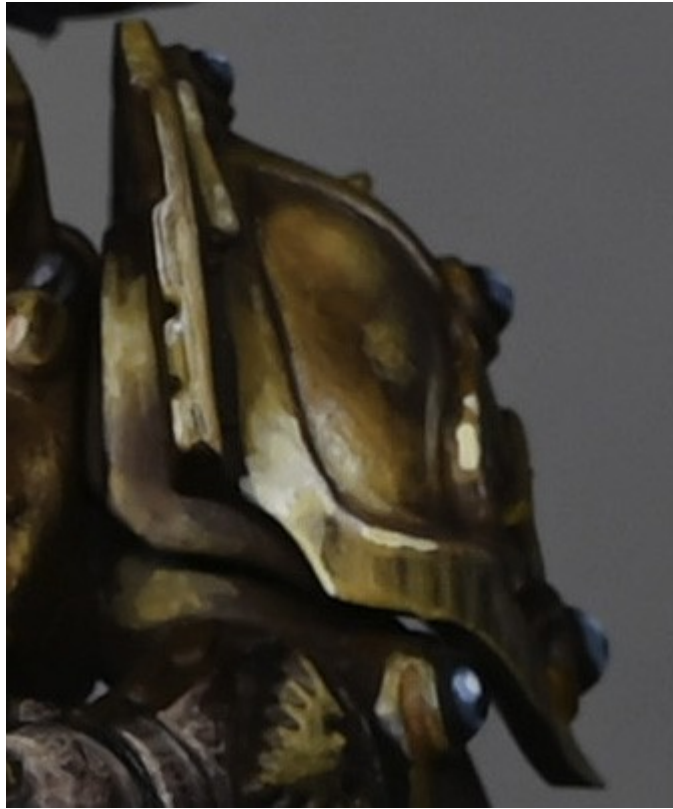


The lines on the trim of this shoulder pad are also to represent reflections of objects that would be surrounding the model on the battlefield. They are just vertical lines with uneven spacing.



Now we are moving to the final stages of the NMM effect. Here I have brightened the primary highlight points using Ice Yellow. You should be able to see that adding these brighter highlights has desaturated the model, removing a lot of the yellow colour. You should also see that various areas on the model have been painted black in anticipation of them being painted fully, this has also increased the contrast of the model, making the brightest areas look even lighter.

When applying the Ice Yellow you should be careful as the paint is very opaque, but also as it is majority white there is a chance that the model can end up looking chalky or that the paint will be too thick. It is safer to have the paint slightly too thin and build up in multiple layers than risk having the paint too thick. 2 parts water to 1 part paint should give a good result.

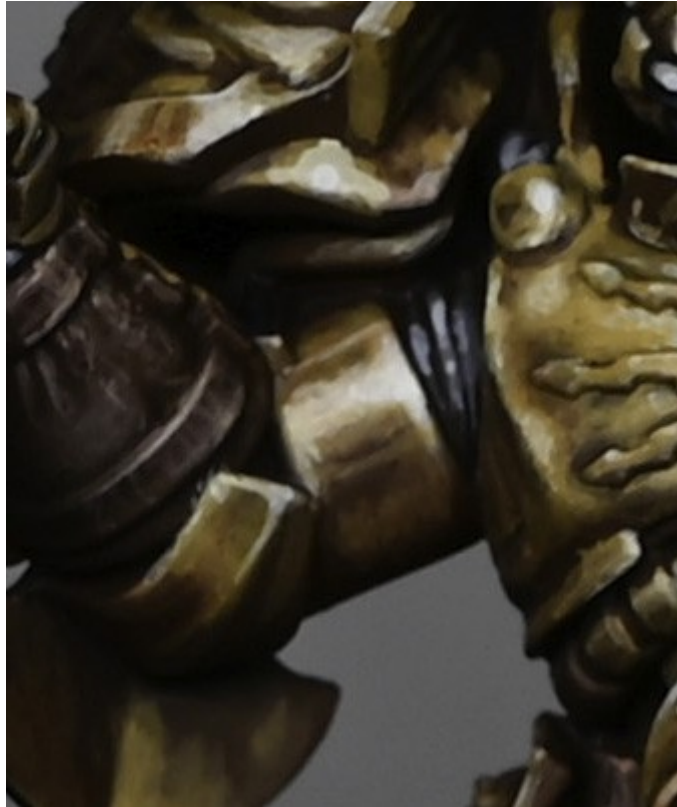


Now it is time to add glazes. I used Mournfang Brown mixed with water around 7 parts water to 1 part paint. Load the brush (large brush is better) and run the majority off on some kitchen roll until hardly any mark is left when the brush touches it. When applying it to the model do not go over the brightest highlights as it will make them dull and dirty. Place the brush starting next to the highlights and then drag it towards the shadows so any pooling that happens will be in the darker areas.

Mournfang Brown will add a lot of richness back to the colour that was removed with the bright highlights, as you layer up the glazes it will also soften the transitions making them look neater. As the Mournfang Brown is lighter than the base Doombull Brown you risk reducing the high contrast of the model. To fix this you can glaze in Rhinox Hide to the darkest areas. If you decide you want the shadows even darker then feel free to glaze Abaddon Black into the very darkest shadows, but again remember that adding black will remove colour.

In the photograph below you can see again more work on the arm section zoom. I have glazed Mournfang Brown in the shadows and over the secondary highlight at the bottom to make them neater and blend in better. You can also see how I have added some extra reflections to make them look more detailed and interesting. This again is due to preference. The highlight above the primary highlight is Ice Yellow and the one below is English Uniform – Remember earlier I talked about being able to go back to areas on the model and add highlights based on how the model looked after the brightest highlights had been added.

I have also added small white highlights on the very brightest areas on the model. These should be added very sparingly as too much will have the opposite effect and actually make the model look less metallic.



Below you can see a super zoomed in view of the head and chest. The helmet and chest area in particular are important to show how the darker areas on the model are still detailed. This isn't a result of shining a lamp at the model, but how it has been painted. It also shows how having the gems, eyes, hair being painted can have a big effect on the look of the NMM.

Even the metal tubes on the left and right of the face have been painted in a different brightness to emphasise the light direction, with the tube on the right side being just grey while the tube on the left side being taken to white.

Another thing to consider is that if you find the highlights on the darker side too bright (they should be no brighter than Heavy Goldbrown to begin with, only the primary highlights should go higher to Ice Yellow) then you can use glazes of Mourfang Brown and Rhinox Hide to dull them down. Glazing over them will not remove them, so the details will still be there, just not as bright. This will have the added benefit of making them look neater as they will blend in better from the glazing.



Final results below! Here you can see the final look of the NMM gold as well as other areas on the model being worked on to increase the effect. It's important to note that having other areas on the model finished will frame the NMM gold that you have been painting and give a better result, particularly with areas like the gloves, which were brown like the armour and so will take away from the NMM effect until they are textured.

Now the model just needs to be finished and have a base added!



The end!