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BLUE LIGHT SPECIAL

Łukasz Orczyc-Musiałek's Sherman Firefly

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1:35



BLUE LIGHT SPECIAL

It was in late 2024 when I received an email from Peter, my Patron and friend, informing me that he wanted to commission me to build a specific tank from the Sherwood Rangers Regiment. This wasn't a surprise - just another commission for a collector to build. However, over time, what might have seemed like an ordinary order at first turned into something extraordinary. A completely different perspective on this project and the feelings I grew up with were sparked by a book detailing the unit's exploits in Europe in

1944 and 1945. Band of Brothers, authored by James Holland, has brilliantly described the combat trail and profiles of individual soldiers, making it an excellent addition to the historical record. Each page was rich in new information and built a growing sense that, in some perhaps irrational way, I was connected to these guys - they were a territorial unit, and now I am a soldier of a territorial unit, but in a different corner of Europe.



Dedicated to Tytus.



SHERMAN FIREFLY

MODELLED BY
ŁUKASZ ORCZYC-
MUSIAŁEK

Finding information about a specific tank, the Blue Light Special, the crew members, their fates, and searching for photos built the emotional charge and preparedness to complete this project in June 2025, when my schedule was finally free enough for me to focus on its implementation. I enjoyed this experience far more than any other model, which clearly translated into my workload and commitment and was significantly greater than on any other project.

Peter gave me complete freedom to implement my ideas. All aspects of the model's construction, painting, and final finishing were entirely my responsibility. The same applied to the model base. Peter suggested adding a figure of a little boy, a reference to my son Tytus. The idea perfectly integrated into the overall diorama, adding a wonderful interaction between the crew members and the little boy waving hello as they drove along the road repaired by the engineers. Plain and simple, yet perfectly reminiscent of the photos of children preserved in the archives, which you can see on the next page.

Having only 2 pictures where Blue Light Special was presented I analysed them looking for some special features. I managed to copy five elements onto the model:

- the tank's proper name, BLUE LIGHT SPECIAL. After enlarging, I was able to detect differences in font size and the size of the lettering, which I later tried to replicate onto the model. Originally, the lettering was hand-painted by the commander, hence the uneven size and shape of the letters;
- the vertical streaks visible in both pictures were durable enough to clearly stand out on the armour;
- a box on the fender, a common practice used by crews to carry various pieces of equipment and crew personal belongings;
- camouflage netting placed on the front armour;
- tracks with special, attachable "duckbill" elements which are special, wider segments that were placed on the standard tracks to increase their width. This allowed the tracks to have a larger contact surface with the ground, preventing the tank from getting stuck.



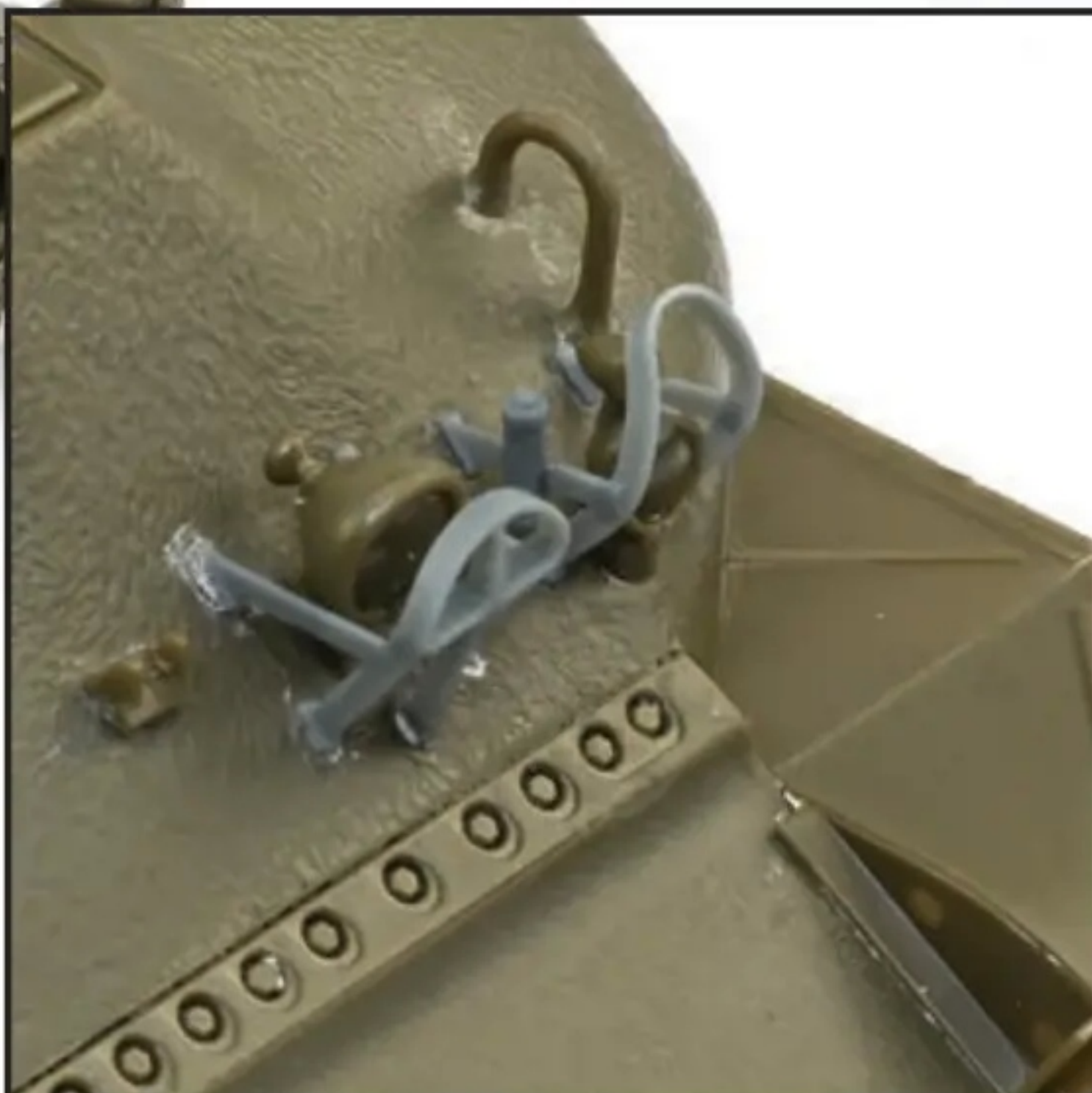
The starting model was the Asuka kit, which is the best available on the market. The kit includes a number of accessories that are great for enhancing the overall look of the model and its crew equipment. The extensive accessories for this model were based on 3D printed components, as well as metal ones. I collected more than I needed, but I figure it is better to have a variety to choose from than to be missing a detail.



The hull and its equipment were assembled quite quickly. The perfect fit of the components made the work much easier.



The grey elements are 3D prints, which are significantly better than the kit components. This is due to their accuracy and the lack of technological limitations in production. Printing individual elements offers more possibilities than producing them from plastic injection moulding.





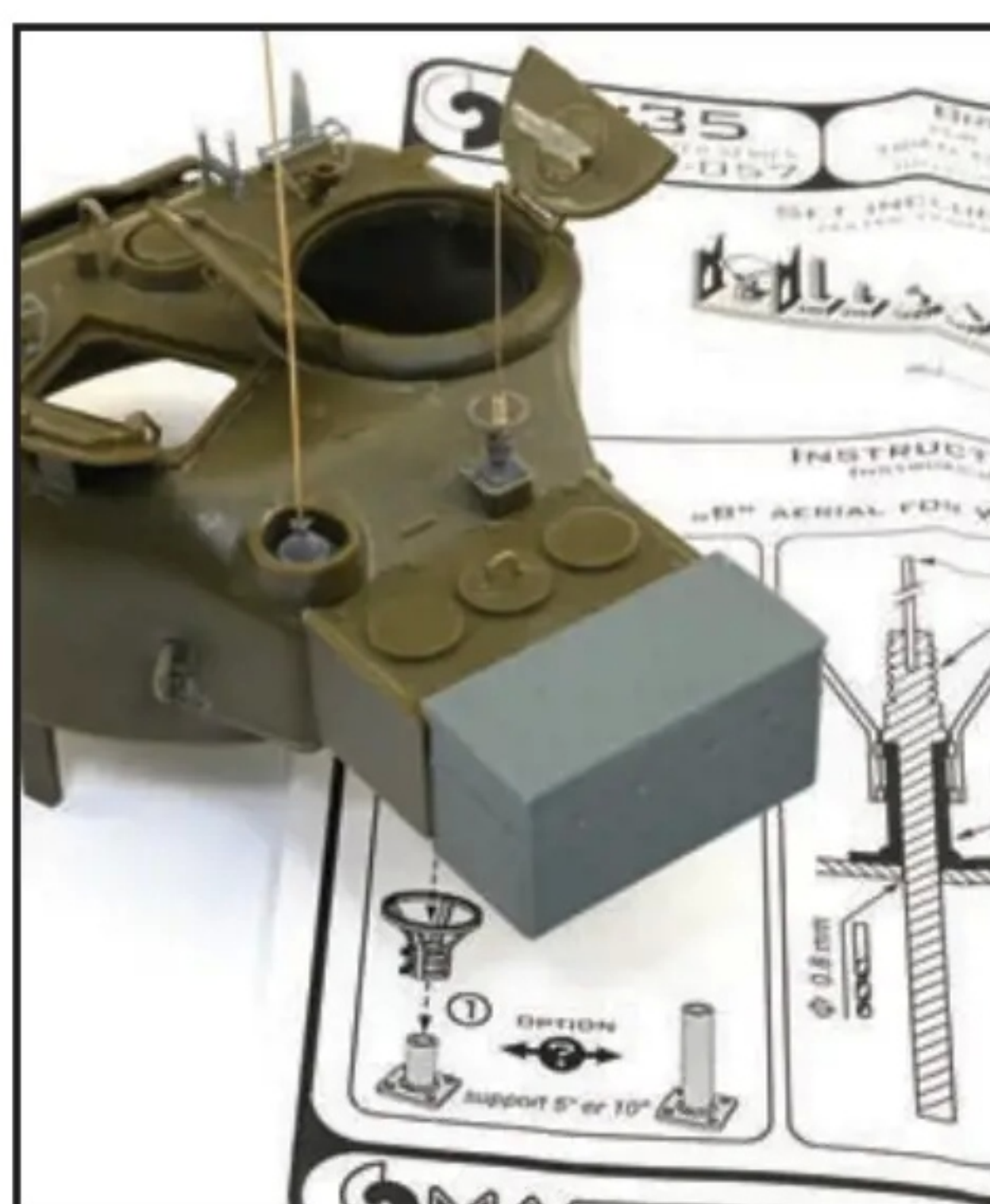
In the model, I replaced the tracks with 3D-printed, movable ones, mixing two sets with different patterns on the overlays. This isn't new, as you often see different track types mixed together on vehicles. This was due to the needs of the moment and the materials available in field workshops. The BLUE LIGHT SPECIAL had duckbill tracks, so I am also using it here.



The metal barrel produced by Master Model for this model looks perfect. The resin machine gun barrel complements it perfectly. The same company also offers antennas for British vehicles. The additional box attached to the turret is also 3D printed, this time by the Italian producer HD Models.



The open hatches will house crew figures.



A mixture of glue and putty is ideal for creating an improved texture on cast steel. The resulting unevenness perfectly replicates real steel. However, it's worth testing how it looks on a real vehicle to avoid overdoing the unevenness. Each vehicle has its own distinctive and individual characteristics, so we'll treat the surface differently on a Sherman, a T-34, and yet another on a German Panther. Gentle sanding brings the surface to perfect condition.



One of the details I noticed in the BLUE LIGHT SPECIAL photo is a weld line on the additional armour, which looks different than the model manufacturer suggests. First, I removed the plastic welds, then carved a deeper groove for the new ones, and then created new welds by laying lines of green stuff. I achieved the desired shapes using a hobby knife. I did the same on the other side of the hull. The result is

definitely better than before the entire operation. On the BLUE LIGHT SPECIAL and other tanks of this unit, you can see additional boxes added by the crew, which likely housed various tools or equipment. These were most often bolted to the fenders. Fortunately the producer provides nice set of extra stuff and the modeller has a lot of options to upgrade the model.



I glued nuts into the hull and turret to hold the bolts. These provide good grips while working on the model. I've been using this simple method for years, and it's never failed me. Simplicity is the best solution, and in this case, the ability to manipulate the model is crucial for comfortable work.

After that I primed the entire model with VMS green primer. Two thin coats were enough to prepare the surface for the proper colour.



I prepared the individual components for painting. I drilled holes in each carriage and inserted a wooden stick into it for easier handling during further work. I always choose the least visible places, but at the same time pay attention to the construction of the entire element so as not to damage it during drilling. I do this with almost every model, which is why the sticks are painted in different shades.



XF-13 was the base shade for further colour modelling. A touch of lighter light was added to the base colour to paint the edges most exposed to light, creating a colour gradient across the entire model.



I painted all the details on the model with a brush and acrylic paints.



I painted the rubber wheel covers in the appropriate shade, and also used a metallic marker to dab the areas where the track teeth were leaking from the wheel edges.



Painting the tank's proper name required careful analysis of the photo and surface preparation. I hand-painted the entire inscription with acrylic paint using an enlarged and printed photo as a template. Its distinctive features include varying letter sizes and a diagonal arrangement.



The details were painted in a different shade of green to emphasize their location and shape. This way, using contrast, I created an additional three-dimensional effect.

I tried to replicate this.

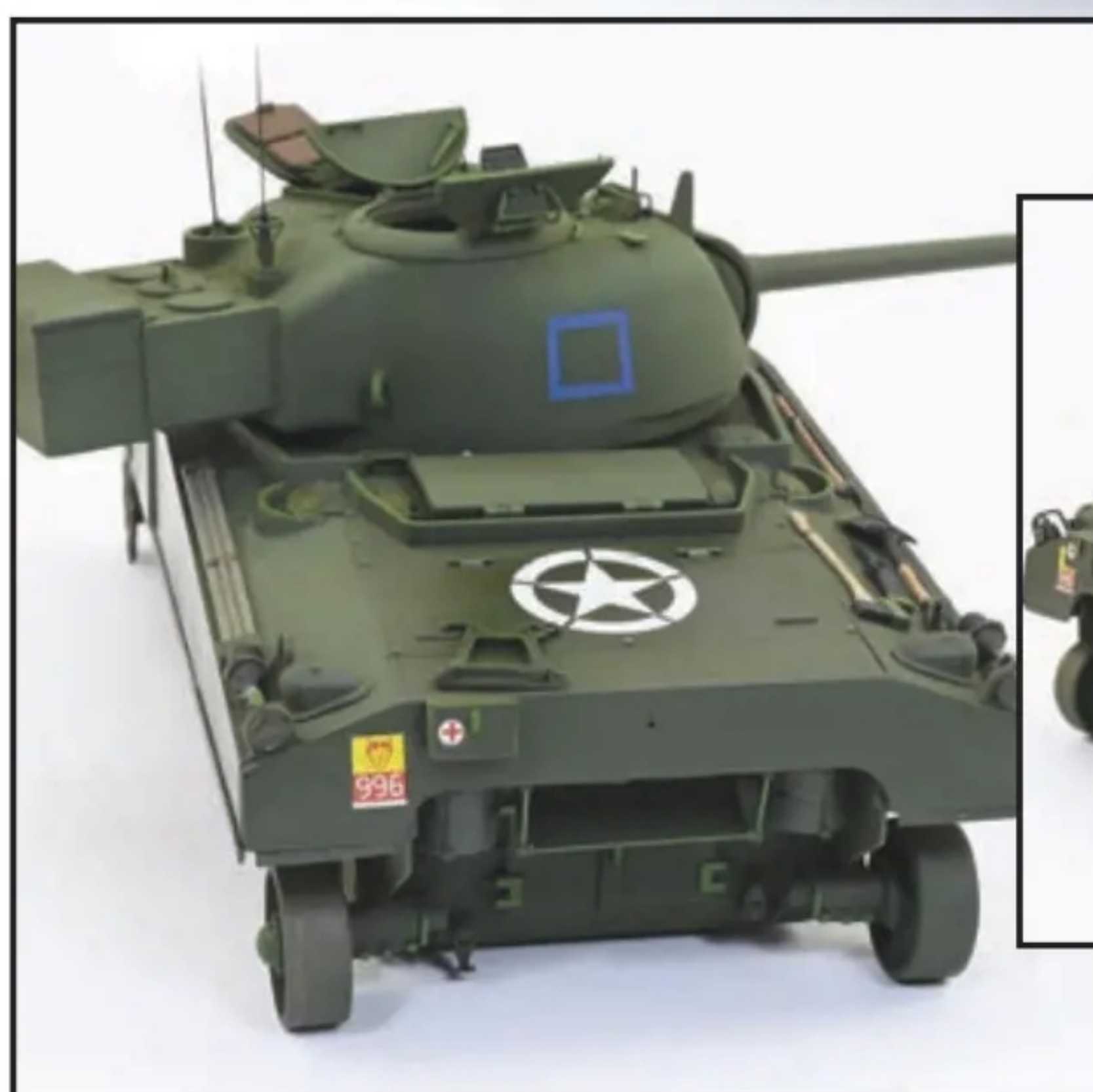
This was the second tank with this name to serve in the Sherwood Rangers. Previously, the Sherman M4A2 had borne this name. Interestingly, painting the name was one of the first actions the tank commander took upon joining the crew.

On the turret, the B Squadron insignia is a blue square. I airbrushed it, first covering the surface with masking tape. Additionally, other markings appeared on the model, such as the vehicle number, a white star, and information about the anti-freeze fluid. The front and rear of the vehicle were enhanced with tactical markings. I applied all decals to a thin layer of glossy varnish.





The model's appearance before weathering doesn't define its final colour. The colour shift of some surfaces will play out well once the model receives subsequent layers of effects. The amount of light the model reflects is significantly less than in the real vehicle, so it's necessary to support individual elements by enhancing their shapes with lighter shades, often quite contrasting with the base camo colour.



I started by applying a layer of chipping medium, so I could work on the other colours later.



For a thin layer of white camo, as a leftover from winter masking I used white paint with a touch of deck tan which is the best solution for this effect. I applied it with an airbrush in an irregular pattern, focusing only on areas where it might have remained after use and not thoroughly cleaned by the crew.



Here is also the set of tools I used for removing the paint. The paint soaked in water simultaneously activates the chipping medium applied earlier, making it susceptible to scratching, washing, and general damage. This way, you can create a good-looking, worn-out winter camo.



This is how the effect seen here was created. The remnants of white paint beautifully contrast the green of the original camouflage.



A few strokes with a sharp hobby knife and the appropriate scratches appear on the hull sides, simulating the vehicle breaking through bushes or low trees. Caution is advised, as pressing too hard will cause extensive damage to the paint.



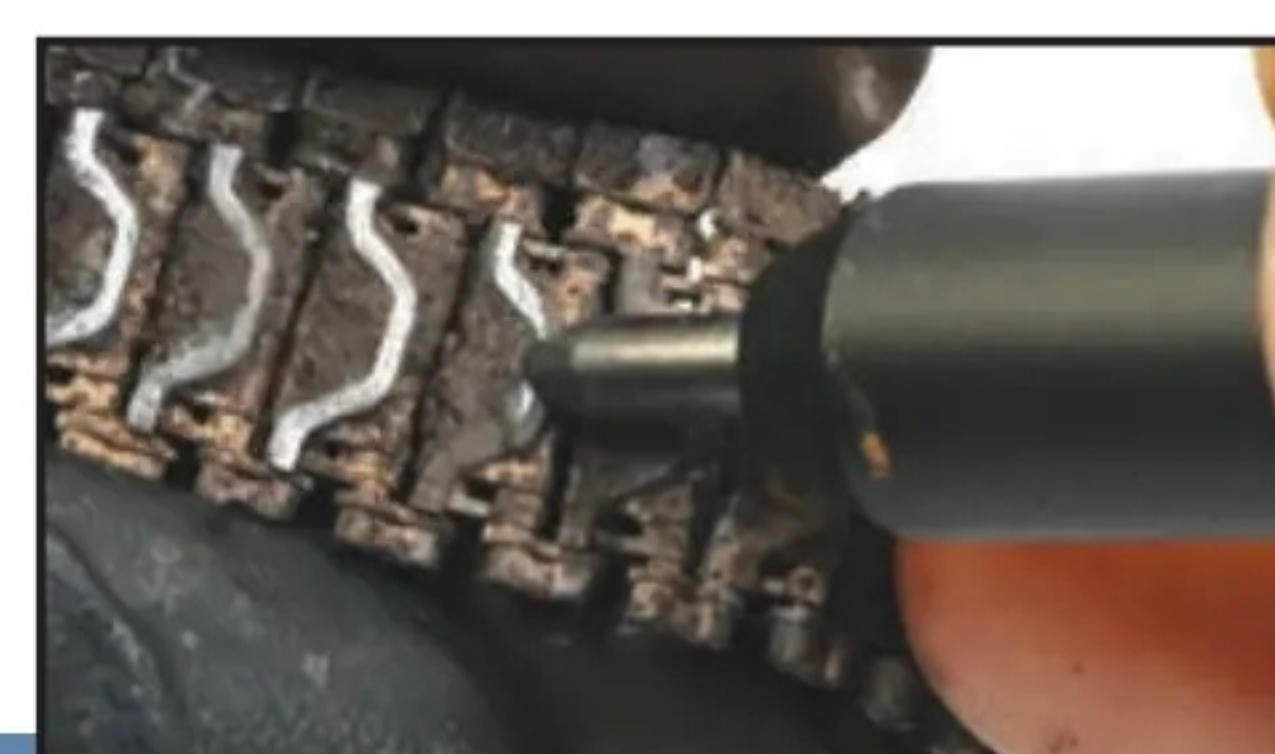
Wash is the first step in proper weathering. Accentuating the recesses and convexities simultaneously adds the appropriate three-dimensional effect, which is essential for a model. In the real vehicle, this effect is created by light hitting the surface, creating varying degrees of natural illumination. Any excess of dark brown paint was removed with clean thinner.



At this stage, leaving the model to dry, I began painting the tracks. The first layer was a dark gray, which is ideal as a base colour for further work. Heavily diluted light brown oil paint created discolouration but also acted as a wash.



The pigment mixture created a dried mud effect, which will only be visible in a few spots when the work will be finished. Nevertheless, it's necessary to create a proper usage history on the model.



Before final placement on the groundwork, Smart Mud used for the groundwork was applied with the contact surface treated with polished graphite.

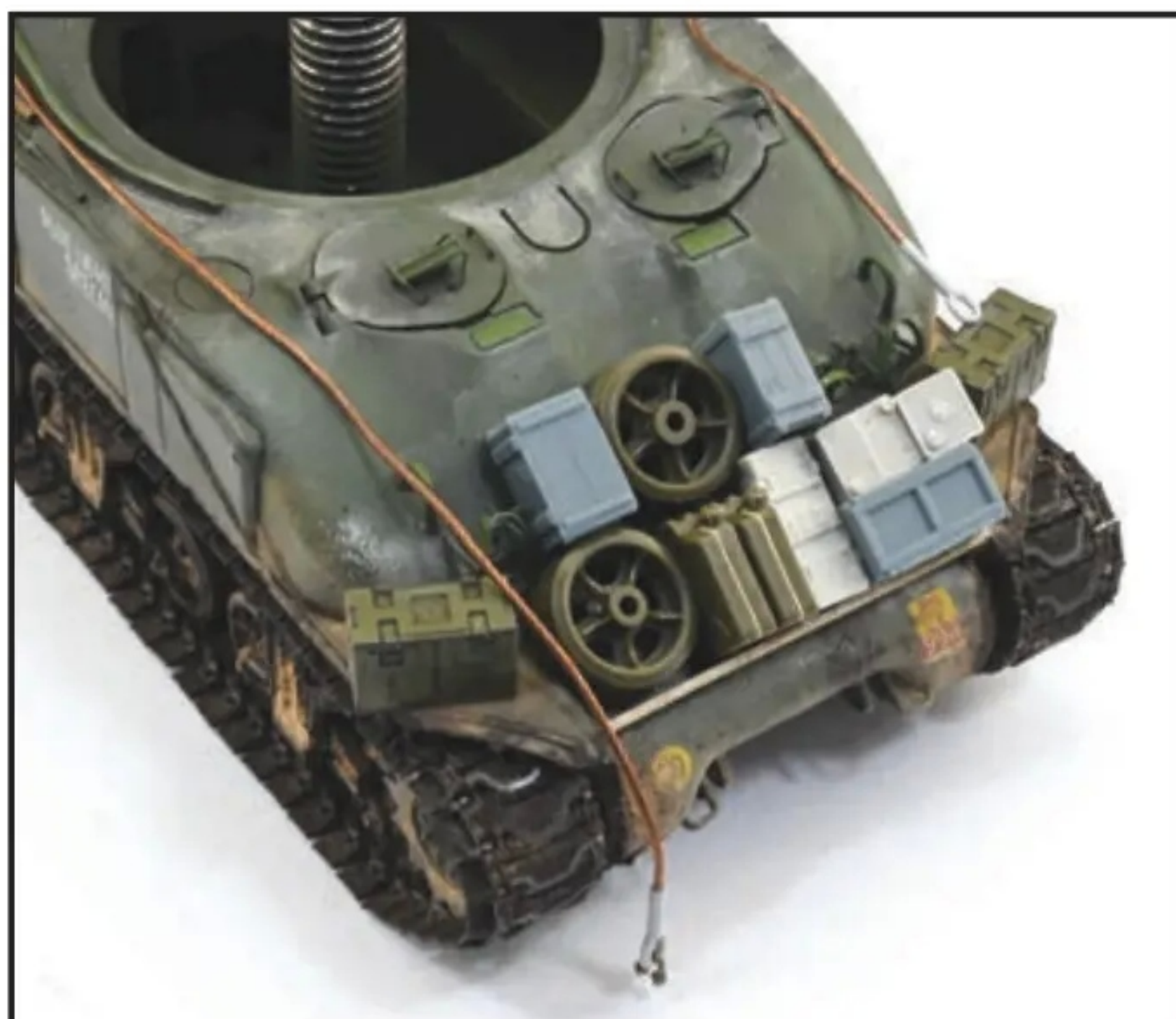


Building the right look for a bottom of the hull is quite difficult and requires a multi-step process. Generally, most vehicles follow the same pattern - first, a layer of old, dried mud should be applied, followed by fresher layers. For this model, I decided to create two colours, or rather shades.

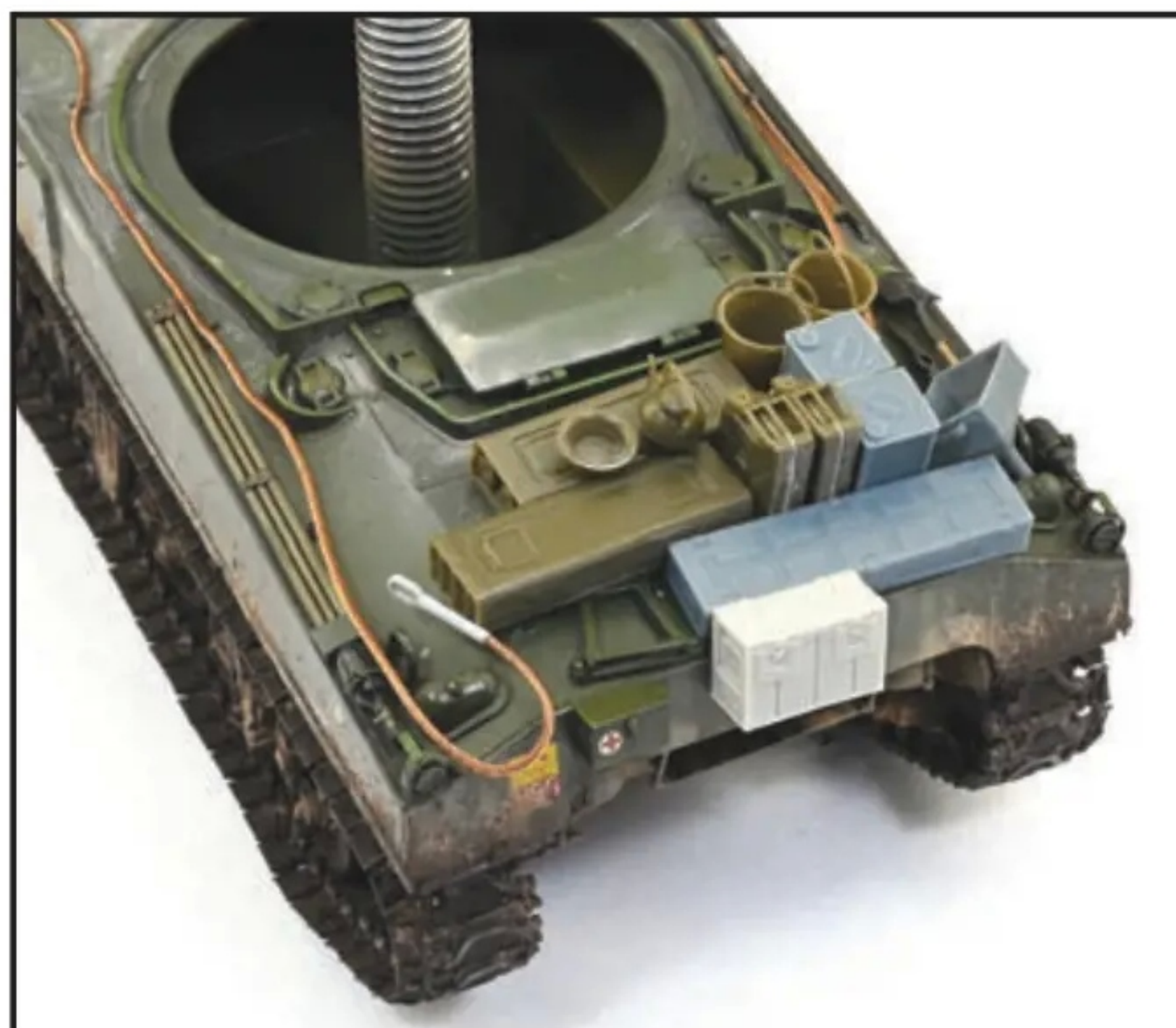
The first is old, dry, light, and turning into dust in some areas, and the second is fresh, damp, and dark, with additional splashes that naturally occur when driving through deep puddles or uneven terrain. Additional stains from moisture or operating fluids are highly recommended. Of course, these surfaces are the least visible on the model, but they shouldn't be avoided just for that reason. They are an integral part of the vehicle and should receive the same treatment as other components.



The same mixture was applied to all the wheels. I painted and weathered all the chassis components before gluing them to the model, which made my work much easier. Reaching all the nooks and crannies is easier when the component can be rotated in any direction.



The stowage is one of the most eye-catching additions to a model. I always use a variety of materials and products to enhance the vehicle, primarily trying to create an interesting-looking mess while also telling a story. Another key element is preparing the individual components so that their arrangement is as realistic as possible. The simplest way to achieve this is to look at the vehicle and stowage through the eyes of a soldier. This avoids unnaturally fitting pre-made elements into the model in favour of a realistic arrangement, exactly as a crew member would.



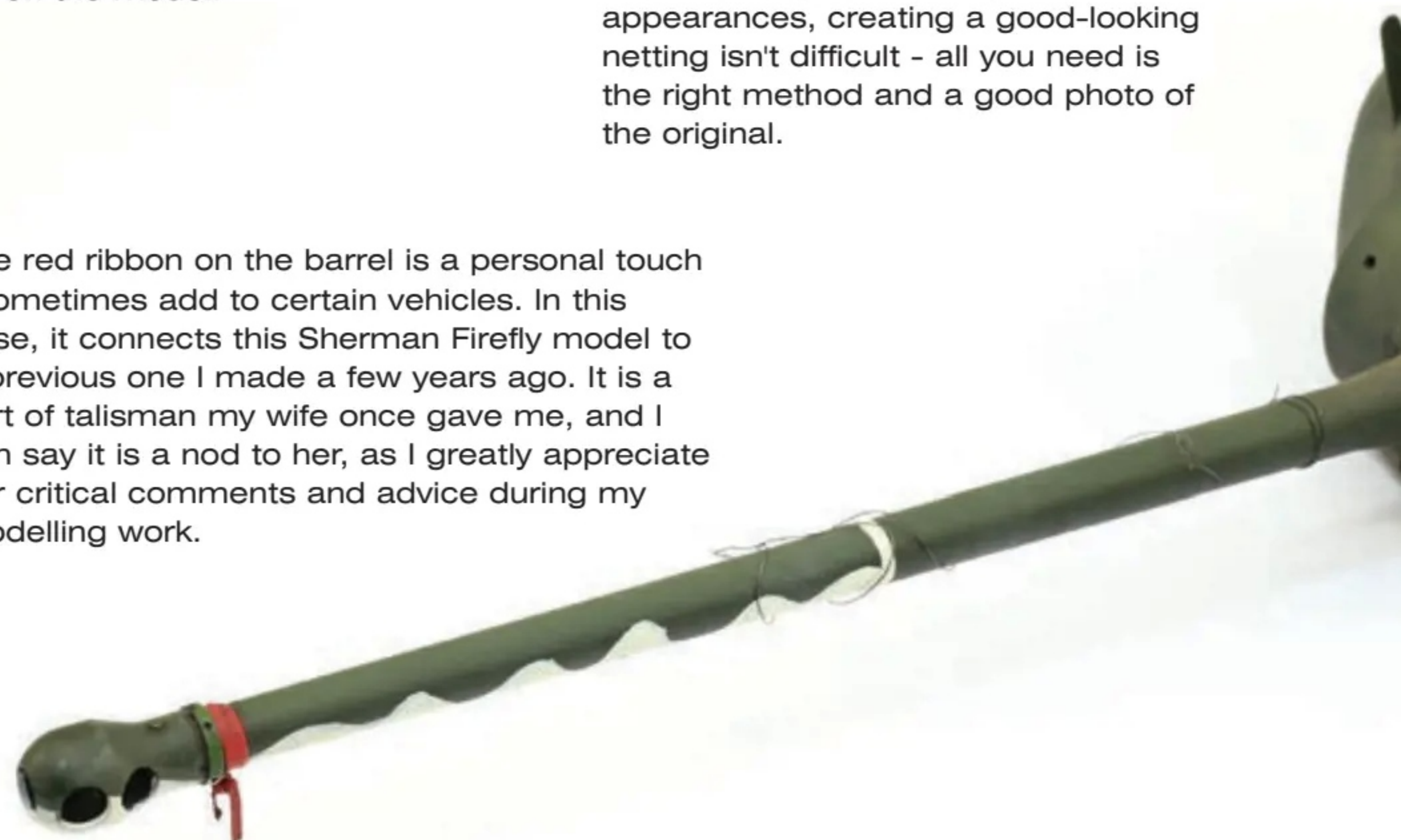
It's crucial to remember that a vehicle like a tank moves over uneven terrain, and the ride comfort is far from what we're used to in our everyday cars. Every element on a tank must be logically attached to its surface; otherwise, there's a high probability that valuable items will be lost due to vibrations, jolts, air blasts from shell explosions, or any other circumstances. Of course, it's worth using photos of real vehicles to understand the arrangement of additional and non-standard equipment. Any strings or other attachment methods should be in scale and look natural on the model.



Here, I used pre-prepared elements from Eureka XXL, Pimp My Miniatures, HD Models, Plus Model, and a few bits and pieces from the base set. The camouflage netting is a specially prepared medical gauze with added coloured stripes. Contrary to appearances, creating a good-looking netting isn't difficult - all you need is the right method and a good photo of the original.



The red ribbon on the barrel is a personal touch I sometimes add to certain vehicles. In this case, it connects this Sherman Firefly model to a previous one I made a few years ago. It is a sort of talisman my wife once gave me, and I can say it is a nod to her, as I greatly appreciate her critical comments and advice during my modelling work.



The model in all its glory with full stowage set and weathering effects.



Very often, at this stage, the model is already finished and ready for presentation. But everything depends on the individual modeller's approach. In this project, there was no intention of ending it at that point, although I would have been absolutely proud of my work if it had. This moment, and this state of the model, was a milestone in my plan that I had to achieve for the entire project to be 100% complete. I still have some way to go.





I prepared the crew figures using several kits. Initially, I used Alpine Miniatures products.

These are the best available figures on the market, with excellent detail and perfect sculpting. I only added headphone cables, but I also made a small change by switching the arms between two figures to better fit the model.

Each figure was painted with acrylic paints. However, I made the mistake of placing one of them in the front hatch, which in reality could not be done due to the gun's ammo rack being placed there. So I swapped it with another from Panzerart. And in the end, it turned out even better, as it allowed for an even better-looking interaction between the crew and the boy waving friendly as they marched. This child figure is from Dynamo Models.



Note that the colours of the overalls are varied, which is clearly visible when the figures are placed side by side. I'm sure this was also the case in reality, as the uniforms were made of various shades of material, especially in wartime production conditions.

A sort of icing on the cake is a small raven figurine from the Mantis Miniatures set, which I decided to perch on a tree that will soon appear in the diorama. It is not just a bird, but rather a symbol of the death that accompanied soldiers during combat. This is a very personal addition, stemming from an experience I had many years ago, where a raven was a very telling symbol I saw.



As the base for the diorama, I used a tin box, which was the perfect height and diameter to display the model. I added an additional circular frame made of sheet plastic, then filled it with Styrofoam, which I immediately laid out to shape the terrain. I glued the whole thing together with PVA glue.



To create the surface, I used Smart Mud, which had already been used to create mud on the model. The advantage of this product is its consistency, which allows for easy shaping over a relatively long period of time. If you encounter difficulties, you can use water to soften the product.



A handful of various pieces of wooden profiles were used to create temporary filler for the road. The idea was to replicate a solution I found in a photo from operations in Italy. The engineers filled a hole in the road caused by shellfire with planks and beams, allowing the vehicles to continue their march. This idea was perfect for my diorama. The colour contrast between the mud and the wood was perfect.



All the planks were treated with various shades of wash, Pigment Jockey, and regular dry pigment. The planks do not look brand new, which is exactly what I was aiming for.



Once the Smart Mud was dry, I covered the entire base with black paint. I applied it straight from the can.



At this point, I could glue in all the wooden planks. The variety in colours, sizes, and shapes worked perfectly.



I used a piece of tracks as a pattern to imprint on the dried mud.
The mud is almost completely dry now, so I could position the model and secure it to the diorama. The most important attachment is a screw threaded into the hull and base. This is perfectly sufficient to secure the model.



On the other side of the diorama, I glued in a tree prepared for me by my colleague Robert Benasiewicz, who has been preparing trees for dioramas for many years. I have used his work many times, and this time he also prepared the tree perfectly according to my instructions and needs.

I covered all the mud with VMS products designed for creating wet mud. At the same time, I filled any empty spaces around the tracks to give it a natural look and prevent the model from floating in the mud. I also initially positioned a few crates and a boy figure, but after making some adjustments to the figures, these were slightly modified.





BLUE LIGHT SPECIAL









IAN BARRACLOUGH
IS BACK WITH HIS BIGGEST LOAD YET!

HET AND HOPE

British Oshkosh M1070F Heavy Equipment Transporter, King GTS 100/7 Trailer & AH-1 Apache Longbow

The US built M1070 Heavy Equipment Transporter (HET) was originally designed for use by the US Army to move armour such as the M1 Abrams Main Battle Tank and Bradley Infantry Fighting Vehicle (IFVs), which are often seen being moved in pairs on the massive M1000 trailer.

In 2001, the M1070F variant replaced the venerable Scammell Commander (see my article in AFV Modeller Issue 131) as the prime HET for the British Army. In a huge change in British military logistical thinking, the 92 tractor units and 89 King GTS 100/7 trailers were delivered to a Private Finance Initiative (PFI) run by FASTRAX, who employ 'civilian' staff, operating the HETs as sponsored reserves in the British Army.

Differing from the US HET, in the British Army the M1070 HET was equipped with a Caterpillar C-18 engine and Allison gearbox, with torque convertor and transfer case. Visually the UK HET differed from the US model in many ways, the obvious change being the huge, single-piece bonnet (hood) at the front of the vehicle. I obtained the Accurate Armour Oshkosh HET from a well-known auction site after Accurate Armour has ceased trading. As a kit that had long been on my wish list, I wanted to display it with a certain amount of 'wow' factor. Some online searching revealed that in Afghanistan, in line with many British Vehicles – the Oshkosh HET underwent many upgrades, primarily improving survivability due to the Improvised Explosive Device (IED) threat. I have not been able to find a definitive description or timeline for these upgrades, although initially it would seem that conventional armour panels were added to the cab sides with wire screen guards over the windows. These panels were later covered in Barracuda type camouflage netting. Later still, bar armour, used to disable/diffuse Rocket Propelled Grenades (RPG) was added, and the windows were upgraded to armoured glass. Sometime after this, fabric armour panels were added over the top of the bar armour around the crew positions. Further to these armour additions, various Electronic Counter Measure (ECM) antennas and devices were fitted around the tractor unit; and an armoured turret with a General-Purpose Machine Gun (GPMG) was fitted to the cab roof above the existing opening.

To add this would involve a lot of scratchbuilding and plastic stock – so another option would be 3D design and printing (scratch-printing as I believe the Editor calls it). I'm by no means an expert 3D designer – I use a design program called TinkerCAD, primarily aimed at school children! I used the kit parts to take measurements using a digital vernier gauge (measuring to 0.01mm) to redesign and print the cab top, sides and front with the added camouflage netting. For the bar armour I took a previous design I made for the Mastiff 2 bar armour and reshaped this to fit the HET cab. I made the fabric armour panels from a stock 3D design for a sofa cushion – designing creased fabric was far beyond my capabilities. The turret used on the top of the cab is the same turret as is used on the British Husky Troop Support Vehicle, so a quick cry for help on social media soon had a Husky Turret arriving in the post (thanks to Paul at Red Zebra). To test fit the 3D printed parts I built up the cab base from the AA kit parts, much of this won't be visible through the armoured glass, so I went with just the base seats and interior parts -although couldn't resist adding a few extra cables and a cigarette packet. With the cab 'block' built, I left off the bar armour for ease of painting later and moved onto the chassis parts.

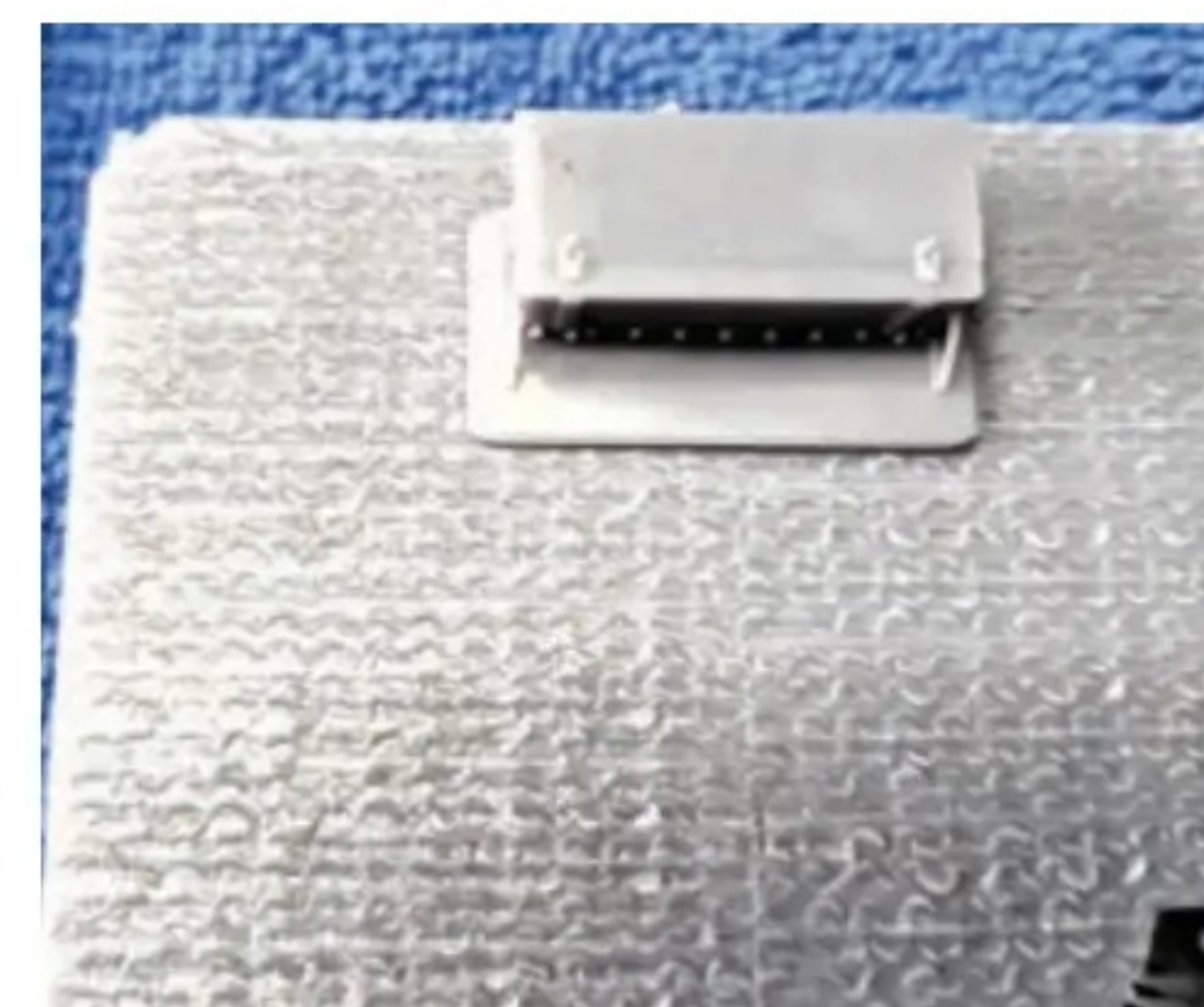
The AA HET chassis is a huge single-piece casting and mine was happily straight, with no hot water treatment required. The wheel stations benefit from the addition of brake and sensing cables, but the rest of the chassis was built as standard. AA provide the C-18 engine, which again would benefit from the addition of lead wire cables and hoses -there is some very good online reference of a HET with an open bonnet - the yellow engine block and coloured hoses add a great splash of colour. The winch platform behind the cab is a model within itself, with well over a hundred parts building up a complex and delicate sub-assembly. The front ECM boxes were 3D designed as were the upgraded headlights (printed in clear resin) and ECM tables and antennas for on top of the cab – these were very complex shapes that I don't think I could achieve using conventional scratchbuilding methods.



Kit parts were used as reference to redesign the uparmoured parts



3D Printed cab top and doors



The 3D designed barracuda netting on the cab rear.



The chassis parts. Making sure these are straight and true.

Chassis and kit parts laid out for the tractor unit.

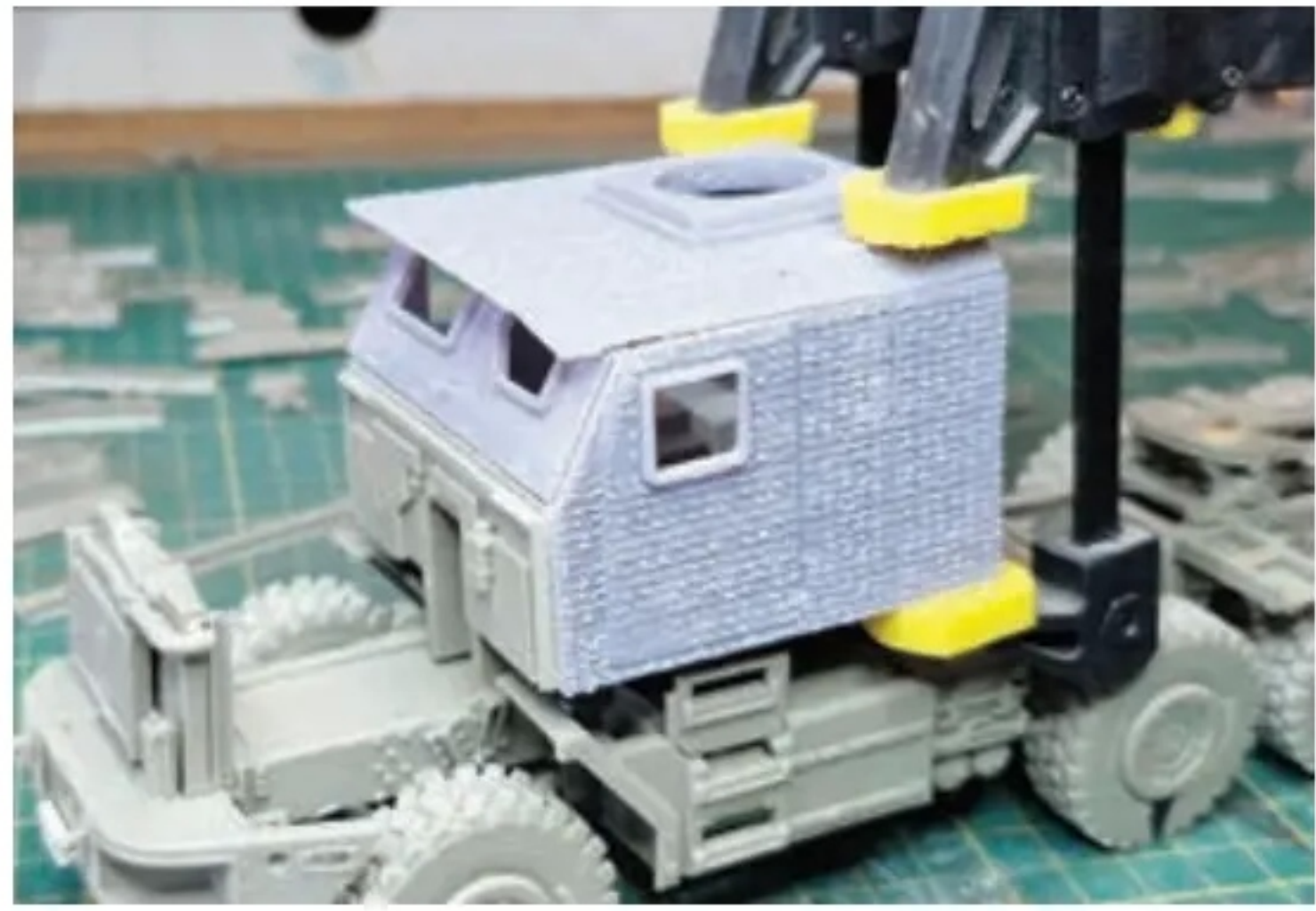




Using weighted printers blocks to ensure straight



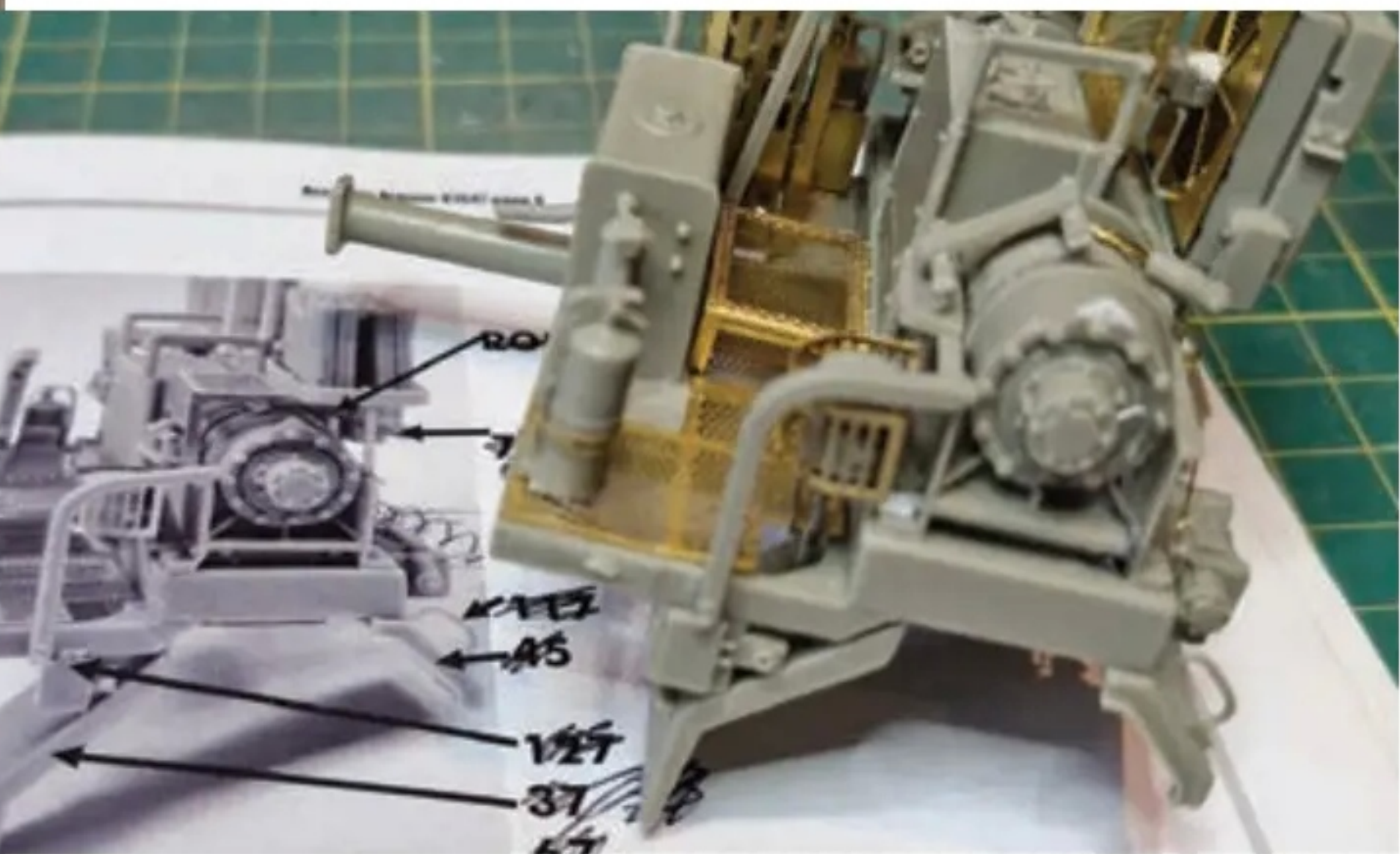
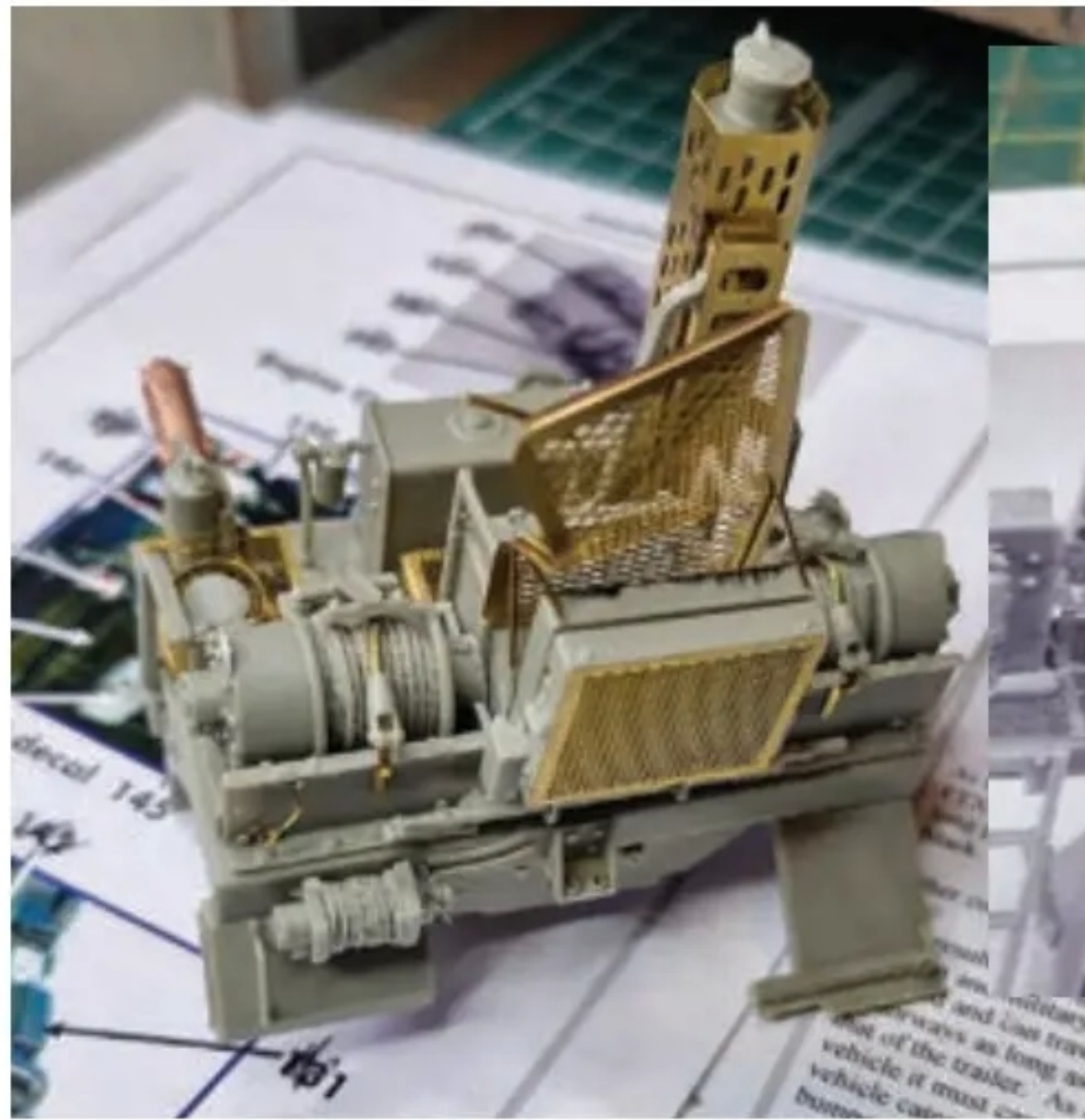
Frustratingly all the wheels are moulded the same, meaning the text on the wheels is all in the same place.



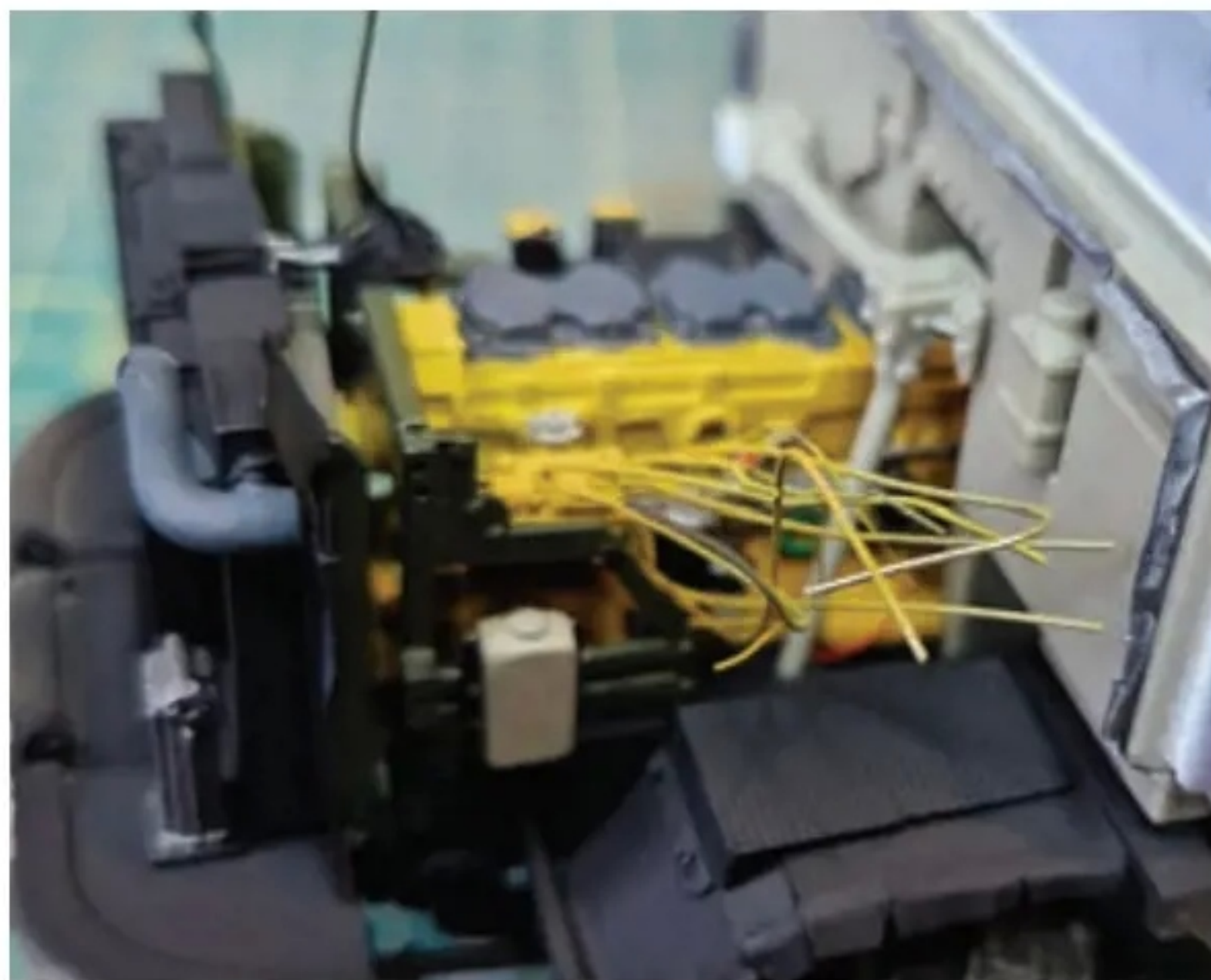
Test fitting the 3D printed cab parts for fit.



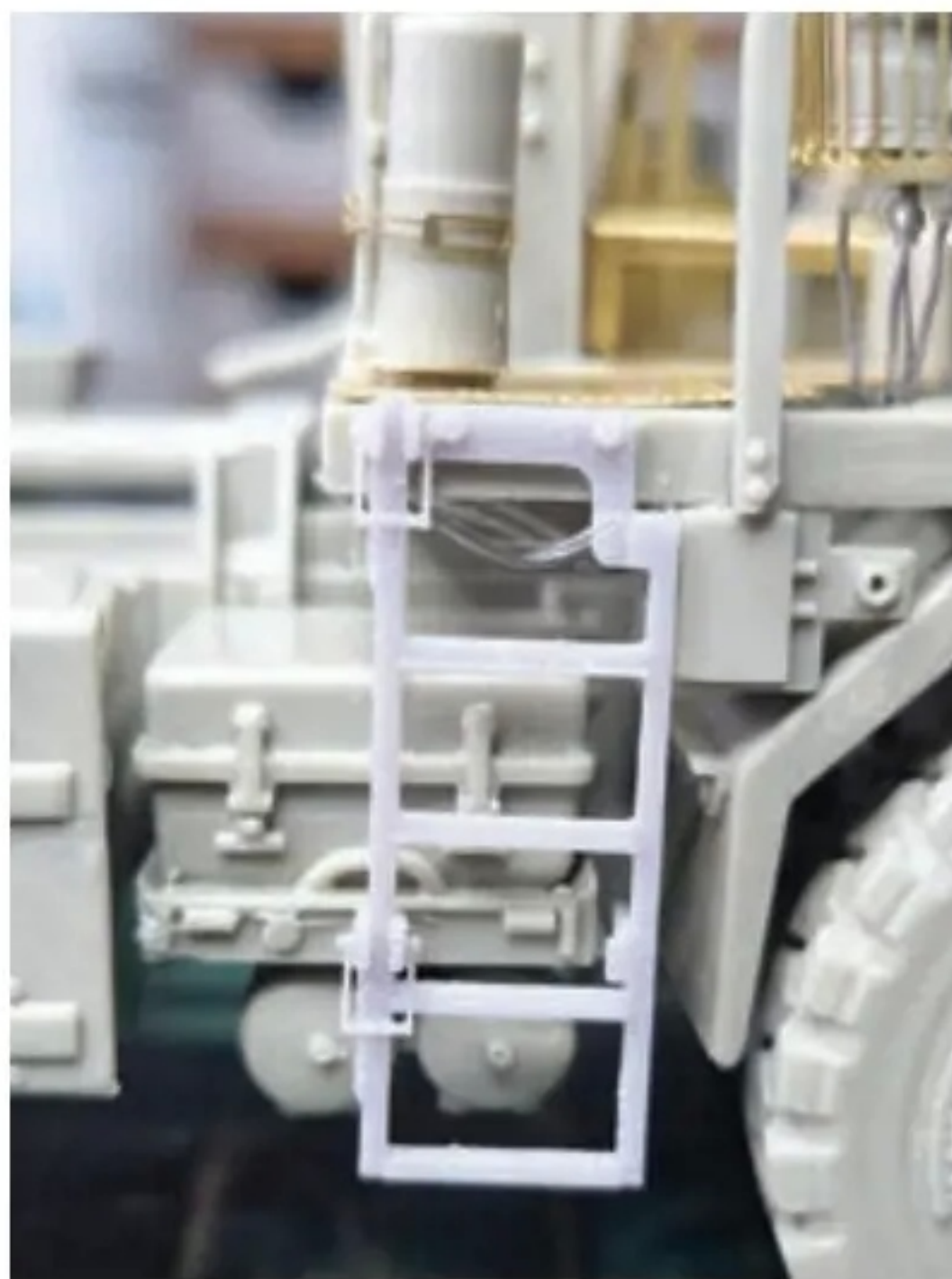
Cab interior. Much of this can't be seen on the finished model.



Winch assembly made up of over 100 parts.



Test fitting the very yellow engine and added cables and hoses.



I managed to lose the ladder, so 3D designed one. It still hasn't been found!
Test fitting the hood and winch assemblies. The hood tilts forwards to reveal the engine.



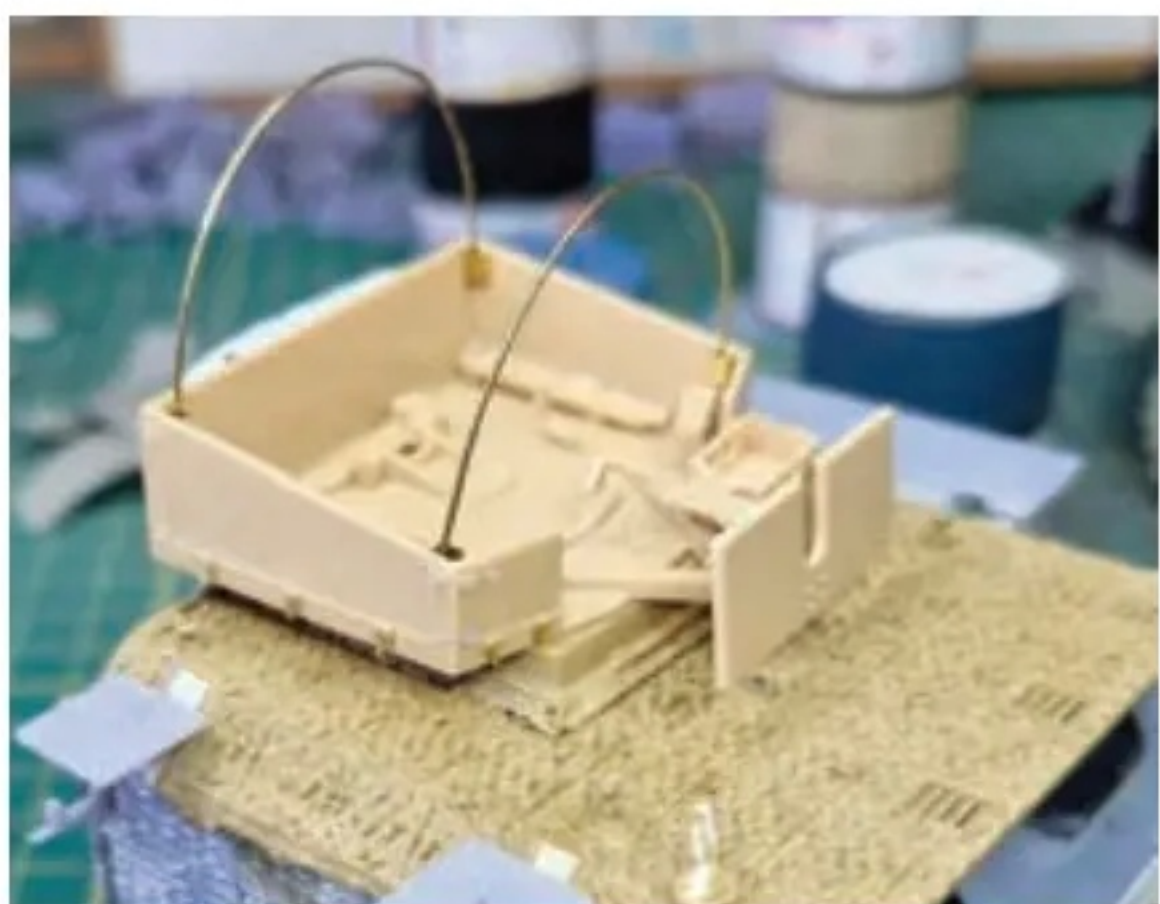
Fitting ECM equipment to the hood assembly.



Fitting ECM tables to the cab top. Antennas are mounted onto these



Rebuilding the front ECM brackets from plastic stock as the 3D printed items were too small.



Fitting the GPMG turret, sourced from a Meng Models Husky. The brass loops over the top are to add a camouflage net sun shade.



Test fitting the bar armour. These were removed for painting.

All sub assemblies ready to be primed. Note the engine and bulkhead masked off as these had already been painted.



The King GTS 100/7 trailer was built as per the instructions, although I discovered (from someone who was involved in the move of the Apache) that the rear ramps could be extended outwards to accommodate vehicles with wider track width. During the actual move, the Apache was loaded backwards, meaning the track ramps had to be extended outwards. As I had already fitted the ramps, some quick surgery with a razor saw ensued... Painting started with priming overall matt black from a rattle can. For modern British green I used Vallejo 4BO Russian Green. This may seem like an odd choice, but this is a great match for the dark green on the HET, especially after weathering. I masked off the green areas on the cab and airbrushed the areas with Barracuda netting around the cab with Tamiya dark yellow. I followed this up with some subtle dry brushing using Vallejo off-white. This highlights the tips of the camouflage netting and really makes the texture stand out. Many of the brackets for the ECM parts were had painted in matt black and I picked out random bolt heads with silver – many of the parts added after manufacture by Oshkosh would not have received the green paint, so adding

these differing colours makes the model stand out. Pin washes were added using dark browns and blacks around detail to add shadow. On a model so big this takes quite a long time but it worth the effort. I sealed this with a water based semi-gloss varnish. The whole model (tractor unit and trailer) was then given an overall thick wash of Naples yellow oil paint. This initially looks terrible, and I usually apply this coat at nighttime before going to bed, otherwise I'd have to do some tidying up! After 6 - 8 hours (depending on how well I have slept) I use a wide brush soaked in clean odourless thinners to wipe off most of the messy Naples yellow wash. Because of the previously applied semi-gloss varnish, attacking the oil wash with slightly more vigour will remove them, but stroking downwards with less force adds nice dust streaking effects. I added some diesel staining using weathering pencils around the fuel filling points and some leaking oil beneath the winches. Both of these effects were given a dusty matt coat by airbrushing over the top of them with LifeColor dark dust liquid pigment.



Chassis parts painted with Vallejo Russian Green 4BO.



Cab parts painted with Tamiya Dark



Tractor unit 99 painted. The front bar armour had to be resized a number of times so is still unpainted here.



Hood removed and engine shown. The small hinges I made can be seen on top of the bumper frame.



Base colours on and ready for weathering. My favourite part.



3D prints of the fabric armour.



The detail achievable with 3D printing is amazing, but here you can also see the layers from the printing. This can be tidied with light sanding.



Adding decals at the rear end of the chassis.



Decals at the front end of the chassis and the redesigned headlights and covers.



Front end detail. The clear plastic bottled carried a glowstick for night time identification.

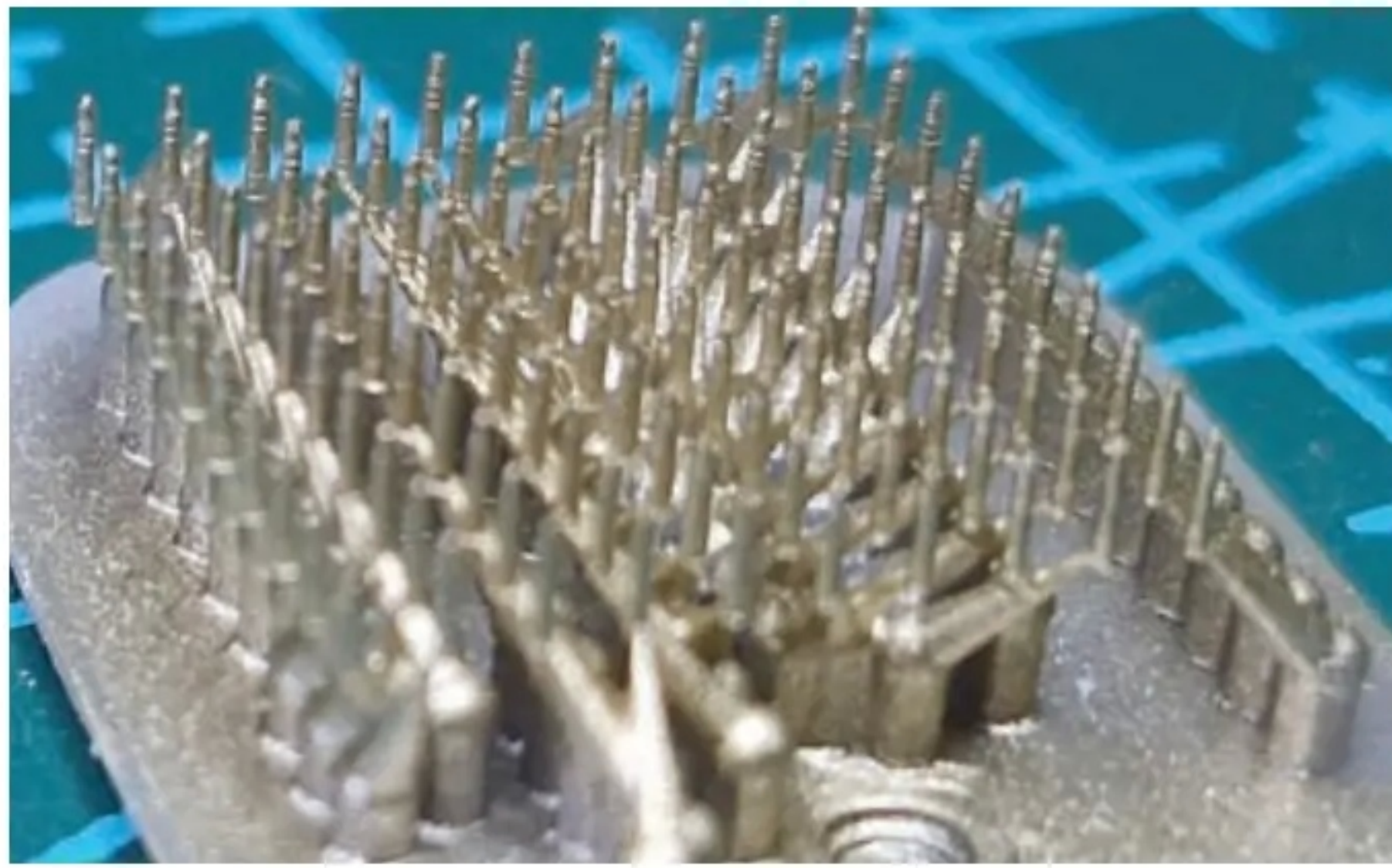


Bulkhead detail. Note the coloured hoses. Cab top detail. Note the different ECM antennas and fixture for mounting the turret.



Turret and added sun shade.





I scaled down some 0.50 cal 3D printed shell cases and sprayed them gold. There were added around the turret



Dark washes on the fabric armour. Most of this will be wiped off later.



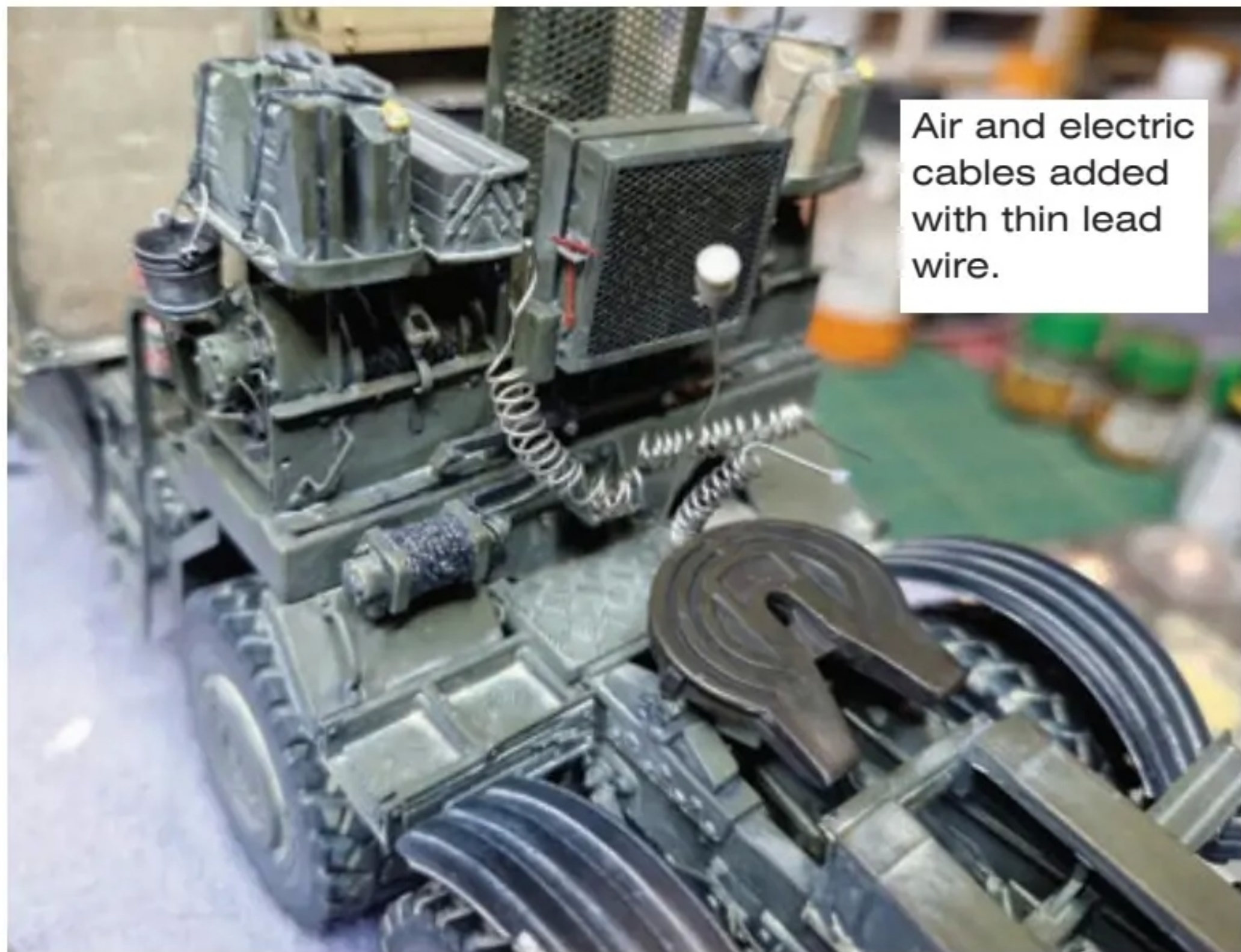
Naples yellow oil wash applied to the fabric armour.



Engine detail and heavy Naples yellow oil wash.



Most of the oil wash is now removed.



Air and electric cables added with thin lead wire.



Fabric armour added.

I added some extra water jerry cans and lifting tackle items to the winch area behind the cab and also to the walkway on the trailer gooseneck. These add visual interest and colour, as well as a human aspect to the model.

On the trailer bed I added chipping effects using a sponge and dark grey paint. I used rubber tracks from a Tamiya Challenger kit, painted in a watery black and pressed onto the bed, to add the black pad marks – these rubbery marks are often left by tanks that sit on the trailer during the very hot Afghanistan days.

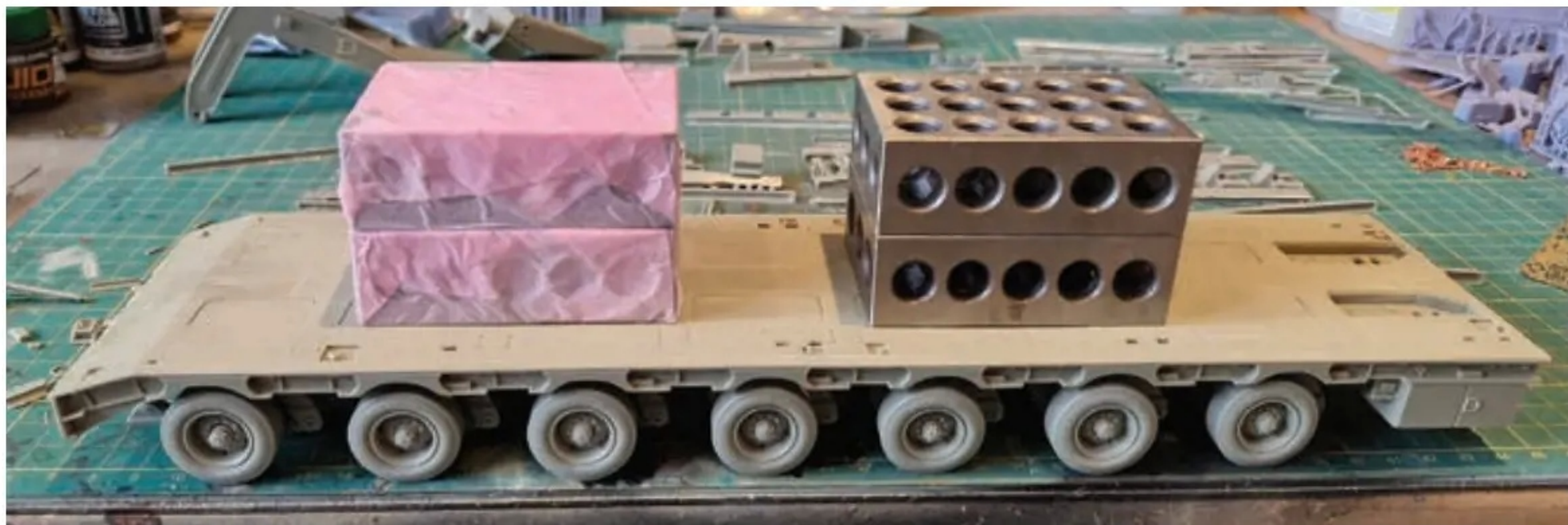
Moving on to the load, my initial idea was to use the Rough Terrain Container Handler (RTCH), as seen in online reference loaded onto the HET. The huge wheels and long arm really make this load stand out, and Four Stars Miniatures produce a stunning 1/35 Kalmar RT240 resin model as used by the British Army in Afghanistan.



All of the trailer parts laid out ready to prepare...7 parts per 14 wheel stations. You do the maths...

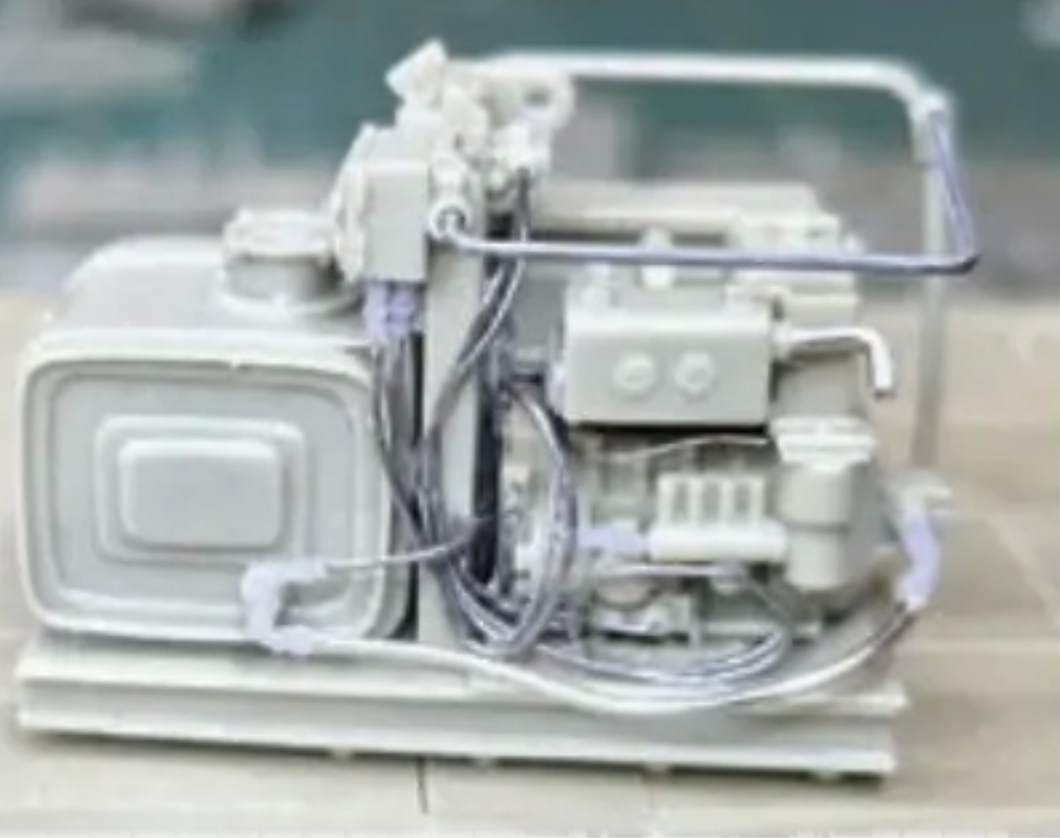


Models, football on TV and liquid assistance. What more could I ask for?



Using printers blocks to ensure the wheel stations sit true and flat.

The trailer mounted generator is a model within itself, although benefits from some added cables and hoses.





Trailer nearly ready for paint. Note the ramps are in the narrow position here, I had to cut them off later and refit them.



I made up the turnbuckles from the AA kit, but only used a few as stowed items.



Trailer and generator painted the same dark green as the tractor unit.



Wear, tear and track marks added to the trailer bed.



I 3D printed some palm air hose connectors as the ones in the kit were poorly moulded. Also note the added air lines from the connections.



I couldn't resist a quick test fit using my Mastiff 2 and 3D printed bar armour.

This thing is so big it nearly doesn't fit on the desk.



Unfortunately (for the RTCH), searching for online reference of the HET use in Afghanistan brought up images of the HET loaded with an Army Air Corps Apache Helicopter - specifically a British built AH-1 Apache Longbow.

Some research on social media sites revealed that this was a helicopter that suffered engine failure outside of a Forward Operating Base (FOB) and landed without further damage, although was no longer flyable. The aircraft was secured and arrangements made for its recovery back to Camp Bastion. The helicopter was loaded onto the HET trailer after having had the rotor blades and Longbow rotor mast head removed. Although a specific frame was available for the HET trailer bed to secure the wheels, this was not used on this task due to the fast-moving situation on the ground. During the recovery the Apache was secured at the airframe tiedown points using ratchet straps. The only option for the AH-1 Apache is the 1/35 Takom model.

My initial thoughts were to build this straight from the box, but on seeing the Reskit 3D printed M230 Chain Gun and Empty Pylons, I decided that these would add some nice extra detail. I also used the Redfox cockpit interior. This uses thin, pre-painted and textured panels to replace the moulded plastic cockpit parts. With the cockpit painted matt black, and dry-brushed with field grey -

the Redfox parts are simply attached over the top of the removed detail. I later also added Eduard pre-painted seatbelts when I realised I'd thrown away the etched brass kit parts that are not shown in the kit instructions.

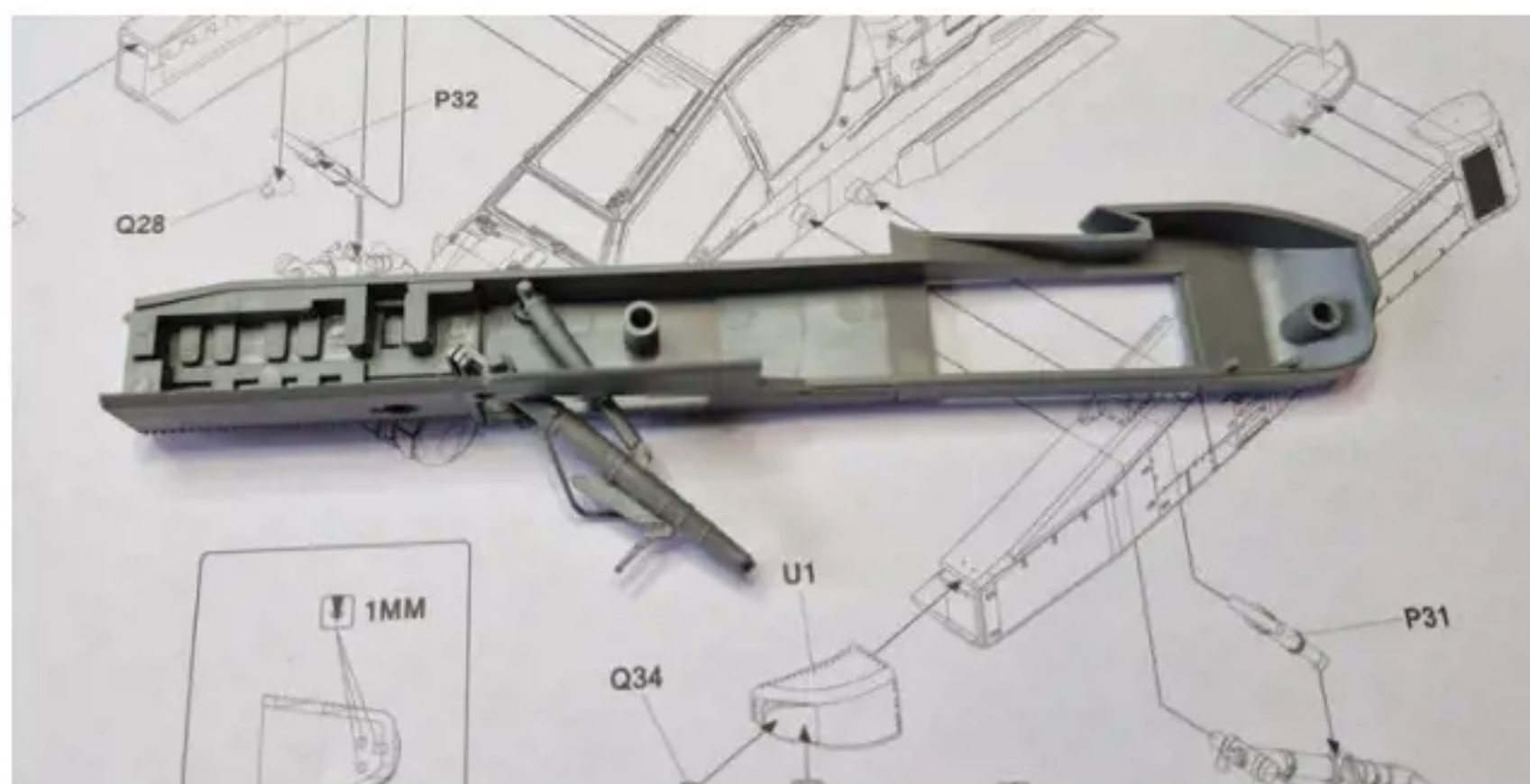
Having mentioned the kit instructions, it's worth mentioning that whilst the kit in itself is beautifully detailed, the instructions can be best described as poor - and in many places confusing. Takom try to show many steps at once per page, with overlapping arrows and sub-diagrams, all in black-and-white. I'd certainly say to take your time when building and understand each step prior to starting - much test fitting is needed.

Painting followed the same steps as detailed above for the Oshkosh. I'm advised by those that know better than I, that Apaches are painted in a specific shade of green (FS34031). I mixed up some Tamiya greens to match this, highlighted at the panel centres for the main colours. Reference materials show that British Apaches used in Afghanistan underwent weathering in a similar fashion to armoured vehicles, with heavy dust coating and fuel staining being very prominent on the examples I have viewed online. I used the same Naples yellow oil paint to coat the models and, again after a delay wiped the majority of this off, leaving dusty deposits in the nook, crannies and crevices.





Apache cockpit with added Red Fox detail.



Wheel strut and side pod.



Sighting unit. I added a pearlescent disc inside the tracking head.



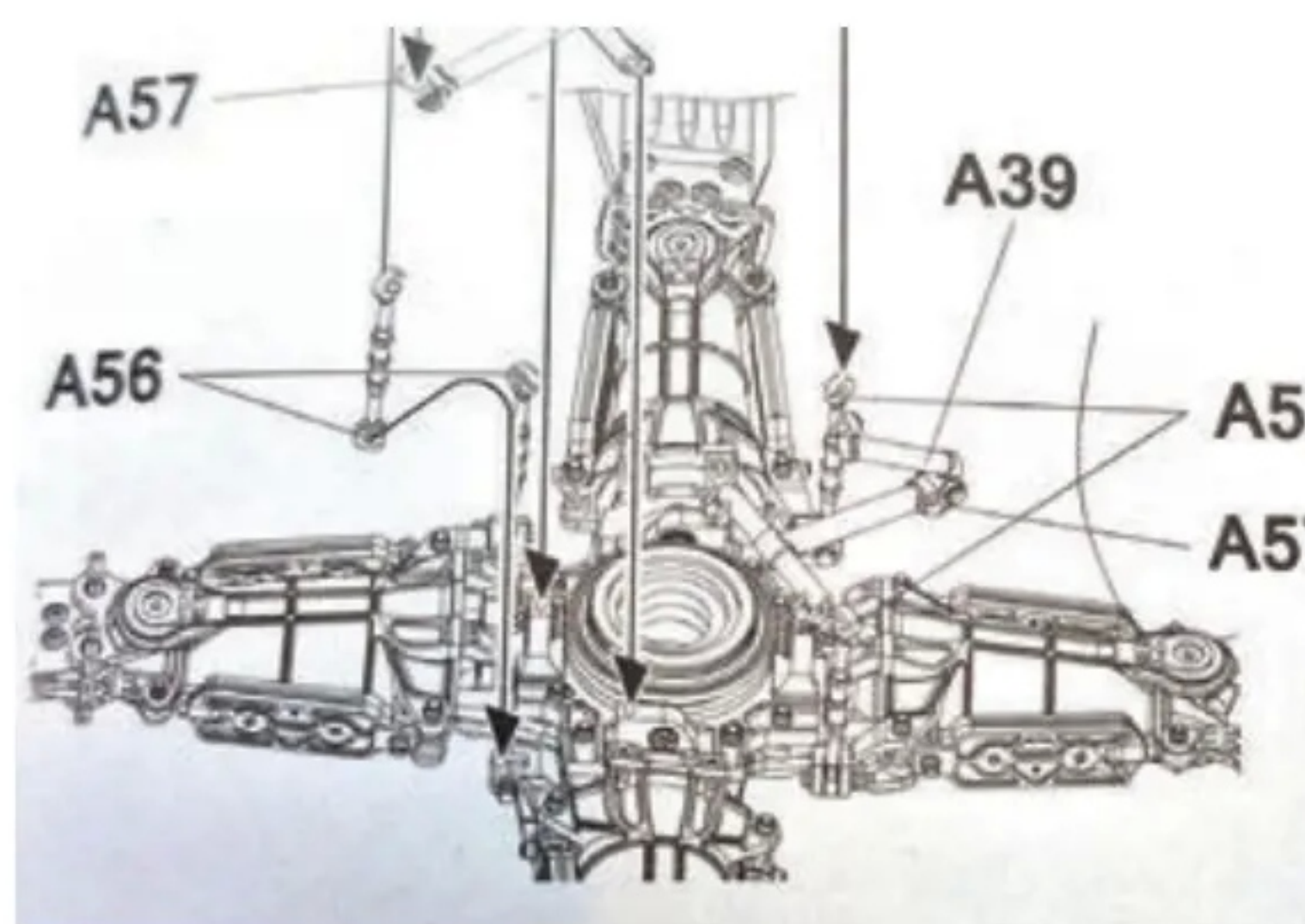
With the tail wheel yet to be fitted I kept knocking detail off the tail, so added a protective sponge!



Using petroleum jelly to ensure the winglets slide into place easily. These were a very tight fit.



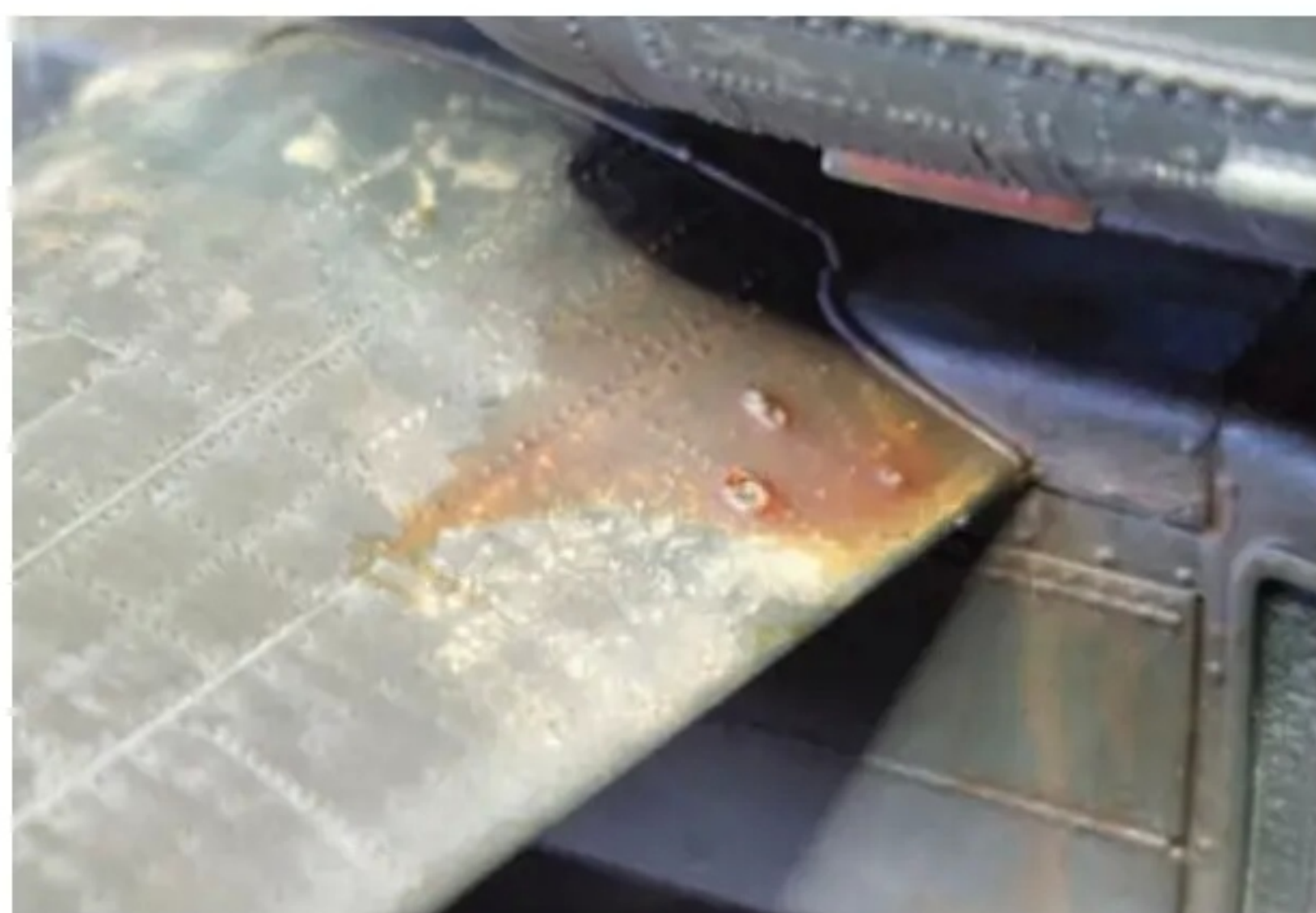
Engine pod. Takom provide great engine detail but I left most of this off as it wouldn't be seen.



Great kit, poor instructions. I challenge you to follow all the arrows.



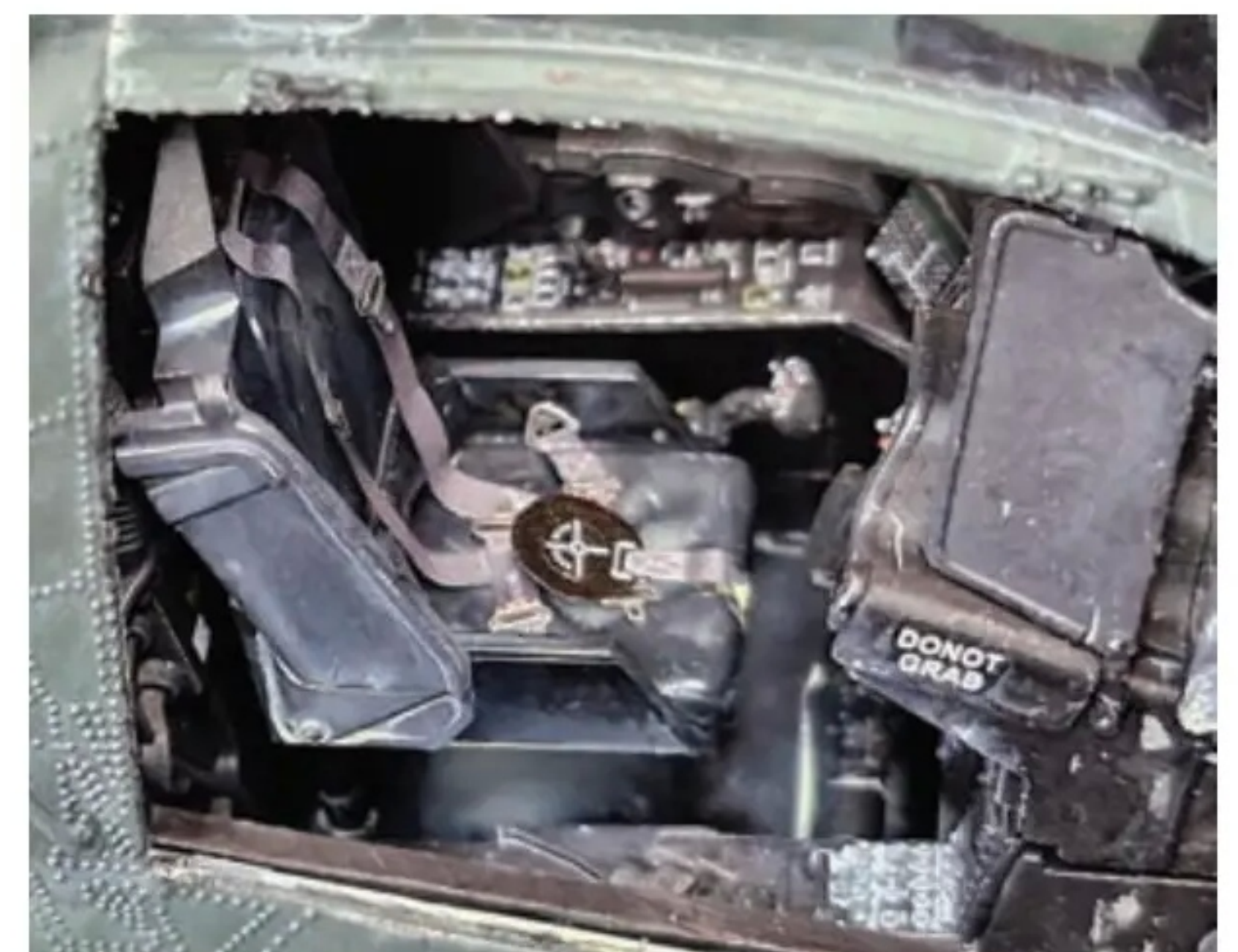
I initially mixed up the wrong colour for the Apache. this can be seen on the front of the airframe, the correct colour is on the tail.



oil leaks on the winglet underneath the damaged engine.



Cockpit details.

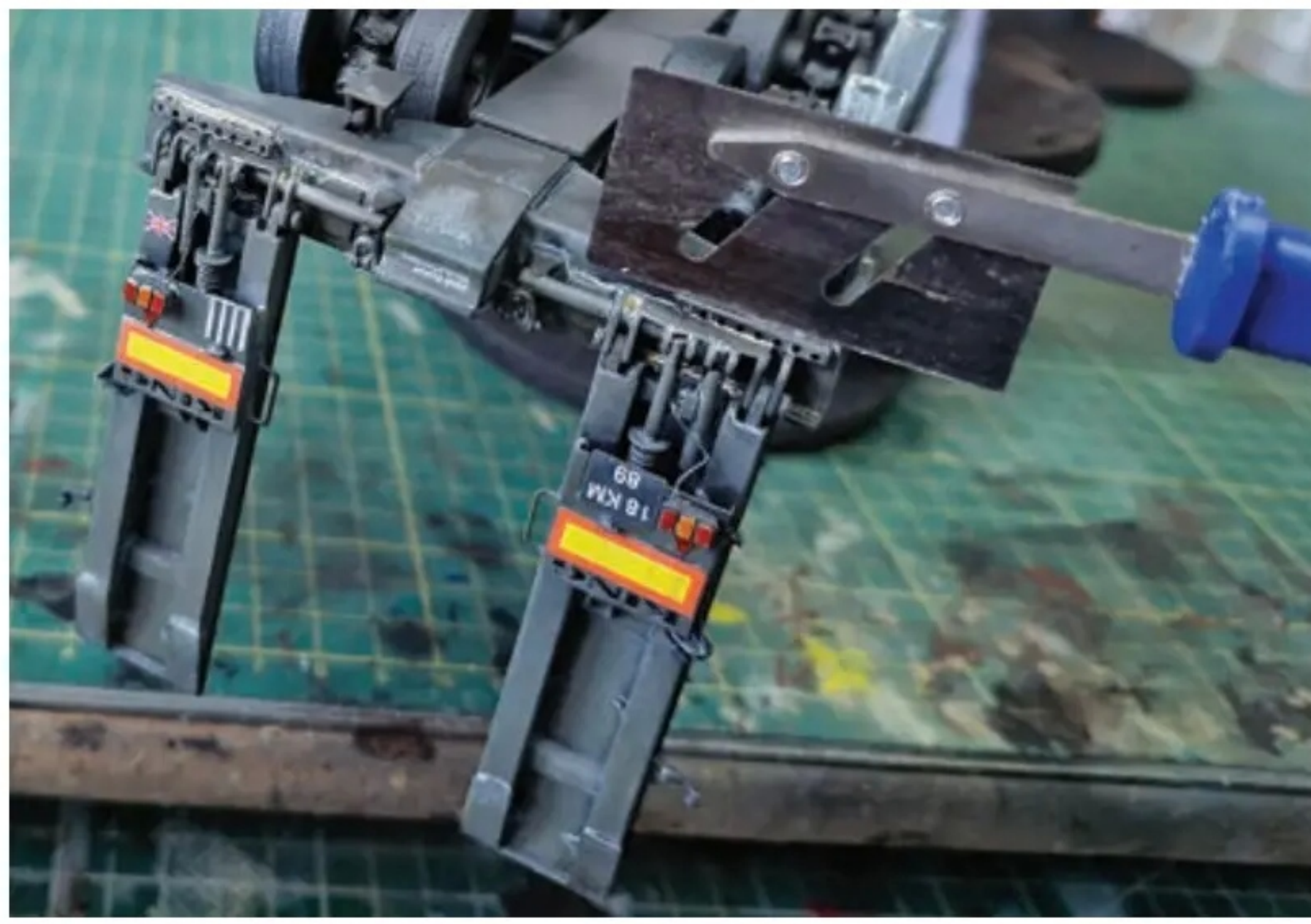


heavy dust deposits applied with Naples yellow oil paint. The canopy needs a good clean!

I wanted to show the 'failed' engine as being not physically damaged, but with heavy soot staining and oil leaks. I used Vallejo water-based Diesel and Oil stains, over the top of the heavy dusting effects. This gives the impression of a aircraft that has maybe sat in the desert environment for a day or two after the initial engine failure.

To tie the Apache down to the trailer bed, I initially had to cut to open the 2 doors on the helicopter body adjacent to the front landing gear upper strut mounting point, on either side of the body. In reality a brace is then attached to the outside of the strut, to which the ratchet straps are attached. There is also a similar connecting point underneath the tail. Online I was lucky to find a Apache tie-down schematic; in comparing this to the images I had and other images of an Apache tied down on a civilian truck - I was able to make an educated guess at how the helicopter was tied down. I made up the ratchet straps from black masking tape, painted in grey. For the actual ratchets I used 3D printed parts, sourced for free online.





After test fitting I discovered that the ramps needed to be placed in their wide positions

To add interest, I used some modern storage boxes from FoxHopp models. These 3D printed parts look fantastic and really add some great detail to the trailer area. Speaking to one of the Tank Transporter operators who conducted his task, he told me that they had to take all tools and brackets with them on the trailer.

The model was fixed to a simple black base, and I added a figure from the Bronco Models British Quad set, with added clear orange ballistic glasses cut from plastic packaging. I made up a blue folder (most British Army manuals come in blue folders...) and printed a reduced size tie-down schematic for him to consult!



Making sure the ramps are positioned correctly this time.



Test fitting and making sure of a tight fit at the 5th wheel.



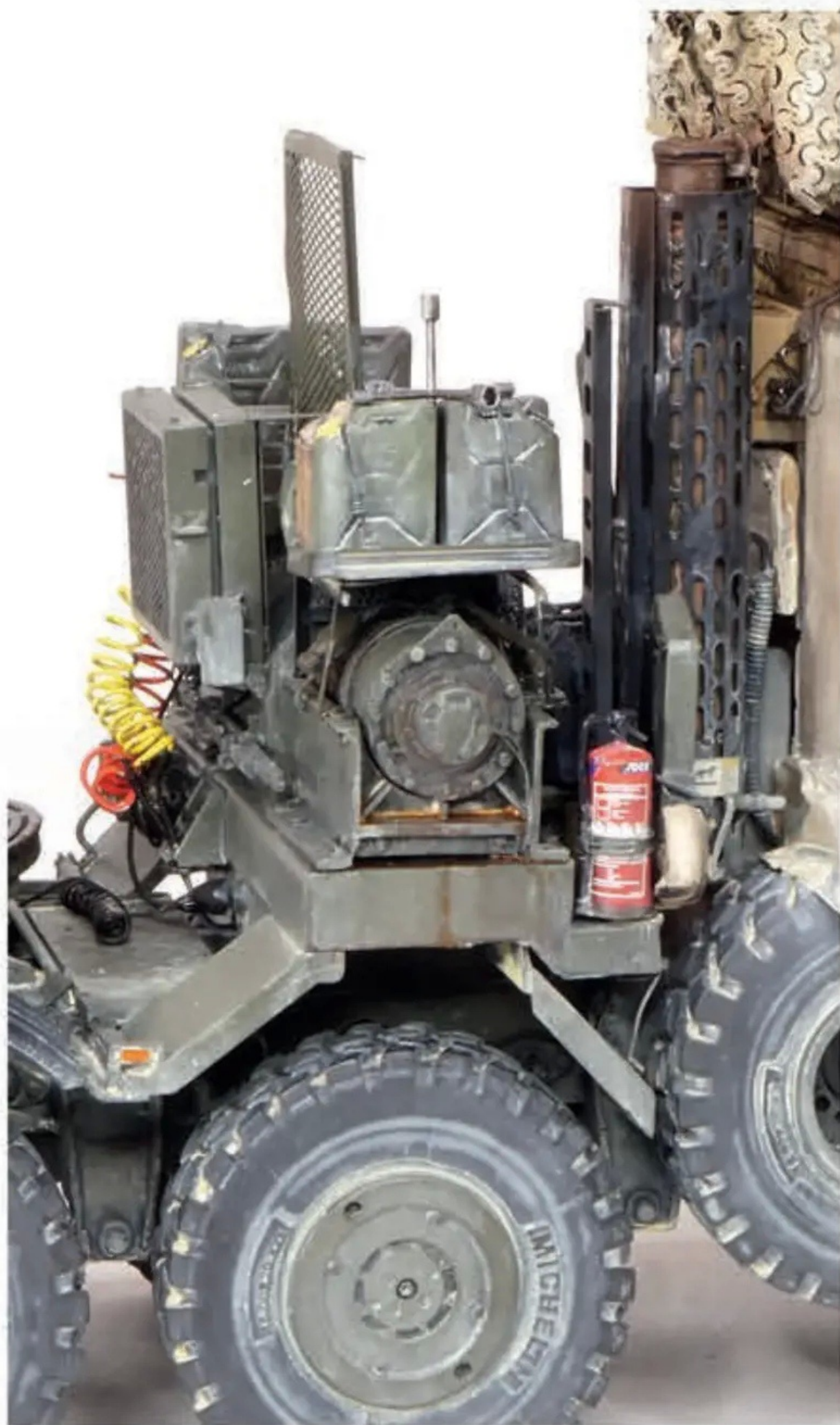
Adding tie down ratchet straps and extra stowage.



Pinned, screwed and glued to the base.

So, this is the first model I have extensively modified using 3D printed parts that I have designed and printed myself. Is scratchbuilding dead...? I don't think so, but like other modelling techniques, it will be string in the modeller's bow, to use when appropriate. Scratch-printing will also develop – I find the process slow and time consuming, often (in my case) resulting in misprints or wrongly sized parts. Like other modelling techniques, I will improve, but doubt I will ever master...



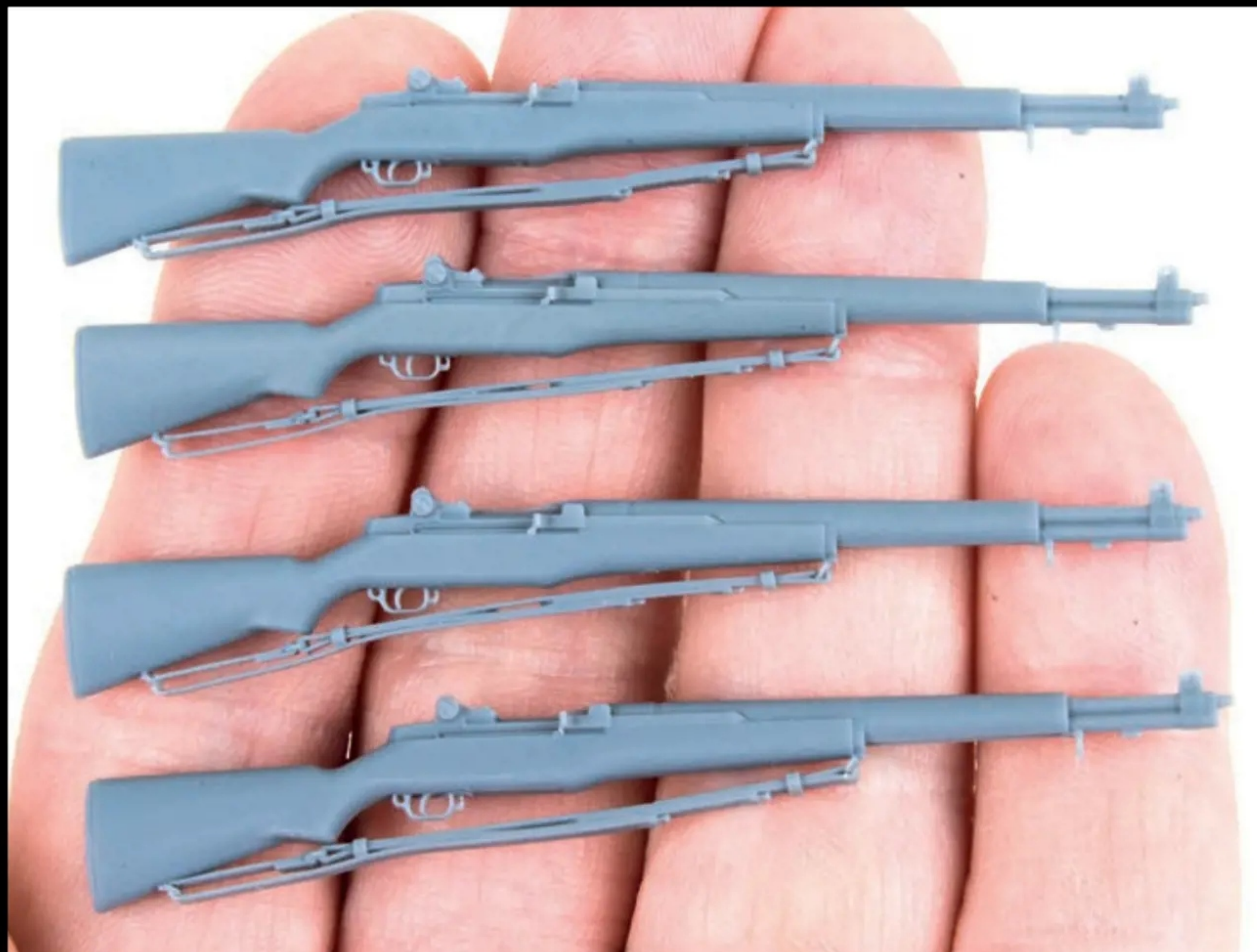




HET AND HOPE

U.S. M3/M3A1 UPGRADES HALFTRACK

AFV
modeller
1:16



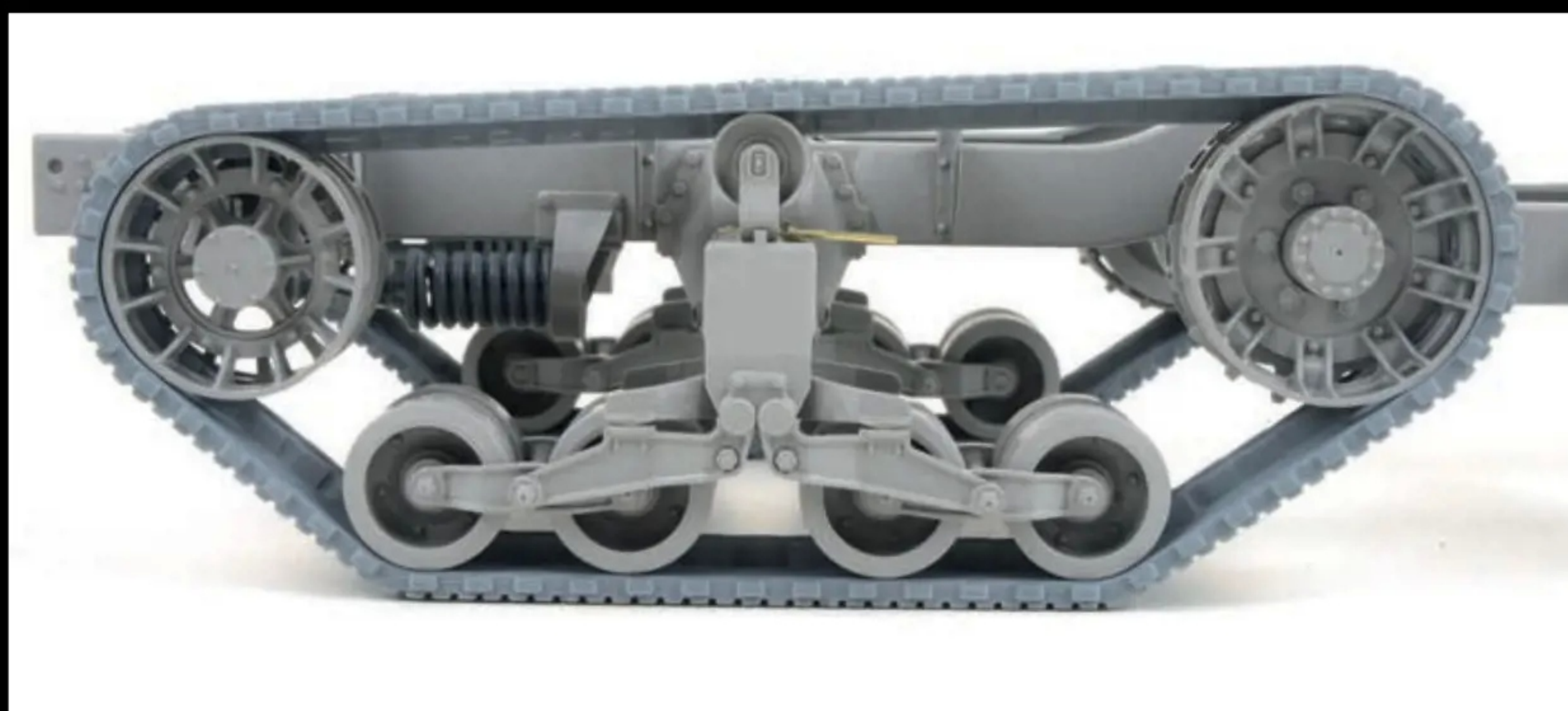
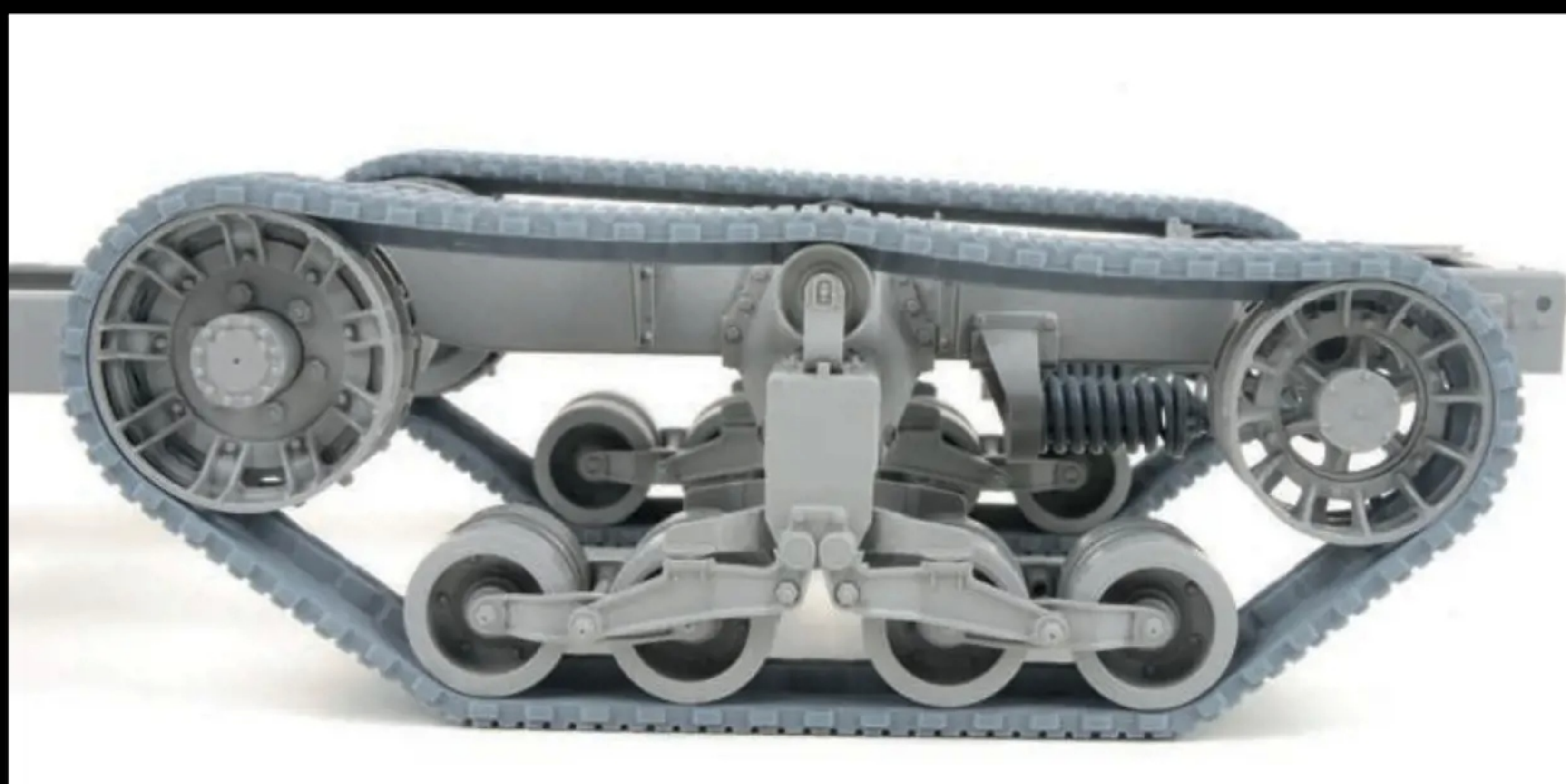
M1 Garand Rifle with sling

Set of 4 highly detailed M1 Garand Rifles complete with slings, correctly sized and ideal for fitting out the stowed rifles on the M3/M3A1 Halftrack kit.



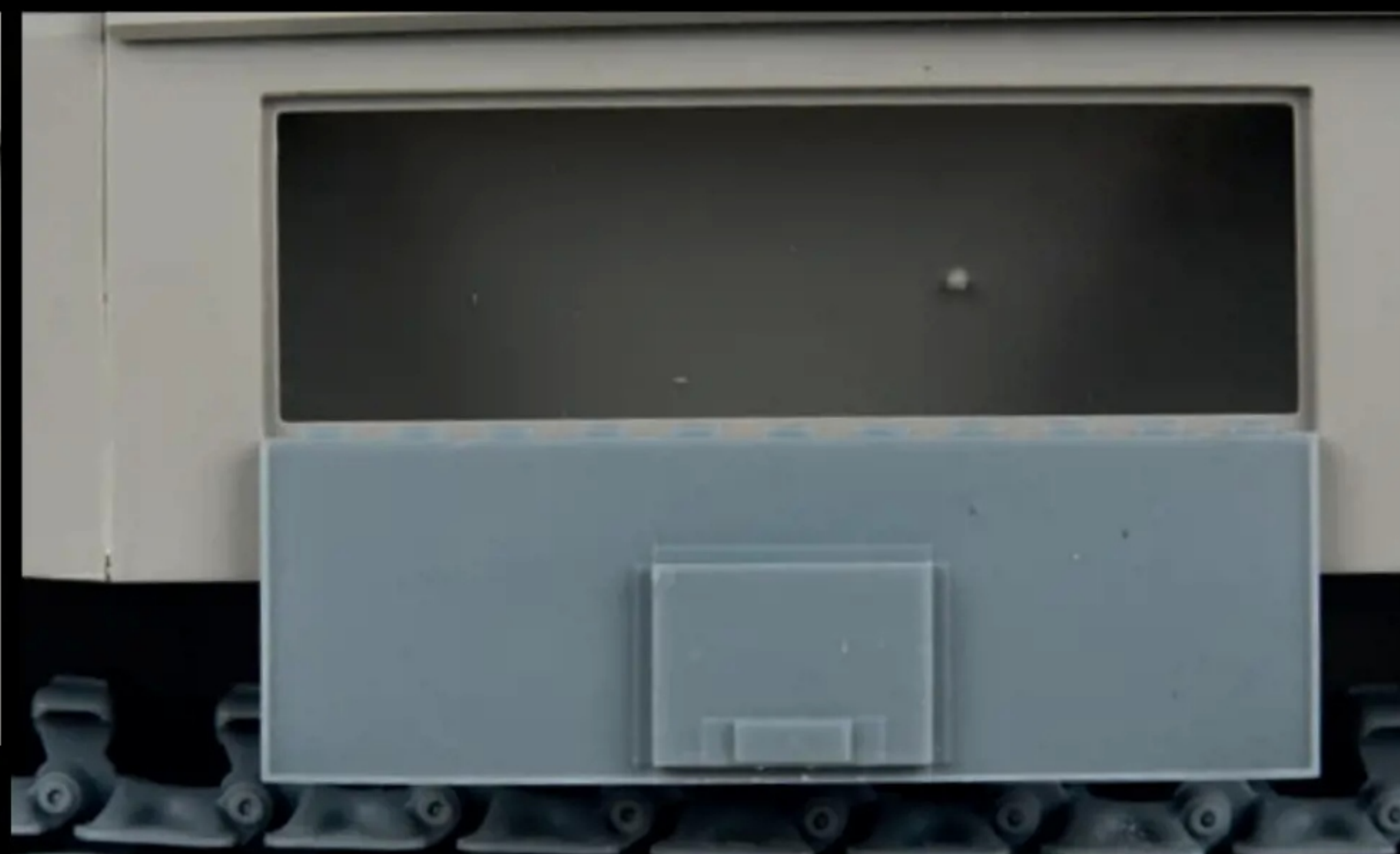
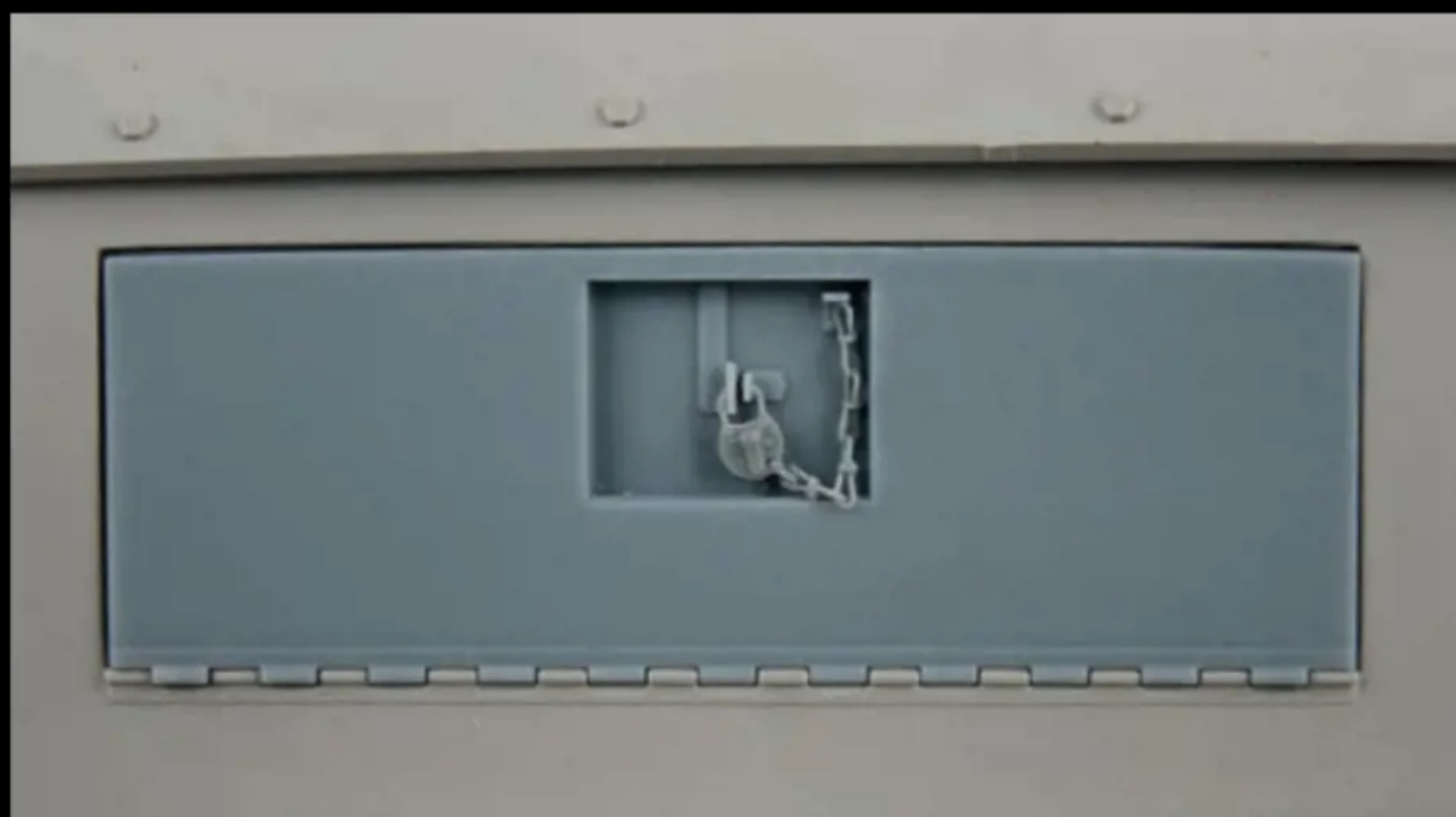
M3/M3A1 Corrected Tow Hitch

A small detail but well worth fixing if you care about getting things correct like we do this simply replaces the kit part.



M3/M3A1 Track Upgrades Taut or Sagged

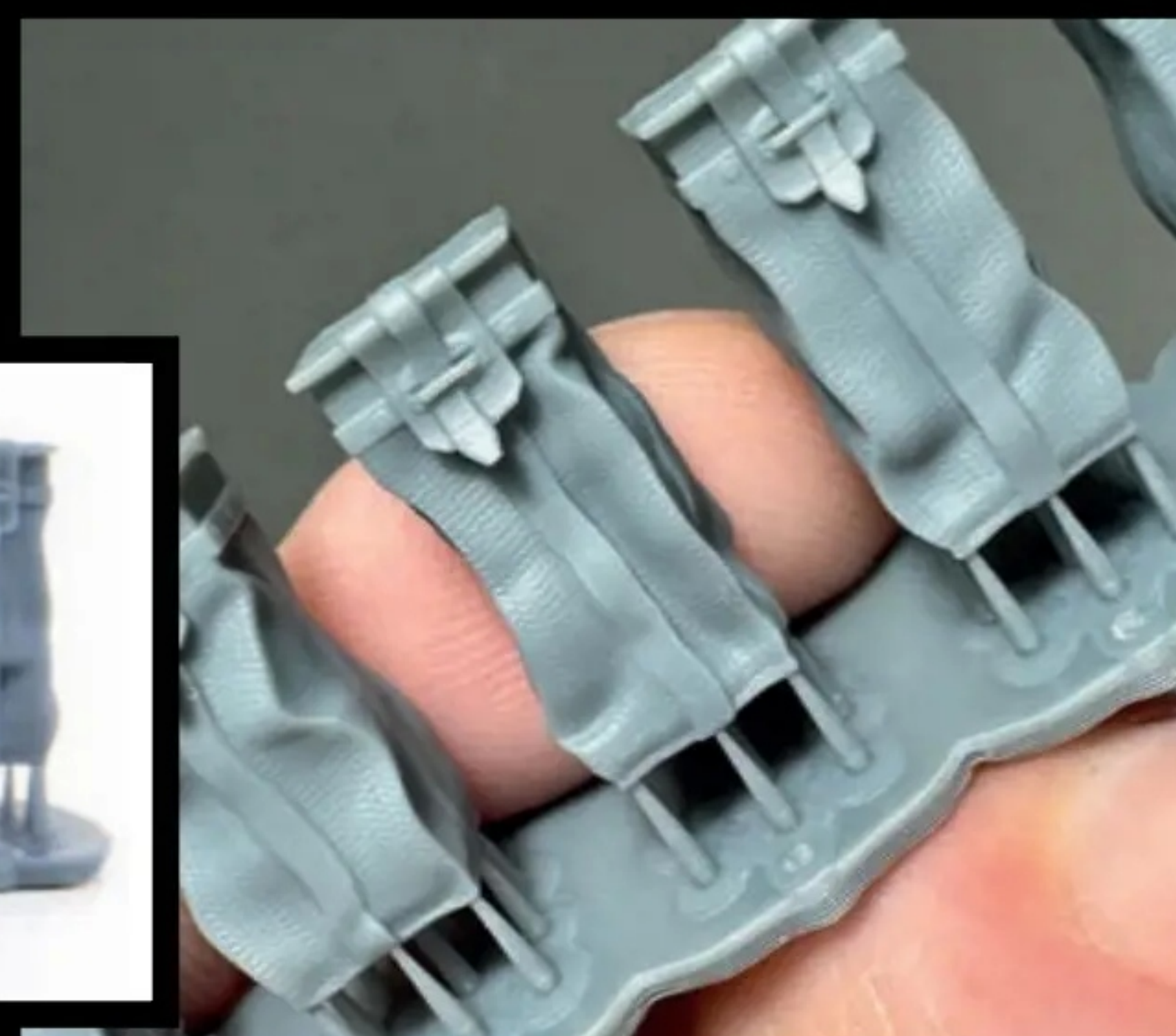
These replacements for the AHHQ kit rubber tracks give a more realistic appearance offering either the taut appearance of the correctly tensioned tracks or the slightly sagged version. These are 3D printed as a single piece to fit the kit bogies exactly. There is sufficient flex in the track to permit them to be fitted over the centre bogie but you will need your sprocket and idler wheels to be separate from the chassis in order to fit the tracks.



Sd.Kfz. 251

Corrected stowage locker doors

These replacement locker doors for the Das Werk 251 kits correct the door locking mechanisms and have correctly detailed internal details should you wish to show them open. They come with working chains and separate padlocks for the ultimate in realism.



German AFV Gurtsacks

Replacing our venerable plastic card and putty gurtsacks these new digitally sculpted sacks offer a marked step up in detail and quality with 30 closed sacks to stow in your chosen tank interior and also available separately, are sets of 4 open sacks used to equip the hull and co-axial tank MGs.



PANTHER



M.A.N. Final production Eighth Steel Roadwheel

Final production M.A.N. Panthers had the last roadwheel station fitted with the 800mm steel wheels on each side. This set of two wheels allows you to model this configuration.



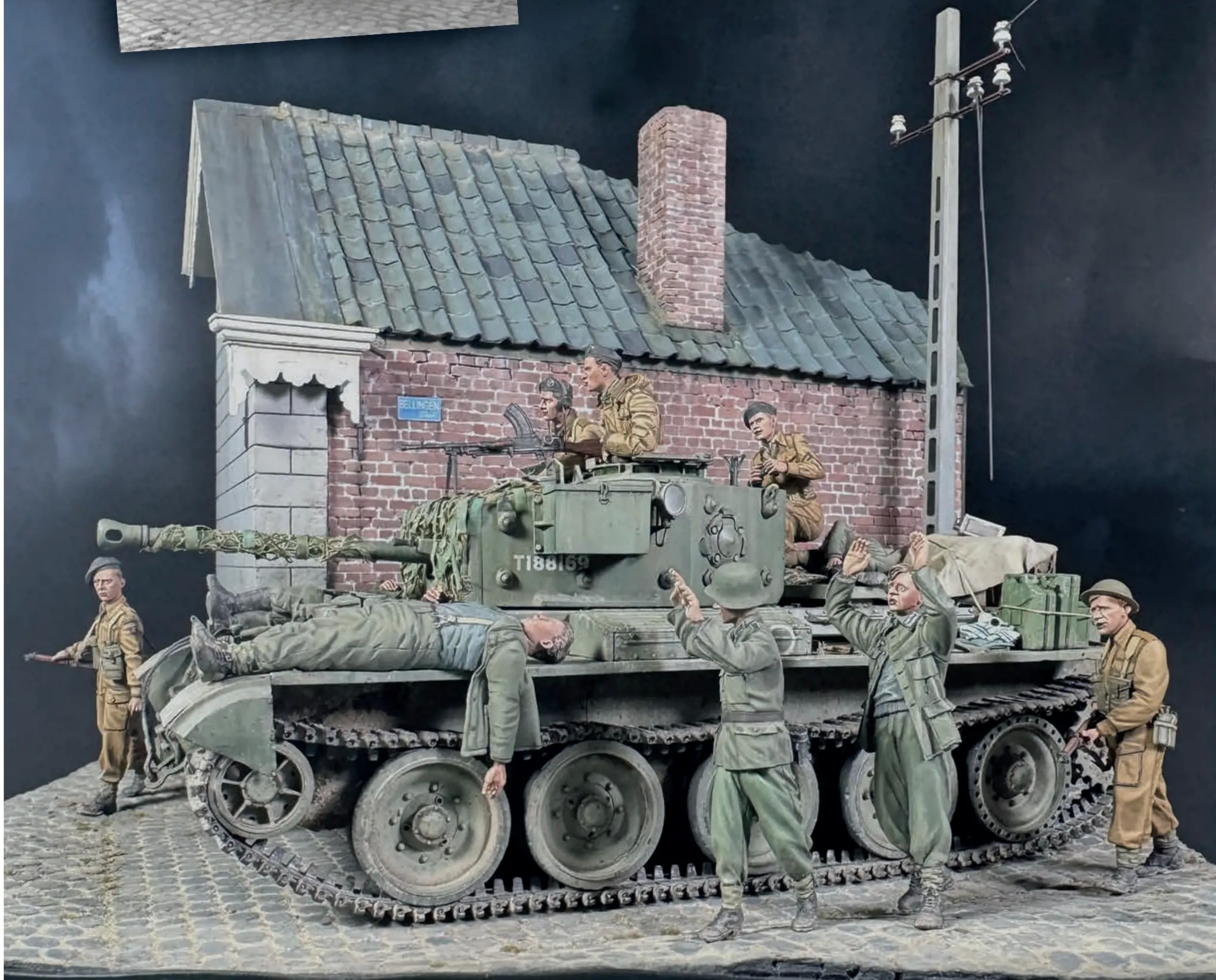
Cupola Ring MG Mount

MG Ring mount for the Cupola ring on the Panther, Tiger, King Tiger and Panzer IV to hold the vehicle MG34. Designed to work with our Panzerlauf MG 34 (16056 shown here but not included)



My ideas and inspiration for building a diorama often originate from a photograph. This particular diorama was no exception. I came across an image in the outstanding book "The Army That Got Away" by Jack Didden and Maarten Swarts. It was only later that I uncovered more about the dramatic story behind it.

In the photograph, a Cromwell tank from the Welsh Guards is seen in the small Flemish village Hondzocht. Apparently, some German wounded or casualties are transported on the side skirts. Below is a brief description of the event in Hondzocht on September 3, 1944.



Triumph and Tragedy
The Liberation of Hondzocht
September 3, 1944

MODELLED BY
ROB WESTERMAN



On the morning of September 3, 1944, the British Guards Armoured Division, under the command of Lieutenant-General Brian Horrocks, was still near Douai, in northern France. His promise was: "See you tonight in Brussels." The Welsh Guards advanced through several villages including Hondzocht, on their way to Brussels. In the afternoon, the Welsh Guards encountered a column of German soldiers at the crossroads of Edingensesteenweg and Bellingenstraat in Hondzocht. In the skirmish that followed three German soldiers were killed. Tragically also a young girl was fatally

wounded, caught in the crossfire while witnessing the arrival of the liberators. Hondzocht was the first Flemish village to be liberated from German occupation, but at a heavy cost. Soon after, the fallen were commemorated with the plaque "The Peace of Hondzocht," unveiled at the corner of Bellingenstraat and Edingensesteenweg. Annual ceremonies are still held in Hondzocht.



For the Cromwell I used the one from Tamiya. A bit dated but with some effort it can be built into a great model. I used some photo etch from Aber for extra details and as the Cromwell in the photograph is one with a F-style hull, I also used a nice conversion set from Accurate Armour.



For this the rear deck and the right side of the front hull needed to be removed. This was replaced with the resin parts with the other front hatch arrangement and front armour. Also the turret stowage boxes were added.

For the commander's cupola and the spotlight, I used a set from T-Rex. The snatch hook for the tow cables as well as the Bren Mk1 gun on the turret, were kindly 3D printed by a fellow modeller.



The figures used are from various manufacturers such as Alpine, Dragon, D-Day, Rado miniatures and Stalingrad. A few figures were straight from the box, but most were adapted with Magic Sculp to fit them to the scene. In this case of course, it was inevitable to sculpt some parts of the figures because I wanted to more or less replicate the photograph.

Usually, I swap all the heads with ones from the Alpine or Hornet range, because of their excellent expression. Some boots and shoes, and some hands for the adapted figures come from Royal Model.

Painting of the figures was done with acrylics, mainly the ones from Vallejo and the Ak 3gen range. I always start with painting the faces of the figures, beginning with a base coat of Brown sand. Shadows are done with Burnt cadmium Red and highlights with Basic skin tone. The uniforms were mostly painted with Ak3 gen acrylics. There are some nice colour sets available for English and German uniforms. For creating the shadows, I added some German Black Brown camo and for the highlight I added some Flat flesh.



Painting was done with Tamiya acrylics. I mostly apply fairly thin coats using the Tamiya lacquer thinner. After the primer coat of Nato black, a layer of Olive drab was airbrushed on the Cromwell. Then with a mixture of Olive drab, J.A. Green and Sky, highlights were airbrushed on, gradually adding more Sky for the final highlights. This resulted in a fairly bright coat, but after the weathering stage this is all corrected.

Weathering was mainly done with oil paints. I always begin with a pin wash, giving the model more depth and bringing out the details more. Then I used the "dot filtering" method for slightly altering and enhancing the tone of colour of the base coat. For this I use many different colours of oil paint, varying from Raw Umber to yellow ochre. In this stage I also add more streaks, stains, shadows, scratches and dust effects with the oil paints. For example, for more shadows, I use the darker colours as Burnt and Raw Umber. For dusting you can use buff or sand colours. In this case I also used the Light mud oil paint from the Mig Abteilung range. You can do almost anything with oil paints, and if an effect is overdone for your taste, you can easily correct it with some thinner.





For a more "gritty" dust effect I also used the Mig Ammo thick soil. You can use it directly out of the jar, but this paste can be thinned with white spirit. A location of a vehicle which is sometimes forgotten for weathering is the side of the hull behind the wheels and the underside. So before fixing the wheels and tracks I added some pigments and washes to obtain a dirty look. The decals for this specific tank are available from Braille Strike. The tracks are from Fruil and add a nice weight to the model. There are other options for tracks, such as resin or plastic tracks, but I prefer the realistic appearance after treating them with a burnishing fluid.

It was quite a challenge to replicate the Hessian tape camouflage netting. For this I used some very old camouflage netting from Verlinden, I had lying around. The advantage of this netting is that

it's already coloured. The netting was moistened with some diluted white glue and placed on the Cromwell. The tape was made by cutting thin paper into 1,5mm strokes and before cutting the paper was painted with an AK Olive Green acrylic marker. Then, these were cut into 1-2cm strips, damped with some water diluted white glue and carefully placed on and between the netting. After drying some of the strips were slightly altered in colour by giving them a thin layer of Olive Drab. A thin wash of Vallejo German Black Brown was also added.

For some accessories such as the tools, flimsys and the jerrycans, I used the Ak acrylic markers. These are very easy to use and give great coverage of the paint. They tend to give a satin finish, so some items were given a matt coat afterwards.



For making the building on cobble stone street, I used styrodur foam. This is available in various black and blue sheets and is very easy to cut and shape with a sharp hobby knife. For the brick wall of the building, a special tool was used to cut the many small bricks. Some Scotch Brite was used to give the walls and also the street some more texture.

When all of the stones were cut and shaped, a primer coat of Tamiya matt black was airbrushed on. After this a thin layer of plaster was smeared on for the jointing of the wall. On the cobble stone street also a thin layer of plaster was put on with some fine sand added. Then the building was painted brick by brick using Vallejo acrylics.

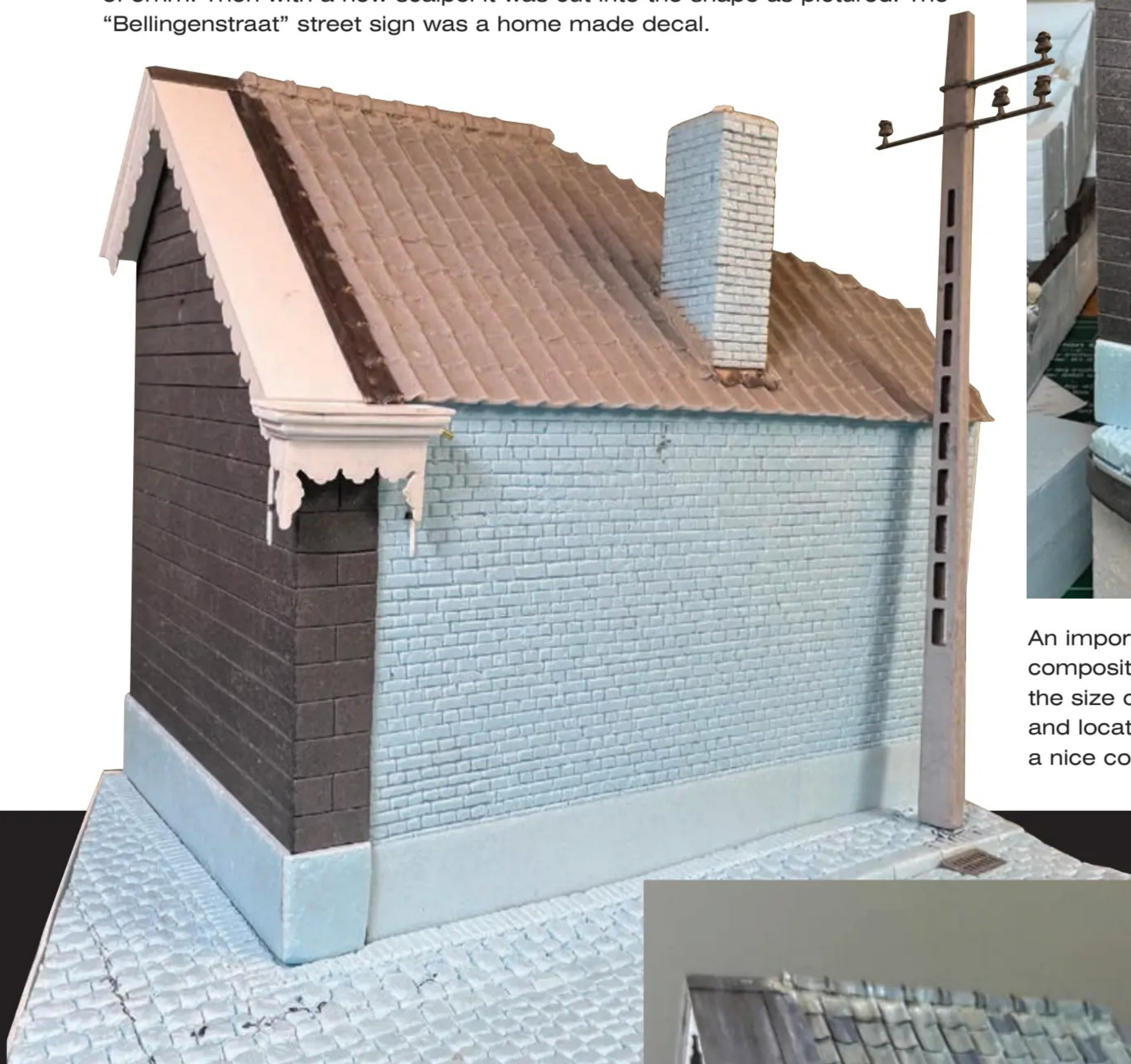


The colours used for the bricks are Saddle Brown, mixed with flat Flesh and Stone Grey for different tones. The grouting was painted with different colours such as Light Grey, Stone Grey, sometimes highlighted with some white. Weathering was also done with Vallejo acrylics, mainly dark brown colours such as German Black Brown camo, Smoke and Chocolate Brown. Damp effects on the lower walls was done with diluted Vallejo Slimy Grime Dark Green. When painting the styrodur, make sure you use an acrylic paint, which doesn't damage or dissolve it. The roof was made of a resin sheet, cut into shape from DioDump. The bargeboard of the roof was quite challenging to make.

After trying and failing many times to cut the desired shape out of thin plastic sheet, I used a special scissor for textile that cuts half of a circle with a diameter of 5mm. Then with a new scalpel it was cut into the shape as pictured. The "Bellingenstraat" street sign was a home made decal.



An important thing to keep in mind for the composition of the diorama, is that I determine the size of the base after completing the building and location of the figures. In this way you achieve a nice compact composition, which I prefer.



So, in the end this was quite a challenging project, recreating a scene from a photograph and trying out some new things to make and paint. But with some effort and patience, this diorama was one I really enjoyed making. I would like to thank Eelke Warrink for providing me the beautiful 3D printed parts, and the members at the Dutch Twenot Forum for their constructive comments during this build.







TRIUMPH AND TRAGEDY



1:35



MAPLE LEAF MOVER



Cristophe Trieste
CREATES A COOL CANADIAN COMBO



After the CMP C60X, released two years ago, Resicast is continuing the CMP range with a CMP C30 Light Anti Aircraft Tractor. Having always had a soft spot for the camouflage of the Italian campaign, this was the perfect opportunity to undertake the assembly and painting of this unusual tractor unit and to envisage a simple scenario concerning this top theatre of operations that is often neglected.

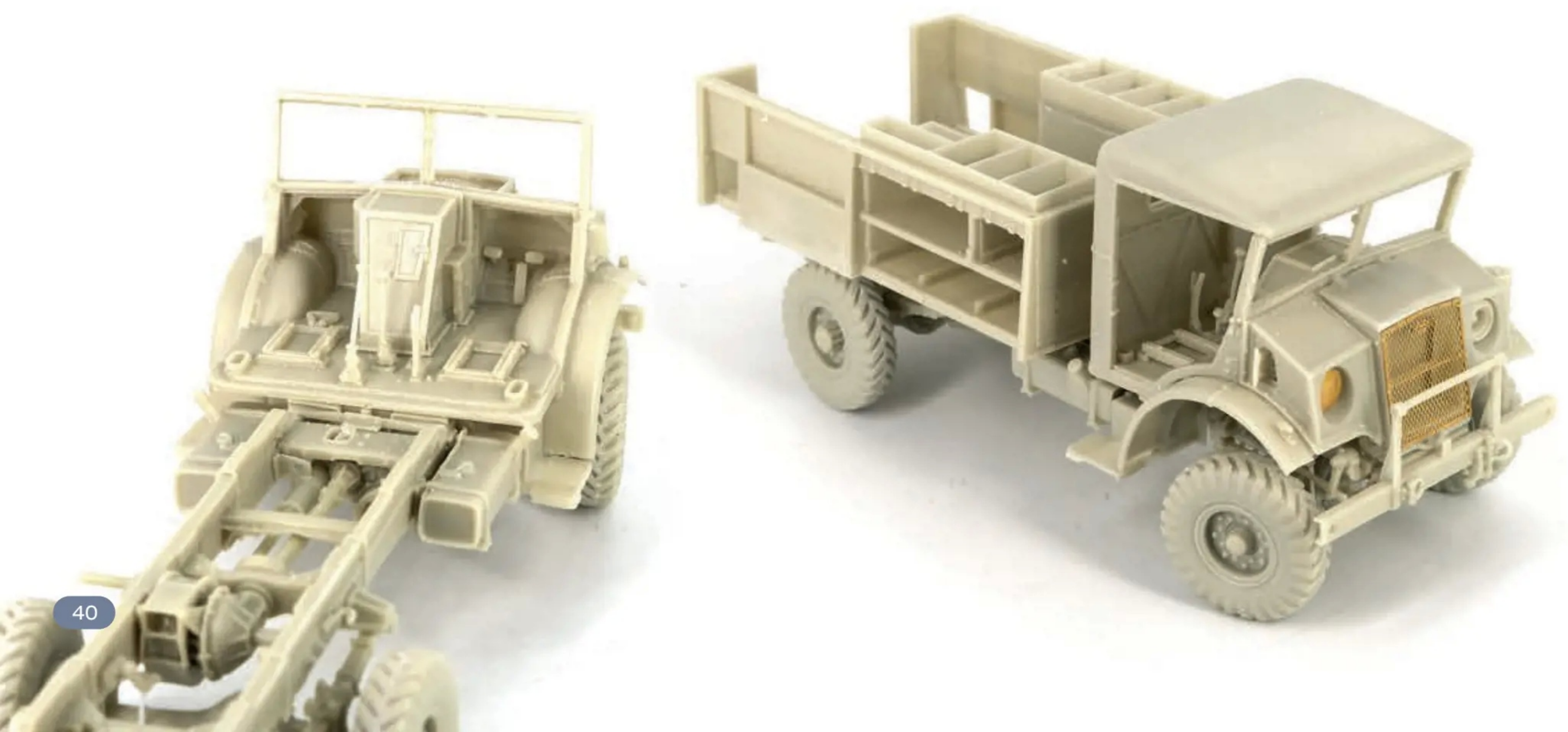
The acronym CMP (Canadian Military Pattern) refers to a large number of different vehicles produced in Canada, based on English models, by different manufacturers such as Chevrolet, Ford or Chrysler (Dodge). These trucks were robust and reliable. They were present on all fronts of the Second World War and continued to be used for many years after the end of the war. The Chevrolet C30, with a capacity of 3 tonnes, had a single axle and four-wheel drive. The rear platform was adapted to carry ammunition, spare parts and the crew of a 40mm Bofors anti-aircraft gun.

The Resicast kit consists of almost 250 pieces of grey-green resin, bubble-free and precisely engraved, with a brief photoetch sheet and a decal sheet to represent three different trucks (two Canadian and one British) as well as all the markings required for the different ammunition boxes.

Assembly is straightforward, thanks to clear instructions and precise adjustments, provided that the sometimes fragile parts are properly degreased and prepared before gluing. A complete, well-detailed engine is supplied. It is assembled but will remain invisible in the configuration I have envisaged. The front wheels are turned slightly thanks to the clever design of the kit, which will add a little dynamism to the whole. The model is divided into different sub-assemblies to make it easier to paint the many accessories. The kit is sprayed with two thin coats of Ammo white primer. Small defects in the moulding or gluing can be more easily detected and corrected at this stage.

The Canadian vehicles were theoretically painted Khaki but I chose a greener shade as a base. An initial coat of Mission Model Paint's US Army Olive Drab was airbrushed over the whole vehicle. A gradient of the base colour plus sandy yellow was then sprayed over the roof. The cab roof is speckled with this lighter shade to enrich the colour and begin the ageing process.

The interior of the cab is quickly scoured with a small piece of sponge and a dark brown tint. A wash enhances the hollows and highlights the engraving. Although the interior is barely visible, particular attention is paid to the dashboard. The eye is inevitably drawn to this kind of detail.

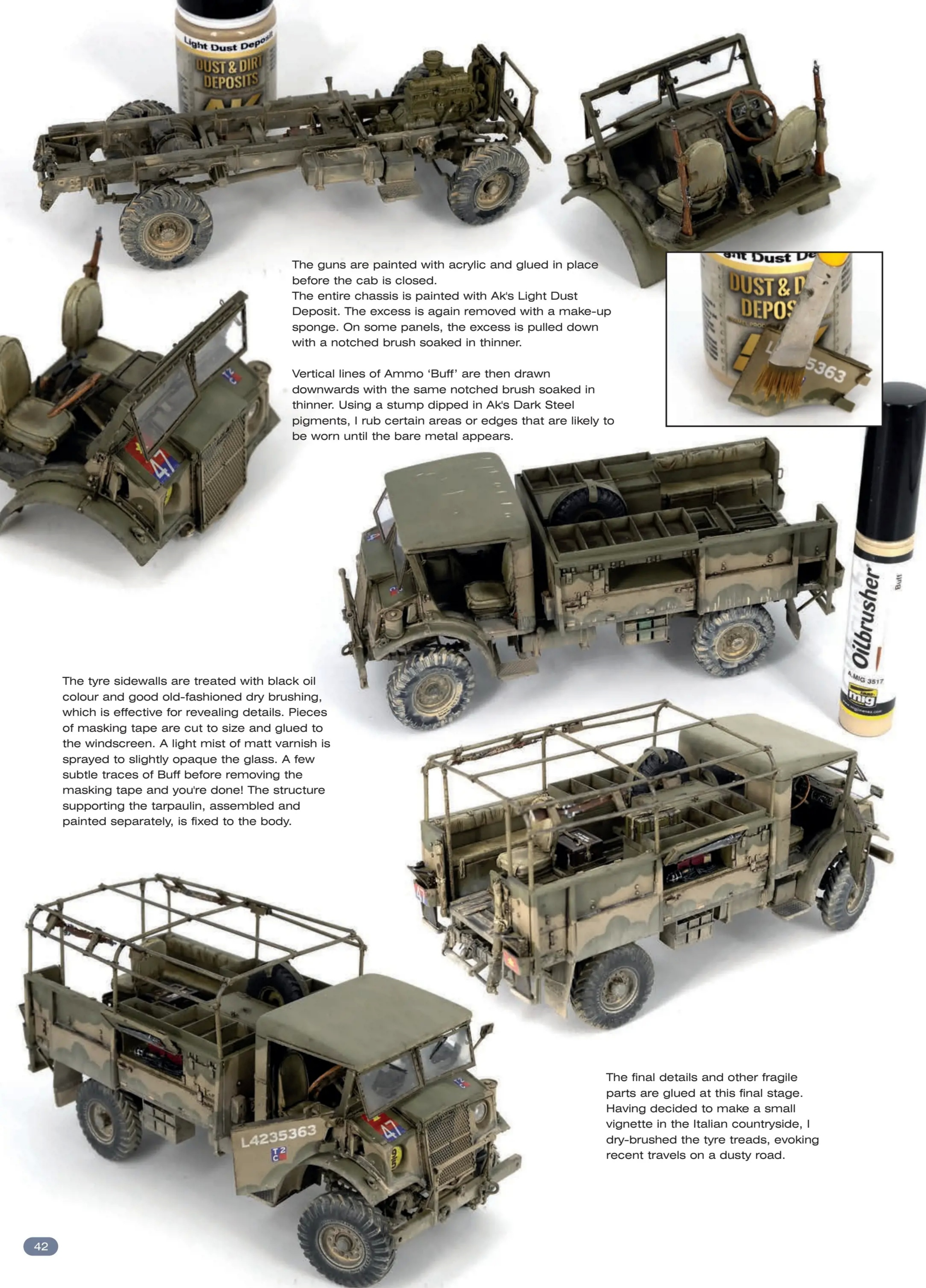




For the camouflage, I chose a profile found on the internet, inspired by the famous “Mickey Mouse ear” camouflage seen on the north-western front of Europe. I stuck on flattened balls of Ammo masking putty to create the camouflage. I then sprayed a coat of US Army Sand from MMP. Some corrections were made using a brush and an airbrush on some of the ‘ears’, which seemed too light in comparison with the base colour. The whole piece was protected with a coat of gloss varnish from VMS. The decals were then sealed with a coat of satin varnish from the same manufacturer, to remove all traces of shine.

An initial, very diluted coat of Ammo dark brown is applied to the entire model to highlight hollows and details. The excess is removed with a make-up sponge. The tyres are painted dark grey. The parts of the seats and benches are painted in oil, with a mixture of burnt umber, ochre and Naples yellow, as if painting a figure. The cab is completed with the windscreen, which is very realistic, with the opening system finely represented. A few traces of “Buff” oil paint stain the floor as dust.





The guns are painted with acrylic and glued in place before the cab is closed.
The entire chassis is painted with Ak's Light Dust Deposit. The excess is again removed with a make-up sponge. On some panels, the excess is pulled down with a notched brush soaked in thinner.

Vertical lines of Ammo 'Buff' are then drawn downwards with the same notched brush soaked in thinner. Using a stump dipped in Ak's Dark Steel pigments, I rub certain areas or edges that are likely to be worn until the bare metal appears.

The tyre sidewalls are treated with black oil colour and good old-fashioned dry brushing, which is effective for revealing details. Pieces of masking tape are cut to size and glued to the windscreen. A light mist of matt varnish is sprayed to slightly opaque the glass. A few subtle traces of Buff before removing the masking tape and you're done! The structure supporting the tarpaulin, assembled and painted separately, is fixed to the body.

The final details and other fragile parts are glued at this final stage. Having decided to make a small vignette in the Italian countryside, I dry-brushed the tyre treads, evoking recent travels on a dusty road.



In 1931, the Swedish company Bofors developed an innovative 40mm anti-aircraft gun. It was manufactured under licence and used by many countries. It is still in service in some armies. Canada used it from 1941 to 1959. Having decided to represent Canadians in Italy, I bought the Bronco kit, which is starting to look old and is hard to get hold of. Bronco is synonymous with quality and fine detail, but also with tiny parts and complex breakdowns! So I won't dwell on the assembly, and will move straight on to the painting.

As with the C30, we start with a coat of primer, this time from Mister Hobby! To vary the shades and break the uniformity, I chose another shade of Olive Drab as the base colour, again from Mission Model. I then sprayed the colour from above, adding a few drops of Sandgrau.

Once again, I used Mx Putty to make the masking and sprayed on some Sandgrau. Of course, this base colour was lightened with white to achieve a zenithal effect. A coat of VMS satin varnish was applied to protect the colours and help the washes to flow.

Having had a few disappointments with the hairspray technique and the Mission Model paints, I decided not to repeat the experience and turned to a long scratching session using a piece of sponge and a fine brush. I used the basic Olive Drab to represent the splinters on the sandy yellow parts and "Nato Brown" on the green parts.

Localised wash are deposited in the hollows and around the reliefs. The excess is removed with a make-up sponge. This operation darkens the previous shades considerably.

Dusting is again carried out using AK Interactive Light Dust Deposit. The excess is removed with a notched brush soaked in thinner. A few traces of Ammo "Buff" are drawn down, again using the notched brush. The wheels and shield are glued on. After careful consideration, the shield is removed. On the advice of a fellow modeller, I repainted the barrel in a very dark grey. In fact, they were replaced very regularly. Camouflage no longer seemed obvious.

Using Ak Interactive "Dark Steel" pigments and a stump, I rubbed a few places where the metal had been exposed by repeated servicing and handling. The gun's protective cover is easily made with two-component putty.

40mm BOFORS gun





FINALLY...

It's been a pleasure to assemble this well-designed and well-understood CMP from Resicast. The gun, despite its sometimes unnecessarily complicated assembly, is a faithful replica of this iconic gun. By opting for the Italian theatre of operations, I was able to choose an original camouflage that highlights the original shapes of the truck and the apparent simplicity of the Bofors.





CMP C 30 LAAT
40mm BOFORS



1:16

PAOLO LASALA
DOES A LITTLE CONVERSION
WORK RESULTING IN A
BIG-SCALE IDF SUPER SHERMAN



M1

SUPER-SIZED SUPER-SHERMAN

With Israel's defence force desperate to strengthen its armoured capabilities in the mid 1950s the IDF turned to France who, at the time, were the only willing supplier of AFVs. An initial supply of around sixty Shermans were delivered secretly consisting mostly of M4A1(76)Ws and some M4A3(76)Ws (the 'W' designates wet internal ammunition stowage). These tanks were designated M1 by the IDF which was the generally accepted term for the 76mm main gun. Some of these M4A1s were fitted with the HVSS suspension and earned the name 'Super- Sherman'. By the time of the Six Day War in 1967 it appears all IDF Shermans sported the HVSS running gear but shortly after the conflict they were phased out as a gun tank and later updated with dozer blades

and features of the M-50 and M-51 series. These were used as late as the Yom Kippur war of 1973. An interesting note, any typical of the IDF's ethos of upgrading and recycling, was that many of the M1s gave up their low-profile cupolas which were added to the new M-48s (Magach) brought in to replace the M1 as Israel's main gun tanks.

Although modellers working in the now very popular scale of 1:16 are not blessed with the huge range of Shermans in 1:35, I have been able to create an IDF M1 using the 'I Love Kit' 1:16 M4A1E8 (kit 61618) which has the correct cast hull. 'I Love Kit' are a spin-off of Trumpeter so typically a solid base to work on requiring a



Armed with good reference books (mainly Sablinga Martin) work began first on the turret as it exhibits the main additions to the kit. The smoke dischargers are made from simple plastic tubes positioned on welded brackets on both sides of the turret with the addition of cap and chains.

The second, and most characteristic sign of the IDF sherman, was the searchlight. This was a real challenge! I studied several options, but couldn't find a satisfactory solution for a long time. There isn't at the moment, much aftermarket for the M4 in this scale and I hadn't taken the dive into 3D printing...yet...

One evening with my wife cleaning the dishes, I suddenly focused on the cap of the dish detergent...immediately I reached for my measuring caliper and...eureka!!! the exact circumference I needed! My wife looked at me thinking her husband has gone crazy! The bulb filament, clear lens and mounting bracket were simple to fabricate.

DEF Model came to the rescue with the correct barrel and muzzle brake. The set DM16003 also includes a .30Cal gun barrel used on the hull mounted gun.





1:16 lends itself well to details and textures that just can't be seen with the naked eye in smaller scales.



The hull doesn't require any modification; only the replacement or addition of some details like the wooden sections of the main gun cleaning rod and the wooden handles of the tools, really unacceptable detail from the box in this scale but easily replaced with real wood.

Some other easy details were the chains on the front light guard and on oil and fuel caps and the track tension tool.

The roll of barbed wire was an often seen feature of the period which I created with metal wire wrapped in fabric tape distressed suitably.

Thin metal sheet was used to create detailed tool fixings.



One extravagance I allowed myself was to raid another kit (M4A1 76W from 'I Love Kit' also) for the correct engine deck (with some plastic-card detail added on the air intake) and turret hatches. The handles were replaced by brass rod for a better scale appearance





The later models of Sherman had an infantry telephone mounted on the rear plate (right corner). I created the electrical cable by winding soft lead wire around itself. More soft metal sheet made the fender-mounted oil can.

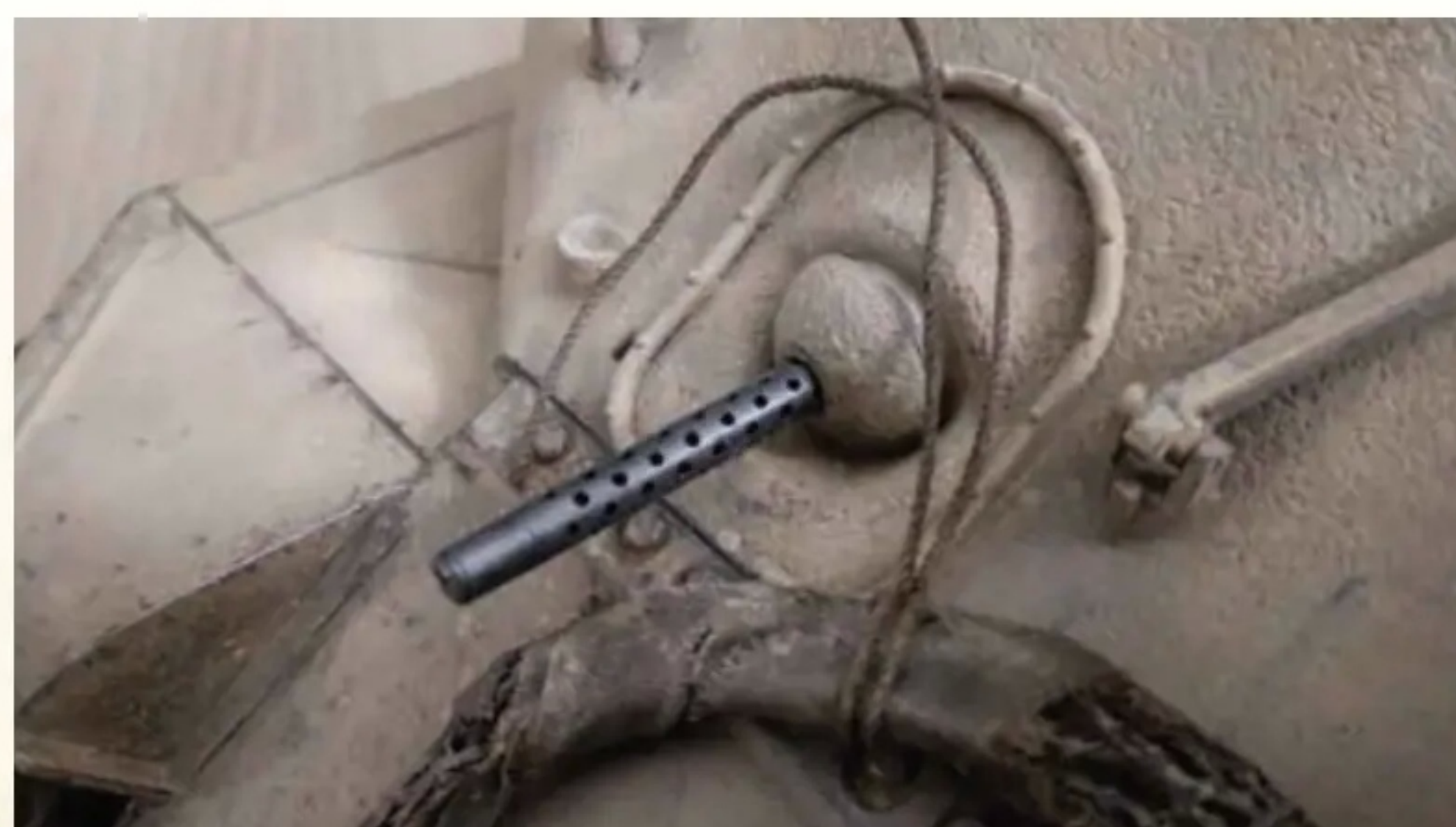
The finished kit tracks look really nice, but...with ten parts per link and 79 links per side tedious doesn't begin to describe the pain of assembly!



As in almost Chinese made kits, the wheels have rubber tyres (hateful) but, with the help of filters and pigments you can obtain a decent final result.



Using the real nice AK IDF early sand yellow (RC880) I painted the entire model and used the classic weathering techniques using oils, filters and pigments as usual. In 1:16 contrasts are best kept lighter than if working in 1:35 or smaller. Paint chipping and damage can be made more realistic in this large scale as can textures of various materials and dirt deposits. All markings are from masks CAD cut by my friend Fabio and then airbrushed. The final touch was adding some resin stowage. So, no more to say if not the most important part; the precious technical / historical support (and patience) from two friends (and great modellers) of mine, John Murphy and Lillo Basile- thank you both!





M1



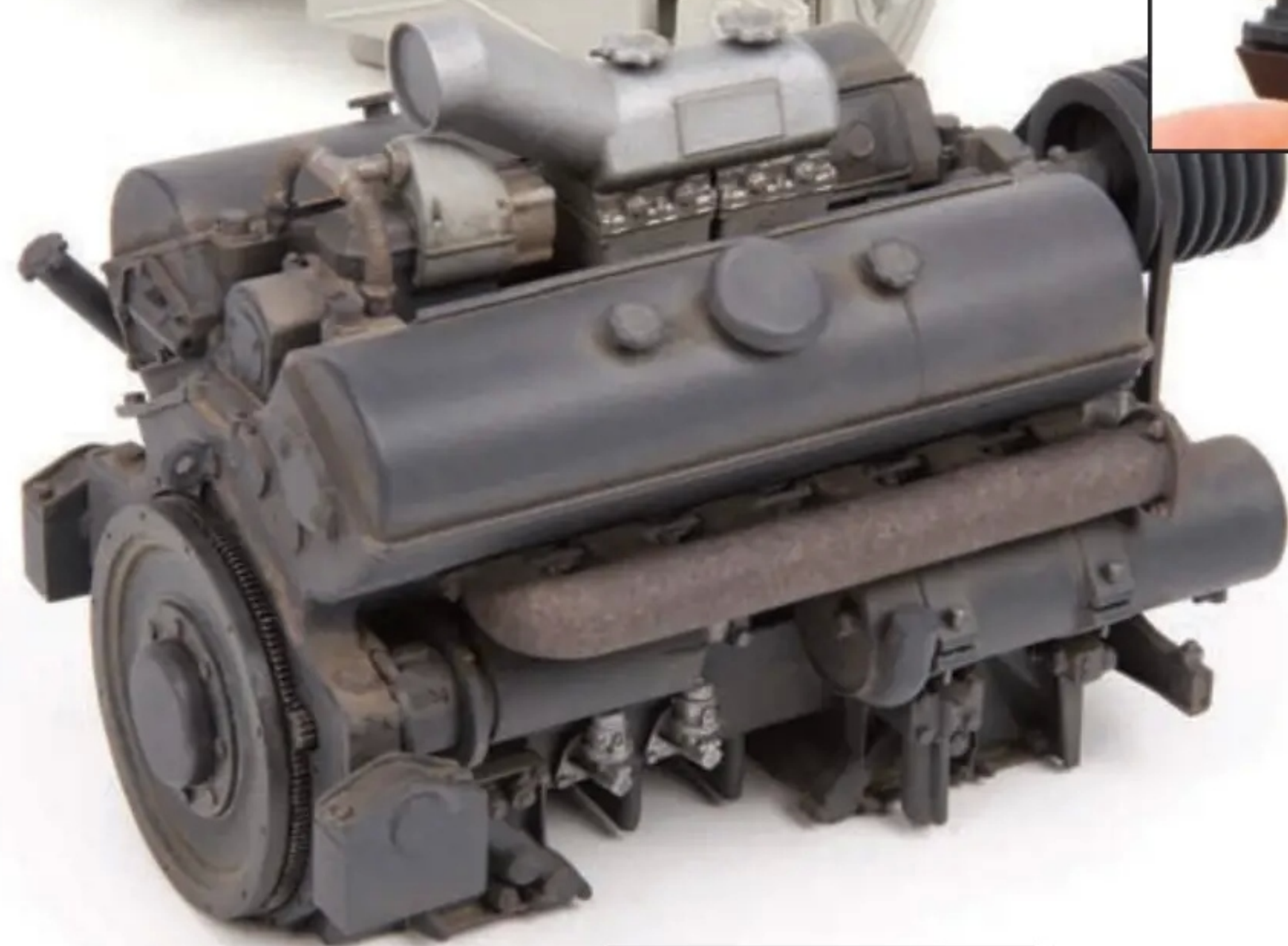
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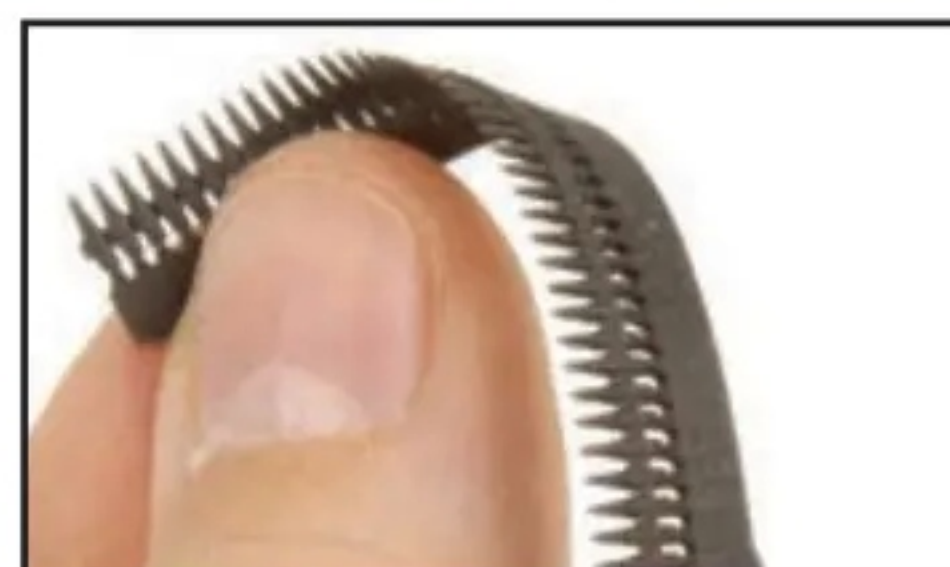
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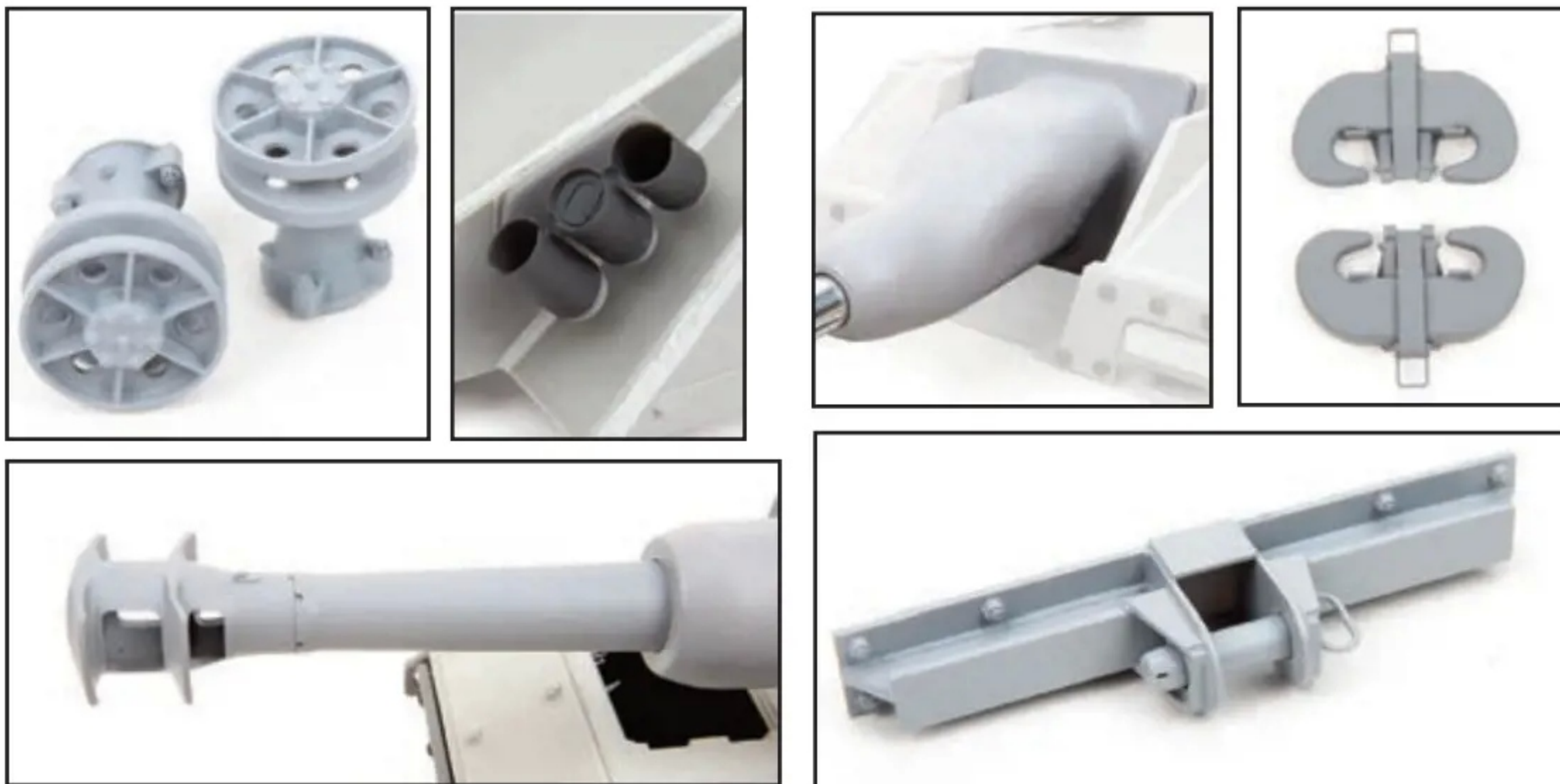


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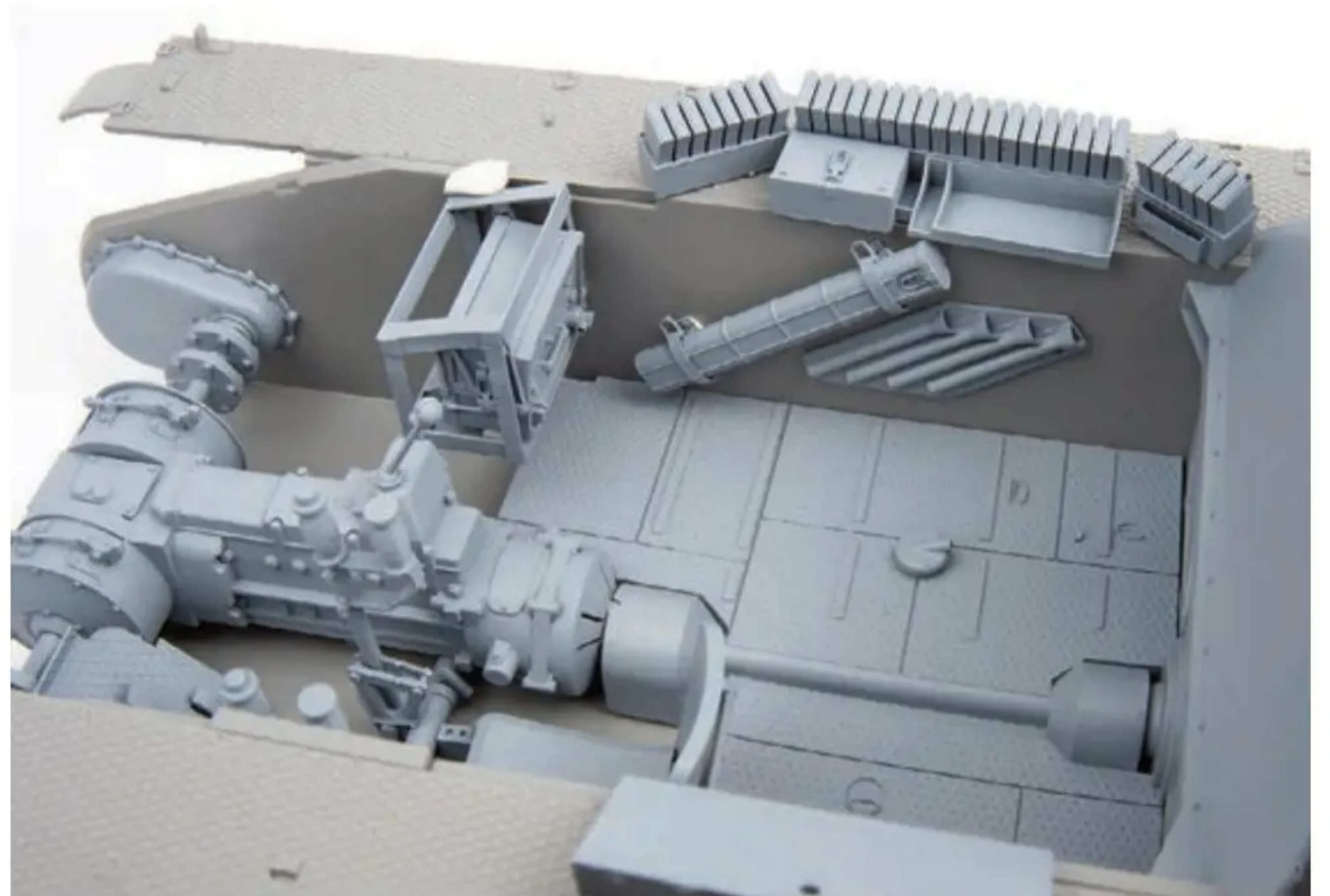
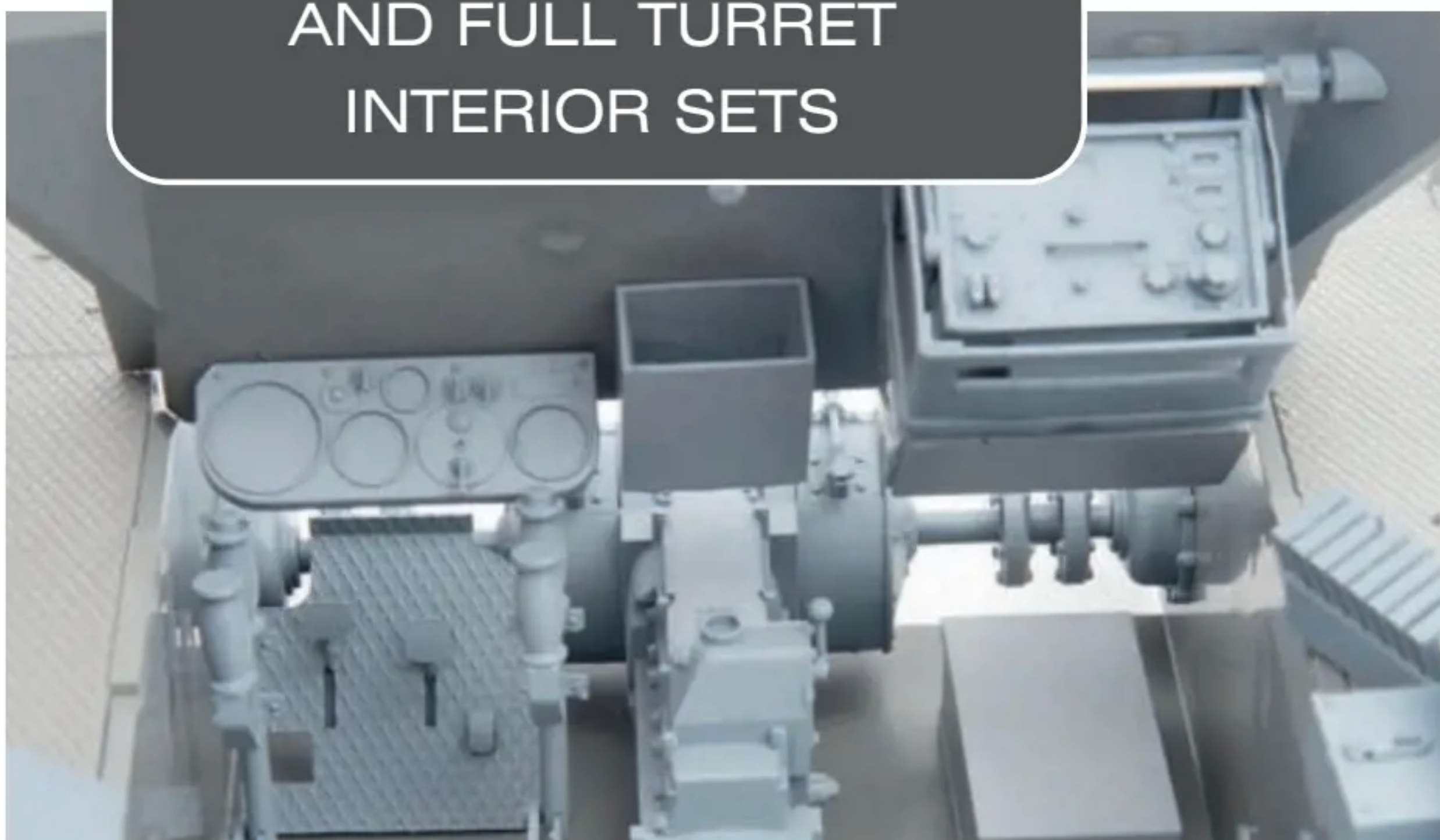


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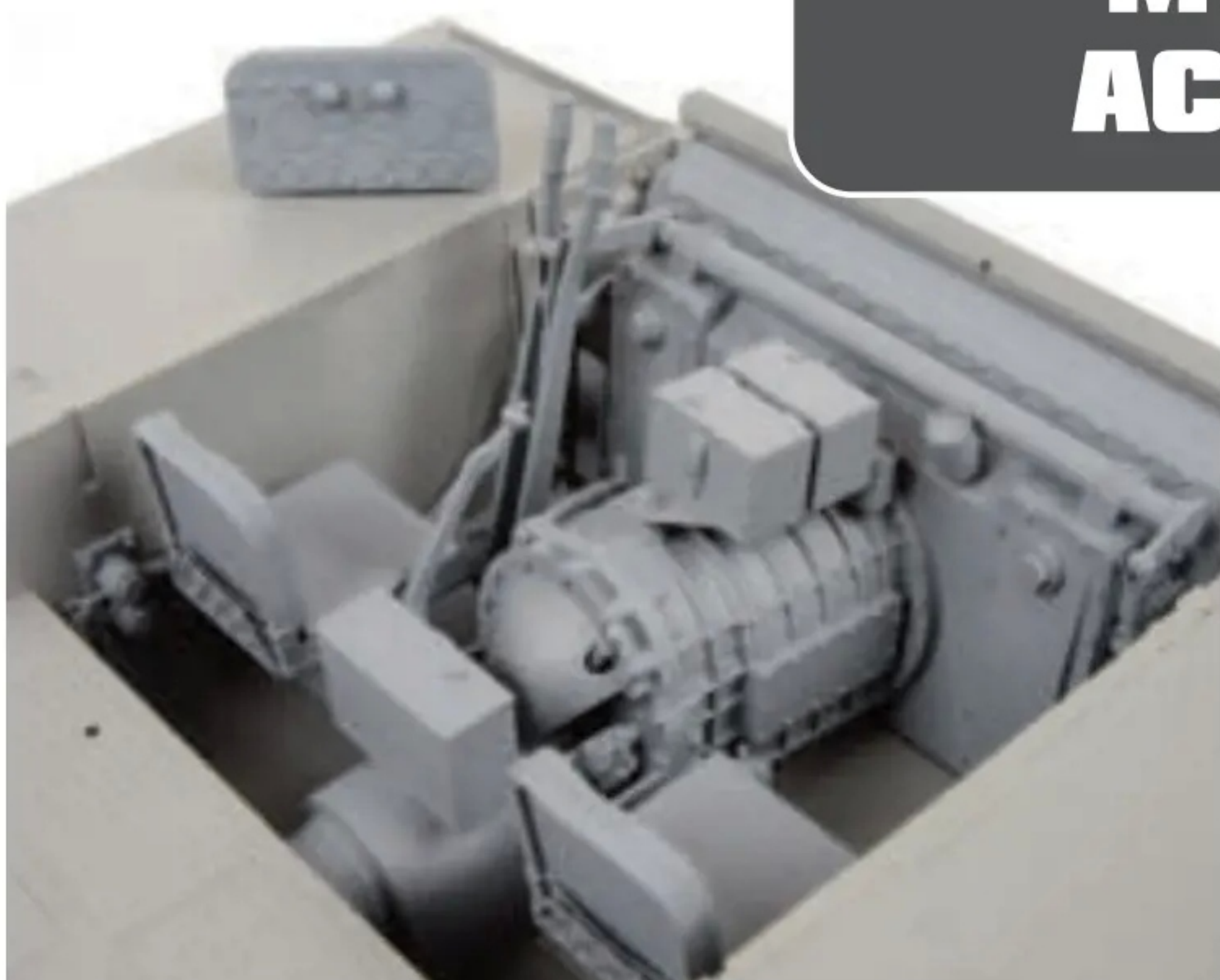
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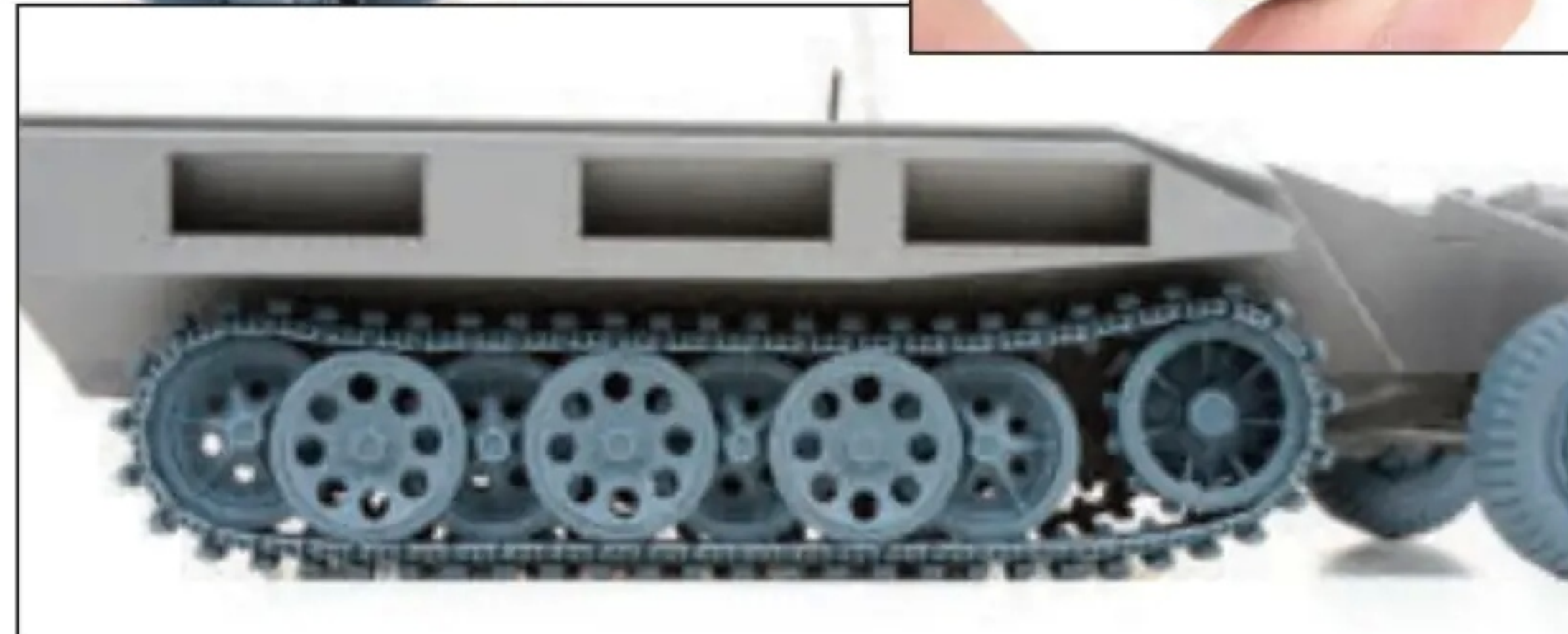
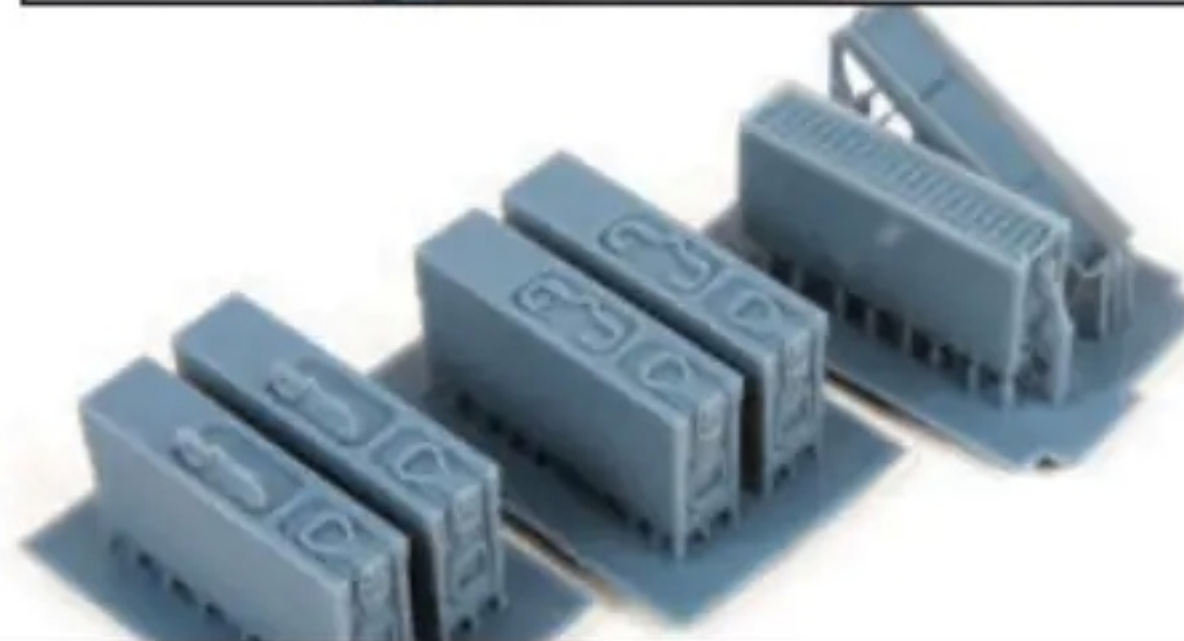
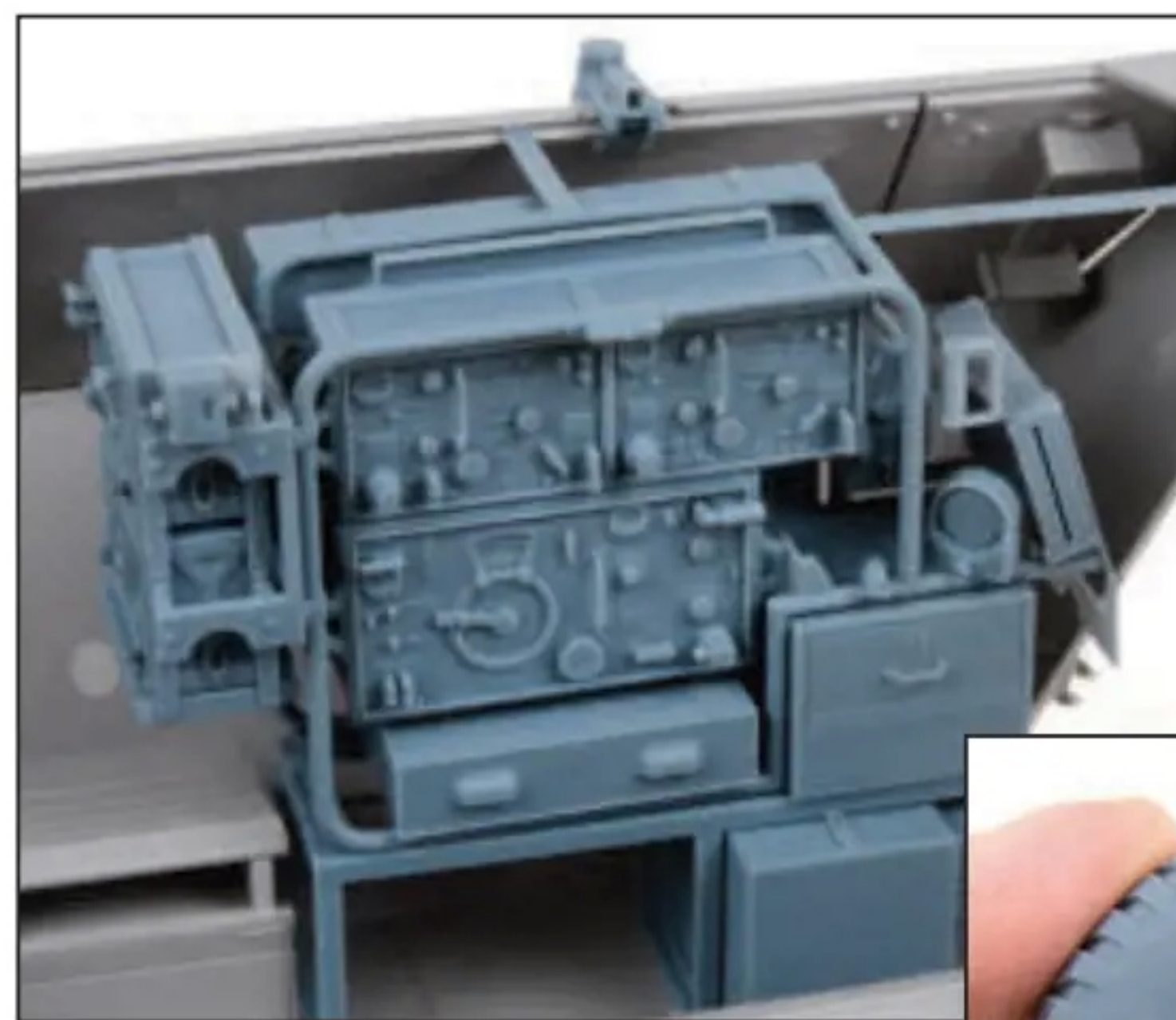
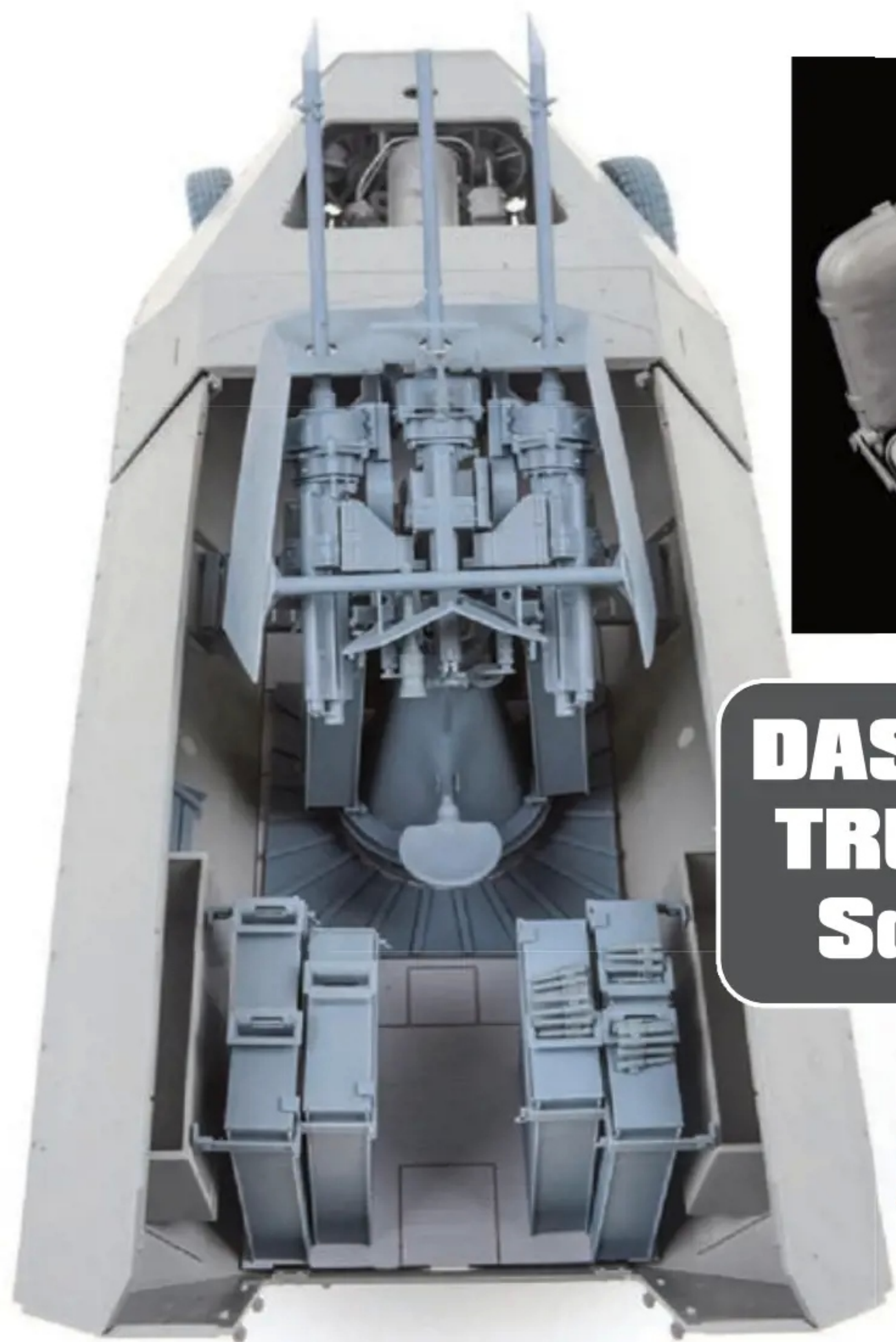


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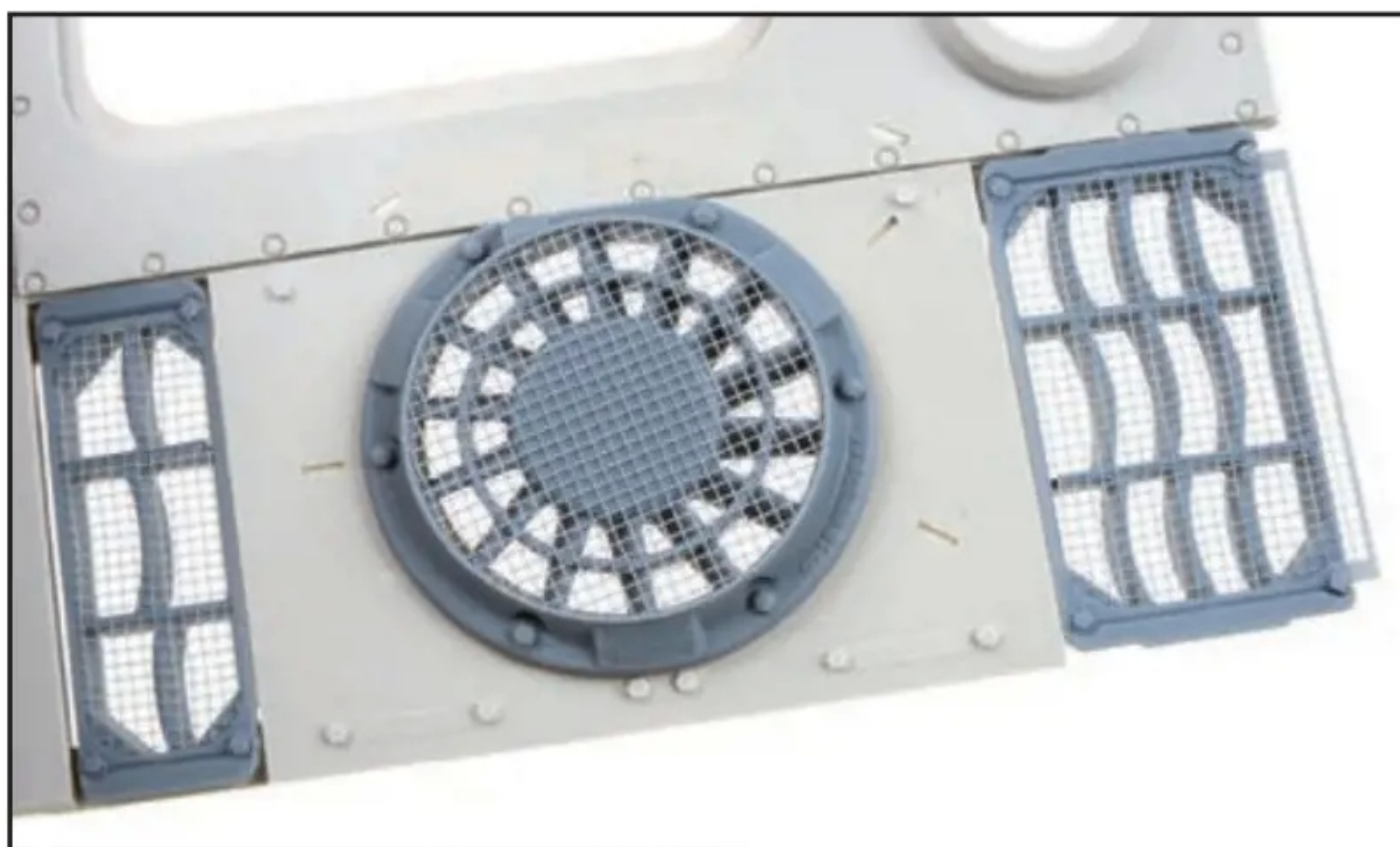
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TRUMPETER PANTHER/ JAGDPANTHER



1:16 PANZER I
D.A.K. CREW



1:16 ARDENNES
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1:16 StuG III CREW

RESIN FIGURES

OVER A DOZEN SETS AND
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CHOOSE FROM



1:16 PANZER
CREW



1:16 SdKfz 251
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1:16
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ZACK SEX

GETS STRAIGHT INTO THE NEW
M142 HIGH MOBILITY
ARTILLERY ROCKET
SYSTEM KIT
FROM FOREART

SMILING
ASSASSIN

HIMARS



1:35



Heavy Hitting HIMARS, the US multiple rocket launcher has become synonymous with the Ukrainian conflict. The making of a modern icon, some weapon systems become icons of their era, while others transcend this and come to represent an army, a cause, or an actual conflict. The US made HIMARS, along with other key weapons such as NLAWs and Javelin, which have, in their own way has come to represent the spirit of Ukrainian resistance. In respect to the Ukrainians' technical ingenuity and their ability to embrace sophisticated western tech in their resistance to Putin's imperial invasion. Much in the manner that the AK 47, Scud missile, and Tiger tank have become short hand for guerilla warfare, the Iraq war, and German panzers.

A little history...

The requirements for a light and highly mobile rocket launcher system were first realized in 1982 by the US Army 9th Infantry Division, which, as a mechanised division, could perceive the need for highly accurate counterfire asset. Presumably aware of such truck based assets as the Soviet Ural based BM 21, the idea for something similar failed to gather support and was shelved for another decade. The advent of the 1991 Gulf War saw a renewed push for a system that was lighter than the heavy tracked M270, a vehicle that was not easily or economically airlifted to Saudi

Arabia. In April 1991, the Himars or High Mobility Artillery Rocket System was tested in White Sands Missile Range, using a modified Honest John truck launch chassis. From this proof of concept Lockheed Martin would be awarded a \$23.2 million contract to develop 4 prototypes, this initial evaluation batch was then followed up by further evaluation batches for the Army and Marine Corps, but at a fairly low rate of production, probably due to a sense in the overall use US military that the need for such a strike or counter battery system was already catered for with everything from SPGs to strike aircraft.

After testing the system extensively (including firing from amphibious transport), the high precision of the Himars fire began to be fully appreciated. The Himars tested firing SLAMRAAM surface-launched and AMRAAM anti aircraft missiles. This highly flexible, easily transported, and highly precise MRLS gave US forces a very effective bang for their buck.

The M142 Himars first saw action with US forces in Afghanistan in 2010 when two Himars launched rockets were reportedly dropped short of target killing 30 civilians during Operation Moshtarak on investigation however its was found that the rockets hit the Taliban targets but that they had been using locals as human shields. In October 2010, Himars were in action again, targeting Taliban leaders in their hideouts.



In November 2015 the US Army was back in action in Iraq but this time in more of a fire role, helping the new Iraqi army and militia units in their desperate counter attack of ISIS using the M142 from various air bases to fire over 400 targeted strikes against this highly mobile and lethal opponent. Himars would see further use against ISIS in Syria in 2016 in support of various Syrian rebels fighting ISIL these engagements would last till at least 2018 and would involve Himars firing their six pod rocket launcher from bases not only in Syria and Iraq but sometimes from Jordan.



The fighting around Deir ez-Zor would see US Himars fire 30 pods of GMLRS (Guided Multiple Launch Rocket System) rockets a day from Omar airfield. The six pod GMLRS (M30 to M32 series) has an effective range of between 15 to 92 Kilometers, while this pod can be removed and replaced with a single and much larger 610mm single tube launcher to fire the ATACMS or Army Tactical Missile System with an effective range of 300 kilometers, this series of rockets includes the M39, 48 and 57, with munitions flexibility being another cornerstone of the M142 system.

Most of this Himars run down would have meant little to the man or woman on the street had it not been for the events of the 24th of February 2022, Vladimir Putin's genocidal invasion of Ukraine would see the collective West (some nations more willing than others) ship all manner of weapons to Ukrainian forces once it became clear that Ukrainians were not remotely interested in becoming absorbed into Putin's Russia and would violently resist his murderous forces. The first major weapon system to see action with Ukrainian troops were of course, the Javelin and NLAW shoulder launched ATGMs. These systems were remarkably effective in tank and IFV killing. The need to hit Command and Control and Russian headquarters along with ammunition dumps and barrack buildings demanded a weapon of greater and higher precision than the older and less accurate BM 21, BM 27 and BM 30s in Ukrainian service. On the 1st of June 2022, the US government announced it would supply 4 Himars to Ukraine .

These MRLS systems arrived on the 23rd of June and were in action by the 25th. If recently released, reports are to be believed this deployment of HIMARS and earlier delivered M777 was overseen by a joint US /Ukrainian group referred to as Task Force Dragon. This group's first target had been a Zoopark M artillery radar hit with M777, but the target list would expand with HIMARS and include Russian command and control targets, fuel and ammunition dumps in occupied Ukraine and later in Russia proper. This was all a part of Biden slow and careful shifting of its own red lines over time.

Fear of provoking Putin too far seemed to dictate the use of longer-range missiles and rockets, such as the ATACMS. However, the HIMARS system was critical in strikes that enabled, for example, the retaking of Kherson city. All manner of Russian targets have been struck over the last three years, with Ukrainian HIMARS hitting a dam in Brlgorod on the 27 of October in 2025 and flooding large tracts of territory and many Russian positions, for the cost of three GMLRS. The ebb and flow have changed again recently, with Ukraine fighting to hold her territory while all the time hitting military targets along with oil refineries and thermal power plants so as to bring the war home to Russians in cities as far away as Moscow and Saint Petersburg. The pressure is building up on Putin with oil sanctions seemingly increased under Trump, but whatever happens, we are sure to see Ukrainian HIMARS in action for some time to come.

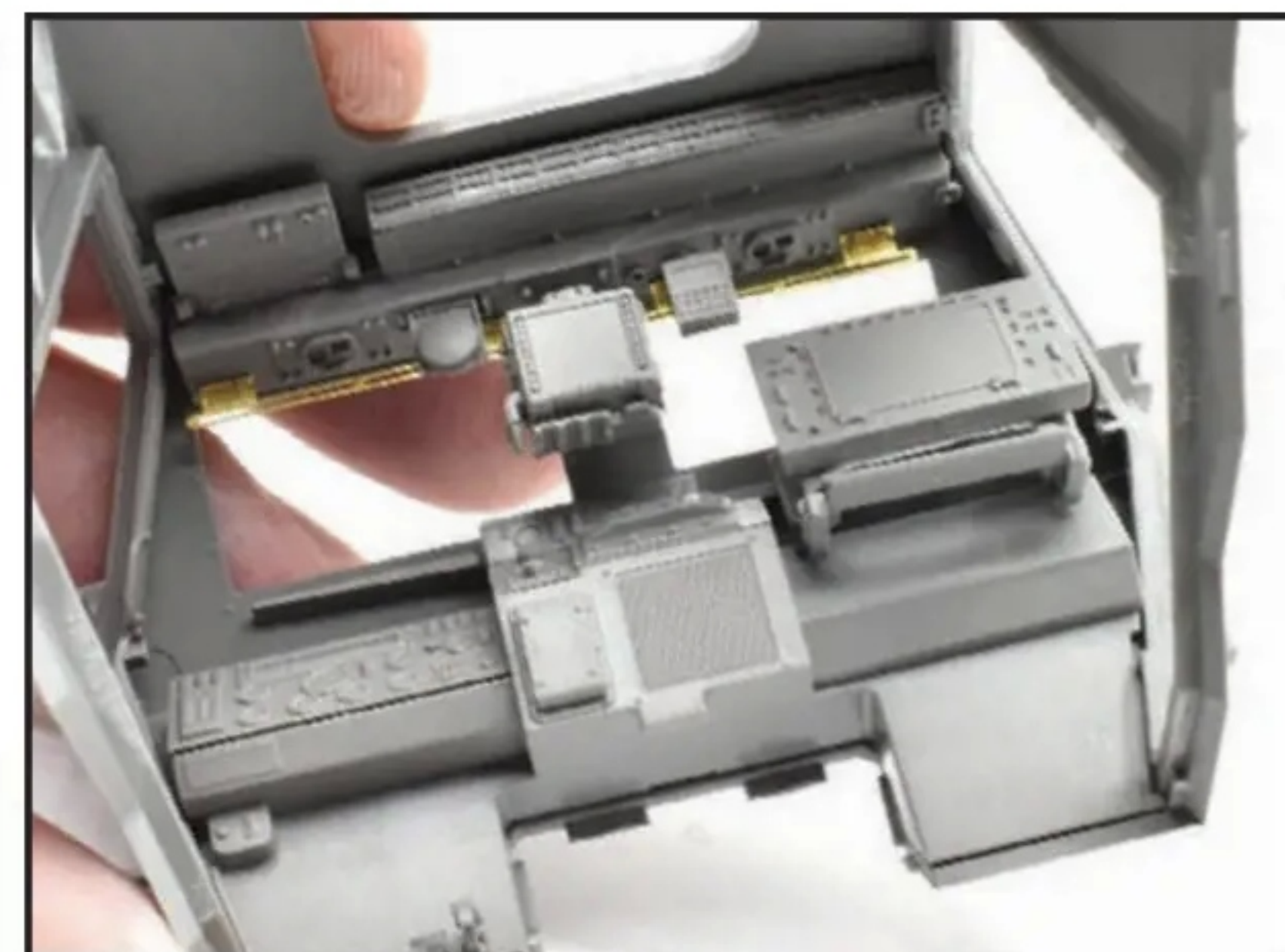
Foreart offers three HIMARS kits, one in 1:76, one standard US military model, and one in Ukrainian configuration. The Ukrainian variant comes with extra cab armour panels, which can be bolted on or off as required. These armour plates are only available in the Ukrainian kit. Other differences are the removal of the aerial and communication units on the rear of the cab and the absence of a machine gun mount on Ukrainian HIMARS so far. The Ukrainian variant also includes a distinct curved set of smiling teeth found on at least one HIMARS MRLS and two M1083A support trucks. The kit contains a sample GMLRS rocket and an ATACMS missile, along with an excellent US army 3D printed driver and a selection of firearms and a shoulder launched anti tank missile.

The first step in construction is the chassis and engine. This layout and assembly allows the modeller to build the Caterpillar engine and display it by tilting the cab forward as illustrated in the text. This could make for an interesting diorama of a repair or garage facility for those who like that sort of setup. I primed the chassis black and, as luck, would have it was about to mount the pretty reasonable rubber tires and plastic wheels when I made contact with Sergey from ScaleX in Odessa. ScaleX produces an ever expanding range of wheels, both WW2 and modern, along with an

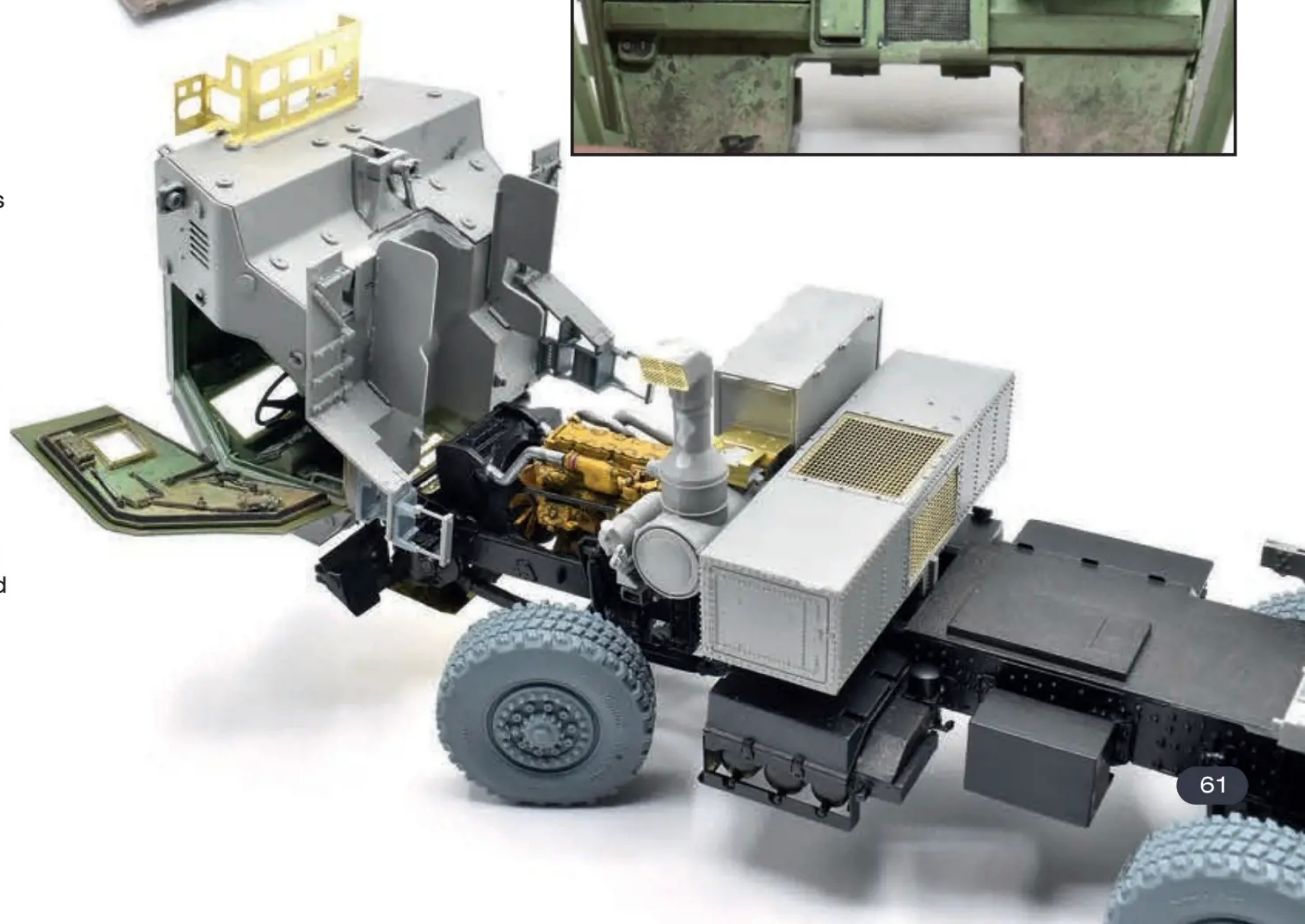
expanding range of wheeled and tracked Ukrainian army attack drones. Rumour has it. ScaleX may well be planning full armour kits soon, but you'll have to wait a couple of months for more information on that.

ScaleX provides the modeller with two options standard tyres and wheels or sagged. For me, it's hands down sagged. They just bring the model to life as far as I'm concerned. The Caterpillar engine was primed and literally coloured in with AK yellow paint pens, completed with a Tamiya black panel line wash. I was rather happy with the little yellow engine, I know it disappears under the cab unit, but I know it's there. I also found that the hinged unit holding the cab on was fairly flimsy and snapped after falling forward too many times during painting and weathering, so be careful if you want to be able rise and close the cab. The painting of the inside of the cab was a bit of a model project in itself. The cab is beautifully detailed, decals, details, and etch build up nicely. Examples of the quality are the cab door interiors, which build n paint up very nicely along with the cab dashboard and ballistic computers. After looking at video footage of US HIMARS in the field, I noticed how dirty and muddy the cab gets during operations.





It is worth noting that as the HIMARS is a high value weapon and target, there are very few photos of them in Ukrainian service floating about. High security is the name of the game. After painting and weathering the interior of the cab, I had to leave the driver's door and roof hatch open to show off the interior, which I would admit I was rather happy with. The HIMARS rocket launcher system was next to this end, I went with the more commonly used six rocket GMLRS pod. I has played around with the idea of putting a single ATACMS bursting out of it's single launch pod with orange Leds and cotton wool but I'm going to use it on a Dragon M270 also in Ukrainian service.





The construction of the Foreart HIMARS kit took a fair few evenings, and attention must be paid to the sequence of assembly and painting, but as all complex kits I find a bit every evening and eventually you empty the box. With construction complete, I carefully masked off the cab windows and the opened driver's door.





I sprayed the whole vehicle in car primer grey, again a pound shop purchase that seems to work nicely with Tamiya NATO green XF-47



Various light fittings and tow hooks were painted orange and silver as indicated by the instructions. The smiling teeth decal comes in a number of sections and must be applied with care



I did it bit by bit applying decal softener and fix to each decal as I attached them to the cab. The central decal designed to be applied over the grill would have covered the mesh screen, so I painted it instead of covering it with the decal.

After a number of coats of Tamiya NATO green XF-47, I hand painted the vehicle tyres and a few sections that were rubber black. Weathering involved a series of washes from the Wilder pigments series, including European Dust, Concrete Dust, and other earthy tones. These were flicked, splattered, and washed over areas put on and removed as I built up the effects and then given black oil paint pin washes and broad ones, along with overlays of 6B pencil rubbing. Speckles of black oil paint diluted with white spirits over the pigments and rough rubbing with a number of different sized oil paint brushes added to the required grungy effect.

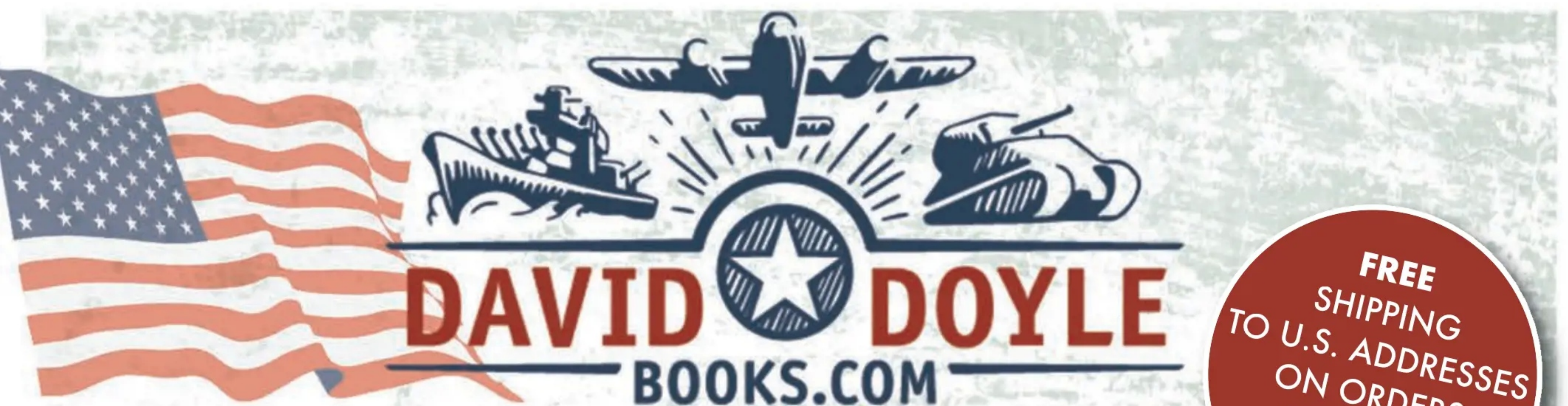
At some point in this process, which could go on forever, I just go right, that's that, and have a beer or two, and consider how the model has turned out. This for me is that short period of time when the project is done and you take it in fresh.

After an evening or two I set about building a simple Styrofoam base after my old pal Jindrich told me there was no need for a big Ukrainian road sign on the base and to just keep the base simple, I was happy to go along with that.



I must say I thoroughly enjoyed building Foreart's Ukrainian HIMARS, and I hope the kit is a success for them and the first of many interesting subjects from them. Special mention must also be made of Sergey and the gang at ScaleX for their outstanding 3D printed HIMARS wheels.

I look forward to meeting them in Odessa next year, in maybe just maybe happier circumstances than now prevail in their home city, so frequently targeted by Russian missiles and drones. Slava Ukraine!



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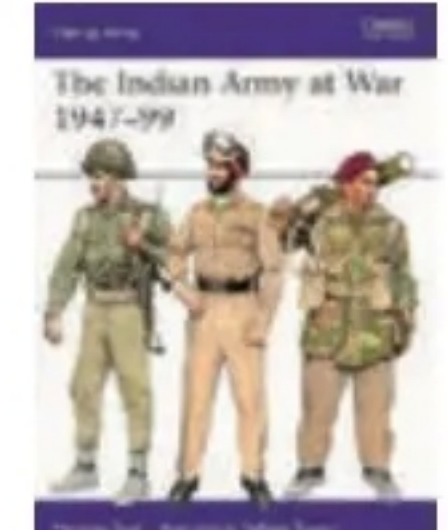
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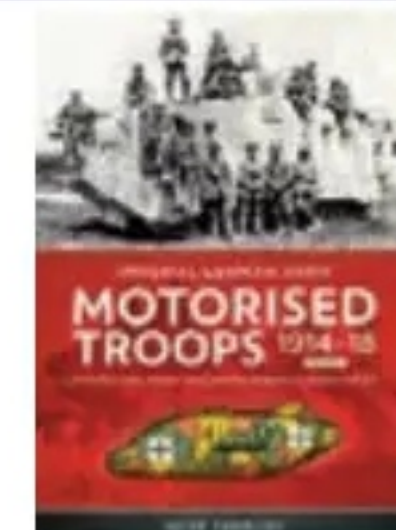
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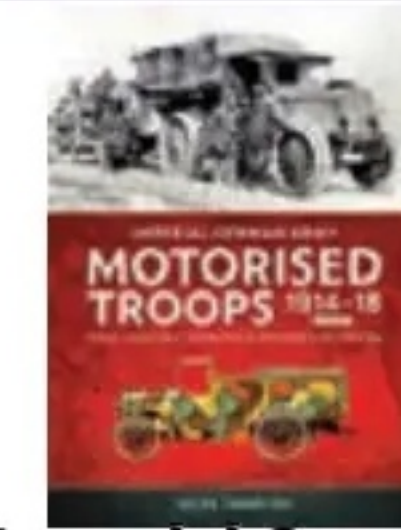
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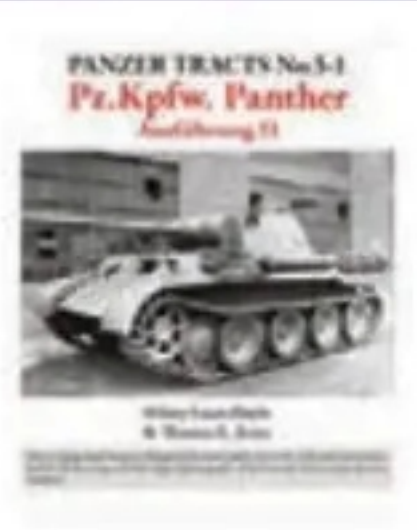
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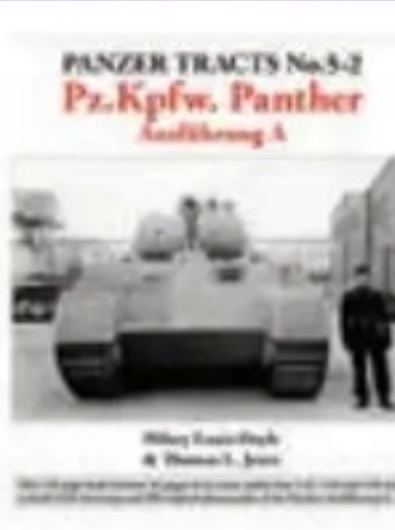
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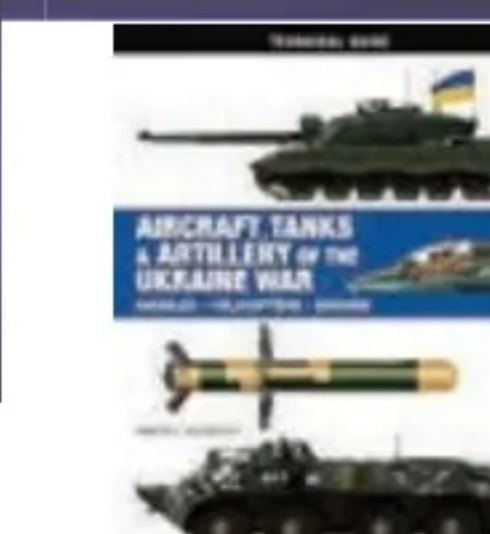
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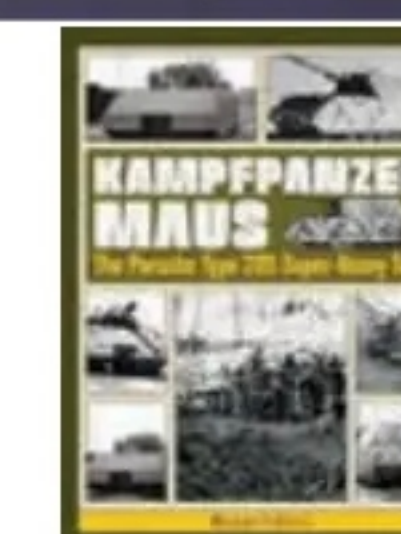
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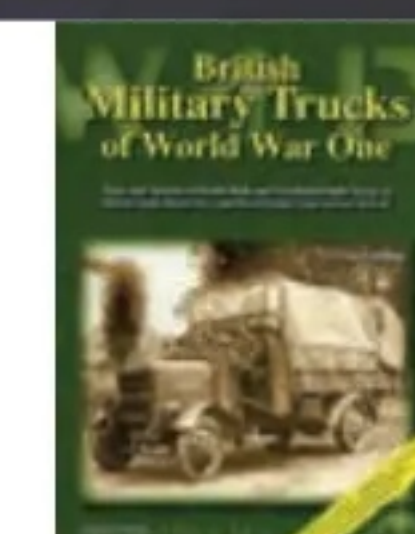
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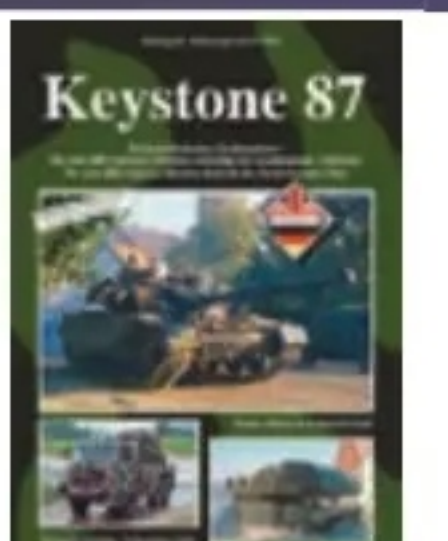
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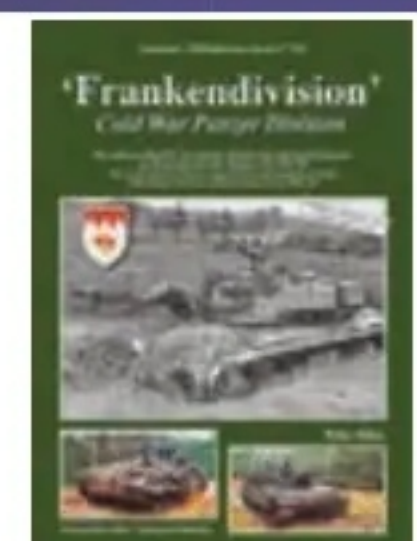
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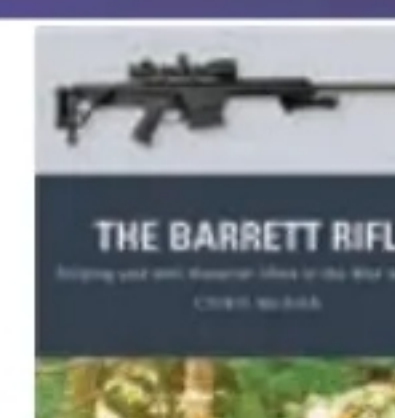
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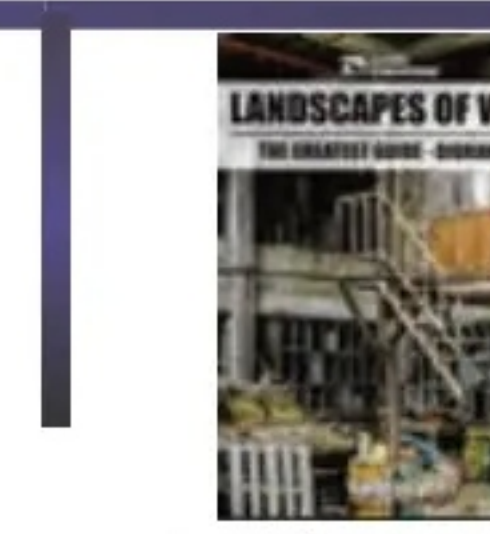
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