



HOW TO PAINT A HARD-EDGE CAMOUFLAGE ON A PANTHER

VICTRIX GAMES

COLOR CHART

CAMOUFLAGE

DARK YELLOW


 Dark base (A.MIG-901)

 Base (A.MIG-902)

 Highlights (A.MIG-904)

GREEN AND BROWN

 Olive green XF-58 (Tamiya)

 NATO brown XF-58 (Tamiya)


 Dark yellow XF-60 (Tamiya)

TRACKS

 Dark tracks (A.MIG-035)


 Graphite pencil

ACCESORIES

 Black Templar (Citadel Contrast)


 Cygor brown (Citadel Contrast)

 Flat brown (984, Vallejo)


 Oily steel (865, Vallejo)

WEATHERING

FILTER

 Tan for 3 Tone Camo (A.MIG-1510)

WASH


 Dark Brown for Green Vehicles (A.MIG-1005)


CHIPPING EFFECTS


 Chipping (A.MIG-044)


 Dunkelgelb Shine (A.MIG-905)


STREAKING EFFECTS

 Streaking grime (A.MIG-1203)

 Streaking grime for interiors (A.MIG-1200)


 Earth oil brush (A.MIG-3514)

 Rust oil brush (A.MIG-3510)

 Yellow oil brush (A.MIG-3502)

DUST EFFECTS (PIGMENTS)

 European earth (A.MIG-3004)

 Dark earth (A.MIG-3007)

PAINTS

Most wargamers normally utilize acrylic paints, such as Vallejo or Citadel to paint their miniatures. These paints are not toxic, are easily thinned with water and cure in seconds. However, we can find other types of paints in our local hobby shop: enamels, oils, pigments, lacquers, etc; which are commonly used by scale modellers for example to create weathering effects. It is important to note that these other types of paint require specific thinners and are used differently, as you can see in the two boxes below. Lacquers, such as Tamiya paints, can be considered as acrylic since we can use water to thin them. However, they work better with isopropyl alcohol.



Legend:
 Acrylic paint
 Enamel/oil based paint
 Lacquer

ACRYLIC AND ENAMEL / OIL PAINTS

ACRYLIC PAINTS

- Thinned in water
- Brush cleaned with water
- Dry in seconds
- Once it is dry, it is impossible to wipe it away

VS

ENAMEL / OIL PAINTS

- Thinned in White Spirit or similar
- Brush cleaned with thinner
- Dry in hours
- After hours, it is still possible to wipe it away

STEP 1 – PRIMER COAT

Using a modelling knife and files we remove the lines and cast flashes. Then, we can put all the pieces together using a specific glue for plastic kits. Let it dry for one hour, and then we can apply the primer coat. This is essential and we should always apply it in first place. Primers are a special type of paint that is extremely resistant and facilitates the adherence of our regular acrylic paints. I normally apply the primer coat with an airbrush or spray to create a very thin layer. This is very important when painting tanks because we have large flat surfaces. With the brush, we can load too much paint and accidentally create weird textures and even cover small details. I normally use grey primer because it is easily covered by the rest of colors. Let it cure overnight.



Let cure the primer for a few hours or even overnight.

STEP 2 – DUNKELGELB (DARK YELLOW)

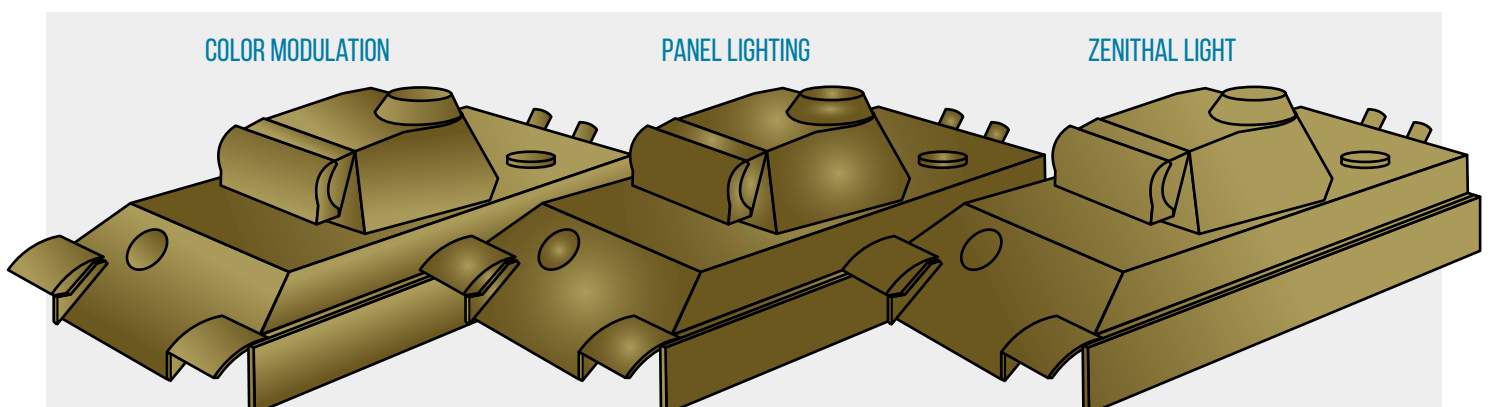
Next day, we start painting the camouflage. Take a few minutes and check some books or websites to find the right camouflage. After all, we are painting historical miniatures. Once you have chosen a given camouflage, you should consider how to paint it. In my case, I decided to paint a typical German tritonal camouflage with hard edges: green and brown spots over the classical dark yellow. In this particular type of camouflage there is not a dominant color given that the three colors should cover the same area; and therefore, it does not matter which one we paint first. However, I chose dark yellow, since it is the easiest one and it is also more realistic (German tanks were initially painted in dark yellow and quite often the crews painted the green and brown spots).

My preferred airbrush is a Renegade Krome from Badger with a 0.2mm needle. I normally use 2 bars but in some cases I go up

to 3 bars. Note that this might change depending on where you live since the atmospheric pressure is distinct in different places. Although most of the paints for airbrush are ready to be airbrushed, I always thin them a little bit more. For acrylic paints, we can use simply water although is always recommendable to use the thinner from the same company. By using diluted paints we avoid clogging problems and it allows us to play with the intensity of the color: we can apply a different number of layers to make a color more or less opaque. This facilitates the generation of smooth transitions between colors.

We have different methods to apply the highlights in scale models. The classical method is the zenithal lighting, which considers a single source of light (such as the sun). However, we have more options: panelling, pre-shading and color modulation. In my opinion, the color modulation works the best with these

LIGHTNING STYLES



tiny models. The problem of small objects is that their surfaces are small, and therefore, the amount of reflected light is also very small. This means that small objects look darker than bigger counterparts even if they are painted with the same color. To overcome this problem, the color modulation will force the contrast -the difference between the lightest and darkest tone of a color. Although this method is extremely unreal (it resembles a 3D render), I find it perfect to bring our tiny models to life.

Following the color modulation method, we should paint each panel or surface independently, with their own shades and highlights. The better results are obtained when we place the final highlight of one panel in contact with the darkest shade of another adjacent panel. To do it we can use different masks to cover the adjacent panels, such as Blu-Tack, masking tape or a piece of

paper. Therefore, we can work easily one panel at a time without ruining the adjacent ones. I acknowledge that this is sometimes very difficult in these tiny models. But do not worry, we do not need to get perfect lines and transitions. Just try to get a nice contrast between the more striking panels (the biggest ones).

To paint the German dark yellow, I normally use the color modulation set from AMMO of Mig Jimenez, which includes 5 successive colors. These are ready-to-use colors so that we do not need to mix anything. For these tiny tanks, I airbrushed only three colors of the set: dark base (A.MIG-901), base (A.MIG-902) and highlights (A.MIG-904). I started with the darkest and then continued with the base and light. For the final highlight, I used a normal brush and highlights (A.MIG-904) to painted small details such as hatches, rivets and some edges.



The color modulation is unreal, but it creates very interesting contrasts in our tiny models.

STEP 3 – CAMOUFLAGE WITH AUTOADESHIVE PUTTY (BLU-TACK)

Depending on how the edges of the camouflage spots (soft or hard), we can follow one approach or another to paint them. For soft-edge camouflages, where the edges of the spot are diffused -such as green serpentes-, we can use the airbrush with high pressure and very thinned paint. For hard-edge spots, where the edge of the spot is clearly defined, we need to use masks to cover the previous colors and apply highlights and shades to each spot.

To paint hard-edge camouflages I normally use the auto-adhesive putty Blu-Tack. There are many other options in the market and you can use any of them, but be sure that it does not take your paint away! I began by covering one third of tank. Then, I airbrushed the green camouflage. To do it I used Tamiya paints (lacquer), which are very thin and works very nicely with the airbrush. As we did with the dark yellow color, I applied shades and highlights. I mixed olive green with a little bit of black (70/30)



Use Blu-Tack to cover 1/3 of the tank.



Airbrush the first camouflage color, with shades and lights.

for the shade and with dark yellow (50/50) for the highlight. And I followed the same lightning pattern I used before for the dark yellow color. Next, we repeat the process: first we cover the painted green surface with more Blu-Tack, and then we airbrush the

brown camouflage. To do it, I used NATO brown from Tamiya mixed similarly with black and dark yellow for the shades and highlights respectively. Finally, we remove carefully the Blu-Tack.



Cover again the tank with Blu-Tack and apply the next color.



Remove carefully the Blu-Tack.

STEP 4 – DETAILS

Using acrylic paints, we paint some elements of the tank now. For instance, I used Dark Tracks (A.MIG-035) to paint the tracks and black to paint the tires and machine guns. I found particularly handy the new Black Templar Contrast colour paint the tires due to its fluidity. You can also use a metallic paint to paint the tools and a brown color for the wooden parts. With a red brown colour, such as Flat brown (984, Vallejo), you can paint the rusted exhaust.

If you wish, now is the moment to apply decals or stencils. In my case I applied the tank number and German cross on both sides

of the turret. To avoid the silvering or icing effect (when the area around the decal get a whitish color) we can follow several tips. First, when cutting the decal from the decal sheet try to remove as much “transparent” decal paper as you can. Second, apply a thin layer of glossy varnish on the area where you will apply the decals. And third, use specific products to fix and soft the decal, such as Micro SOL and SET. Finally, using the airbrush we apply couple of satin varnish layers over the whole vehicle. This is extremely important, since we need this varnish to protect our previous work done with acrylic paints from the aggressive enamels and oils that we are going to use for the weathering effects.



Before applying the weathering effects, airbrush couple of layers of satin varnish.

STEP 5 – FILTER

The first weathering effect is a filter and it is done with enamels. This effect consists on a very thinned layer of paint that serves to slightly change the color of the surface. We do not want to mark the recesses, not yet. In my case, I used a brown filter to integrate a little bit better

the three colors of the camouflage and desaturate a little bit the dark yellow (it ended up too white). I used an enamel filter from AMMO, Tan for 3 Tone Camo (A.MIG-1510). To apply it first we soak the brush in the filter and then we remove the most part of it on a paper towel. Now, with the brush moistened with a

little bit of filter we extend it over the tank. Try to give the brush strokes in the same direction. Do not expect to see a clear and striking change. The effect is very minor, but it will count at the end. When you are done, wash the brush with White Spirit or

turpentine, no with water. I normally let it cure overnight since the next step is also done with enamels and we can accidentally remove the filter.



The filter effect is very subtly. Therefore, do not expect dramatic changes.

STEP 6 – WASH

The second weathering effect is a wash, and we do it with enamels too. The purpose of a wash is to highlight the recesses with a very dark color. Washes, inks or shades are found quite often in the acrylic paints ranges. However, we explicitly want to use an enamel here. The reason is that enamels take hours to cure, while acrylic paints dry in seconds. And as you will see, the idea is to remove the excess of the wash later and keep it only in the recesses. This is impossible to do with an acrylic wash.

I used another ready-to-use product from AMMO, the wash Dark Brown for Green Vehicles (A.MIG-1005). With a thin brush, we apply very carefully the wash exclusively on the recesses. Do not worry if you accidentally put too much wash or apply it in the wrong place! Let it dry for one hour or so. Then, using a cotton swab or a brush moistened with White Spirit or turpentine we remove the excess of the wash. By applying vertical strokes, we can also simulate streaking effects at the same time.



Do not worry if you put too much paint. We can remove the excess later.



I normally use a flat brush to remove the excess of wash.



Cotton swabs sometimes leave some cotton hairs behind.

STEP 7 – CHIPPING EFFECTS

Now it is time to return to acrylic paints to create the chipping effects. Although we can simply use a dark brown color to resemble the exposed metal, I prefer to use two colors: light and dark. The idea is to add volumes and create a 3D effect since the light color will resemble the edges of the scratch. In addition, these two colors will serve to create two different types of scratches: the dark brown color reflects deeper impacts, while the light color serves to create more superficial impacts that have not exposed the raw metal.

For the dark color we can use Chipping (A.MIG-044), meanwhile the light color will depend on the base color of our tank. In my case, I have a tritonal camouflage based on dark yellow. There-

fore, my light color will be a light yellow color such as Highlights (A.MIG-904), the last paint of the dark yellow modulation set. To create chipping effects we can use a piece of sponge and/or a brush. The sponge is quite useful since it creates random scratches very quickly. However, the control is limited. That is why I prefer to use a thin brush. After using water to thin the acrylic paint (50/50) we apply first the light color, and then the dark one inside some of the light spots. Only in some of them, do not cover all the light scratches. Note that it is very easy to overdo this effect. In terms of weathering effects, sometimes “less is more”. Do not cover the whole vehicle with chipping effects. Focus on the most logic and exposed areas, such as hatches and edges. You can also paint thin lines using a very thin brush and more water to dilute the paint.



Use Blu-Tack to cover 1/3 of the tank.



Airbrush the first camouflage color, with shades and lights.

STEP 8 – STREAKING EFFECTS

Again, we switch to enamel paints to create the next weathering effect: streaking effects. These effects are similar to washes, but have more pigment. Therefore, the effect is more intense. We can create our own streaking effects using oils or enamels, or we can use ready-to-use products such as the range of streaking effects from AMMO. For example, I have use two colors here: Streaking grime (A.MIG-1203) and Streaking grime for interiors (A.MIG-1200), red and grey green respectively. You can select one color or another depending on 1) the story you want to tell (for dust, you would use a light brown effect) and 2) the color of the given surface (if you use a similar color, the streaking effect will not be visible). For tritonal camouflages like this I normally pick these two colors, red and grey green, to create rust and dirt effects.

Both are clearly seen all over the camouflage spots and create an interesting contrast. To apply the streaking effects first we paint vertical lines on each vertical panel. After a few minutes, using a flat brush moistened with White Spirit we blend these lines. Do not worry if you remove most of the paint. These effects should be faintly. The weathering is created working layer after layer. Anyways, you can repeat this process as many times as you wish. Or you can even blend carefully a single line so that you do not remove much paint. However, do not overdo this effect neither. One of these more striking streaking effects here and there is enough. If you repeat the same effect in the same way all around the tank, the result is boring!



Combine different color of streaking effects.



You can repeat the process several times.



Here you can see the final results after applying several layers of streaking effects. Note that some are more intense than others. You can also work some streaking effects individually so that you have more control when blending them.

STEP 9 – WEATHERING EFFECTS ON HORIZONTAL PANELS

Previously we created streaking effects on vertical surfaces. However, we cannot do the same on horizontal panels. Instead, we can add some rust or dirt effect in the corners using enamels or oils. We could use exactly the same products we used for the streaking effects. However, I wanted to use oils here to show you another option. Oils are handling in the same way as enamels. We need White Spirit as thinner and they cure in hours. I picked three oils: yellow, rust and earth colors. The yellow will serve to desaturate a little bit more some parts of

the tank (those that are too white). And we will create dirt and rust effect using the earth and rust oils, respectively. We have several options to work with oils: 1) apply a little bit the oil in the desired area, and then blend it with White Spirit. Or 2) dilute the oil with White Spirit to create a filter-like paint, and then apply it in the desired area. You can try both. I usually apply the oils ONLY on some areas or even on a small part of it, such as the corner of a hatch. The idea is to create points of interest to gain more contrast.



Use oils of different colours to create areas of interest in some panels. For example, a redish corner on the turret.

STEP 10 – PIGMENTS

The last weathering effect are pigments. We can use these to create dust or mud effects on the lower part of the vehicle. Although we can also add it all around if you wish. But do not overdo it! We have two options to apply pigments: 1) dry (directly from the bottle) to create a regular dust effect and 2) wet (diluted with White Spirit) to create accumulation of dust. You can combine both. In my case I used the second option to create accumulation of dust between the tracks and wheels.

I normally mix a two or three different pigment to enrich the color. Then, I dilute it with White Spirit (around 50/50) and apply it on the tracks and lower parts of the tank. We need to wait

until the White Spirit is fully evaporated, which can take several hours. You can accelerate the process using a hairdryer. Once it is dry, using a cotton swab or old brush we remove the excess and blend the edges of the spots.

After this step, DO NOT apply any varnish or you will dramatically change the pigment effect. If the pigments get wet with the varnish, they will change the color and become very dark. This is in fact useful if you want to simulate mud, since you can use glossy varnish to darken the pigment and give it a glossy effect. Alternatively, if you want to protect the real color of the pigment, you can carefully apply now a little bit of “pigment fixer” from AMMO.



The more pigment, the more dense will be the wash.



Wait until the thinner is completely evaporated.

STEP 11 – FINAL TOUCHES

To finish the tank, we can now use acrylic paints to paint the crew and small accessories, such as the wooden part of the tools. In addition, we can use a

graphite pencil to gently mark the edges of the tracks and other metal part.



Instead of using a metallic paint, we can mark the metal parts, such as the track, with a pencil.

FINISHED MODEL



GALLERY

