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THE FINAL ROAR OF THE TIGERS

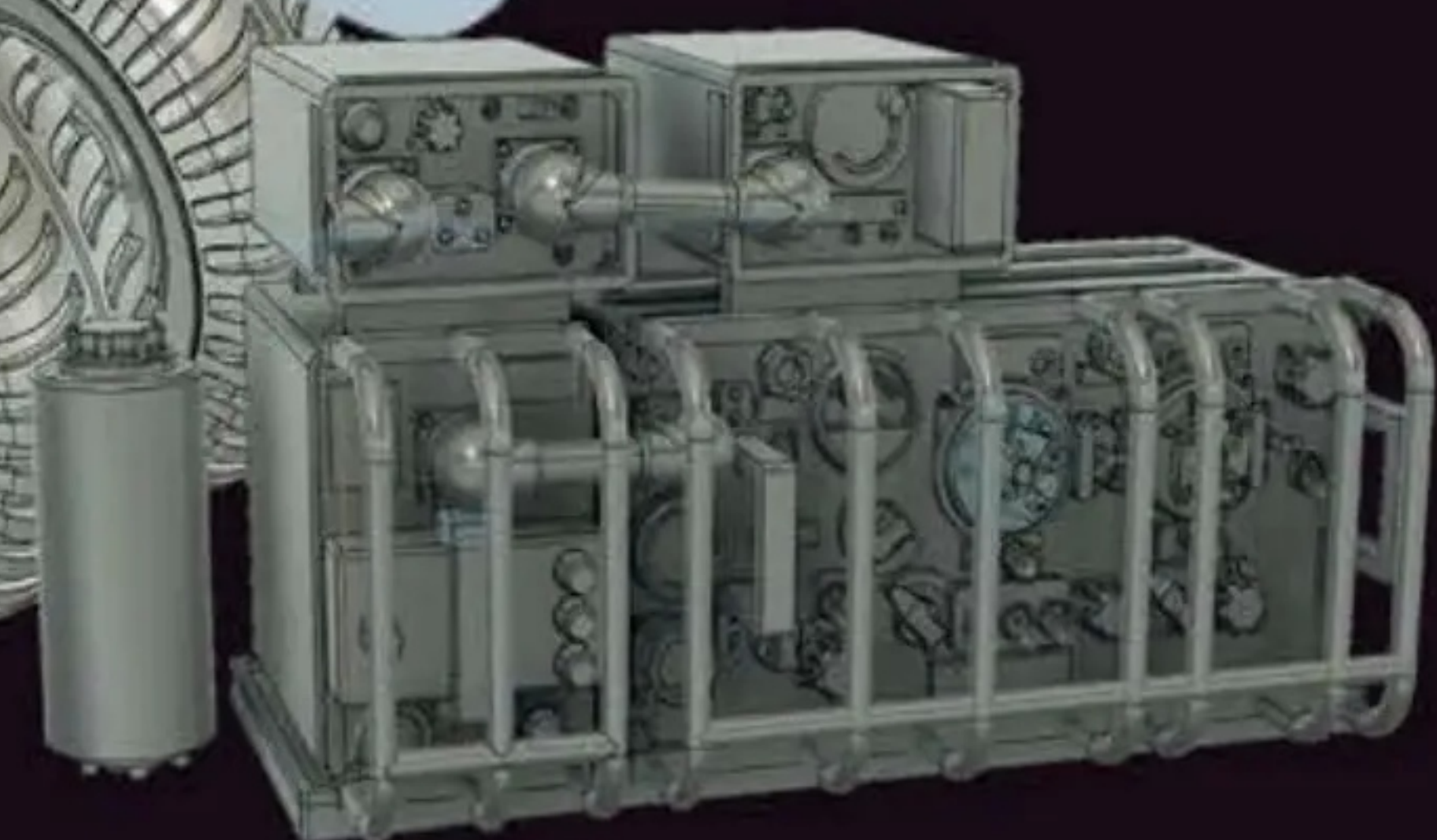
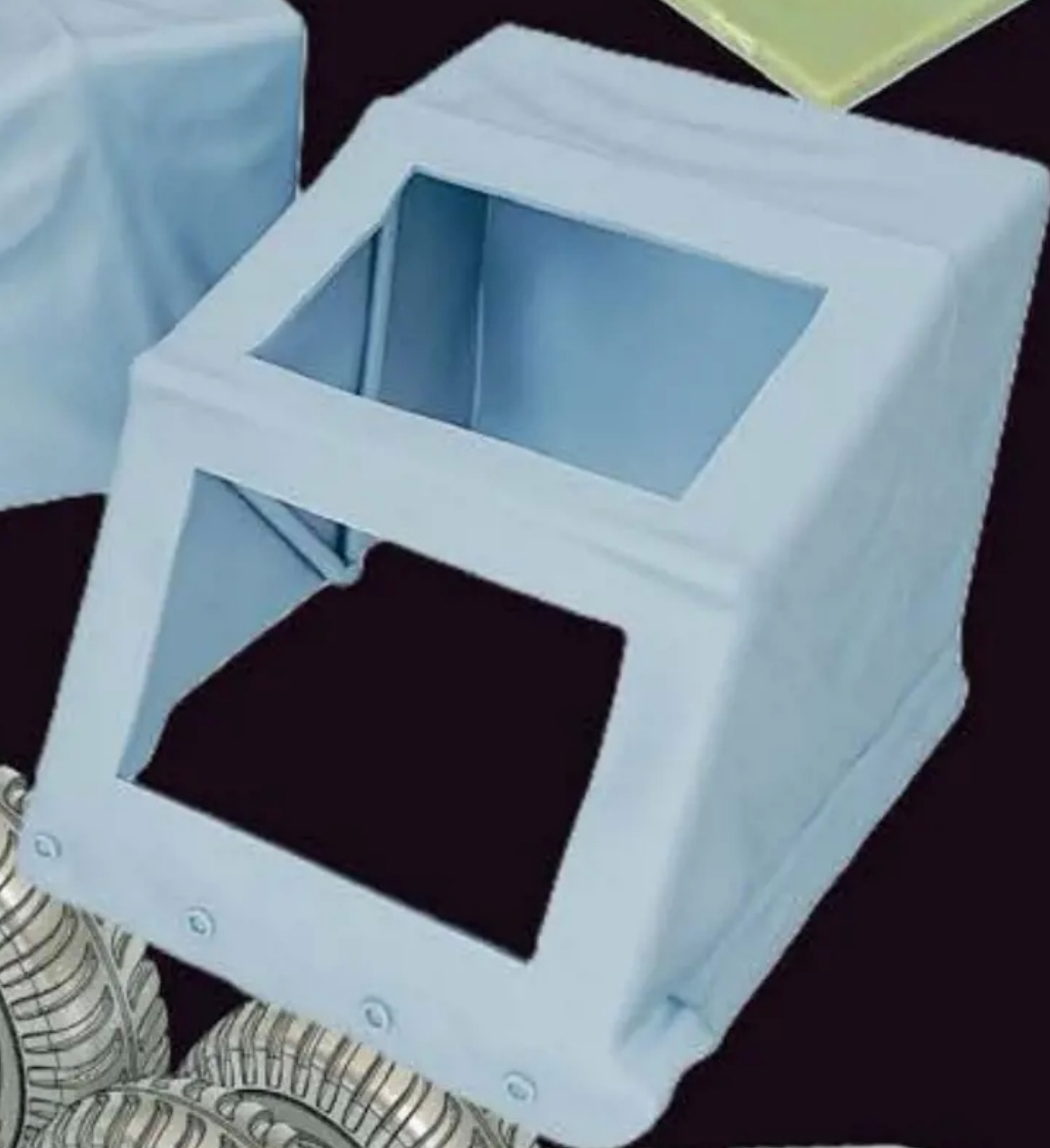
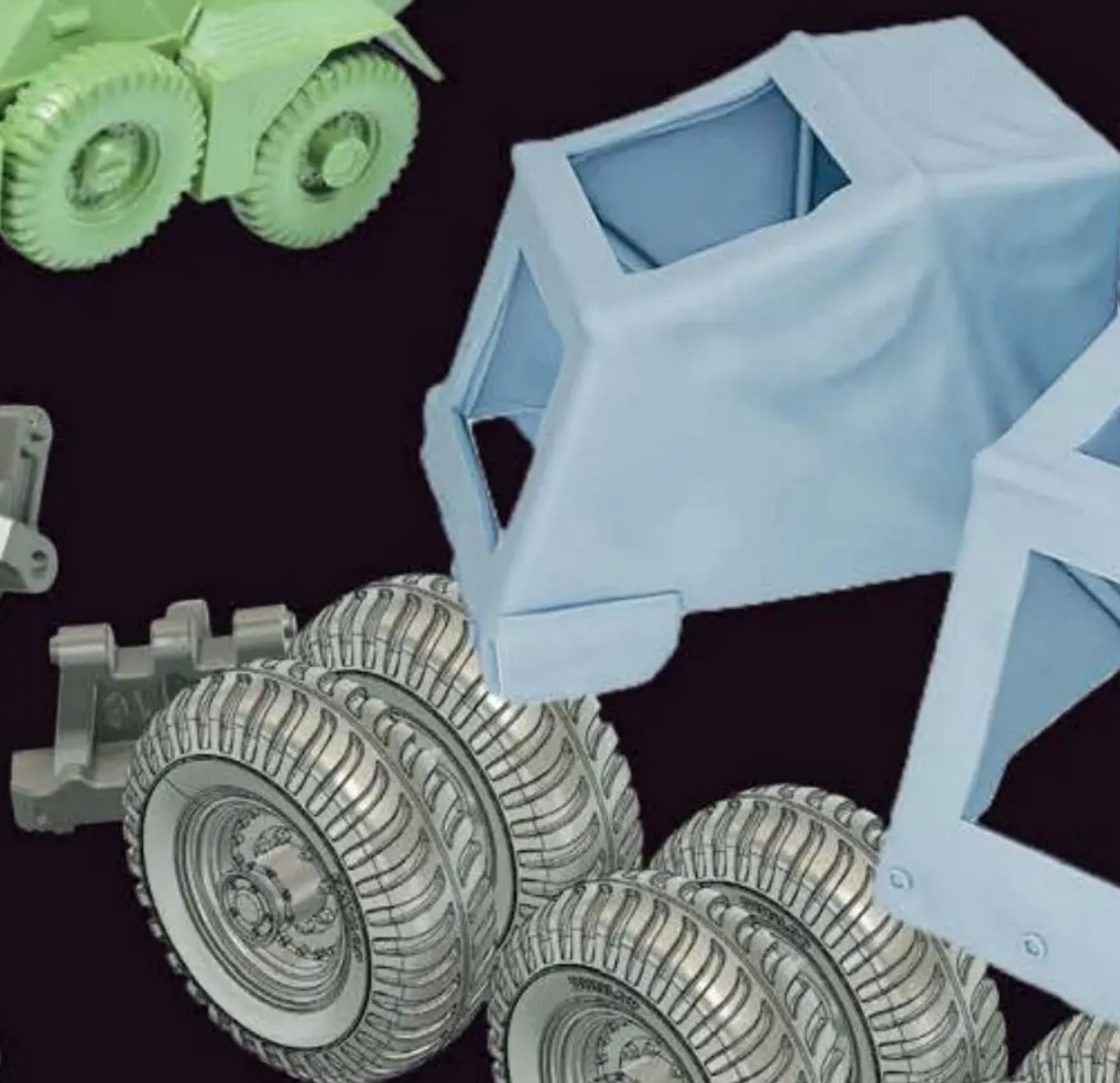
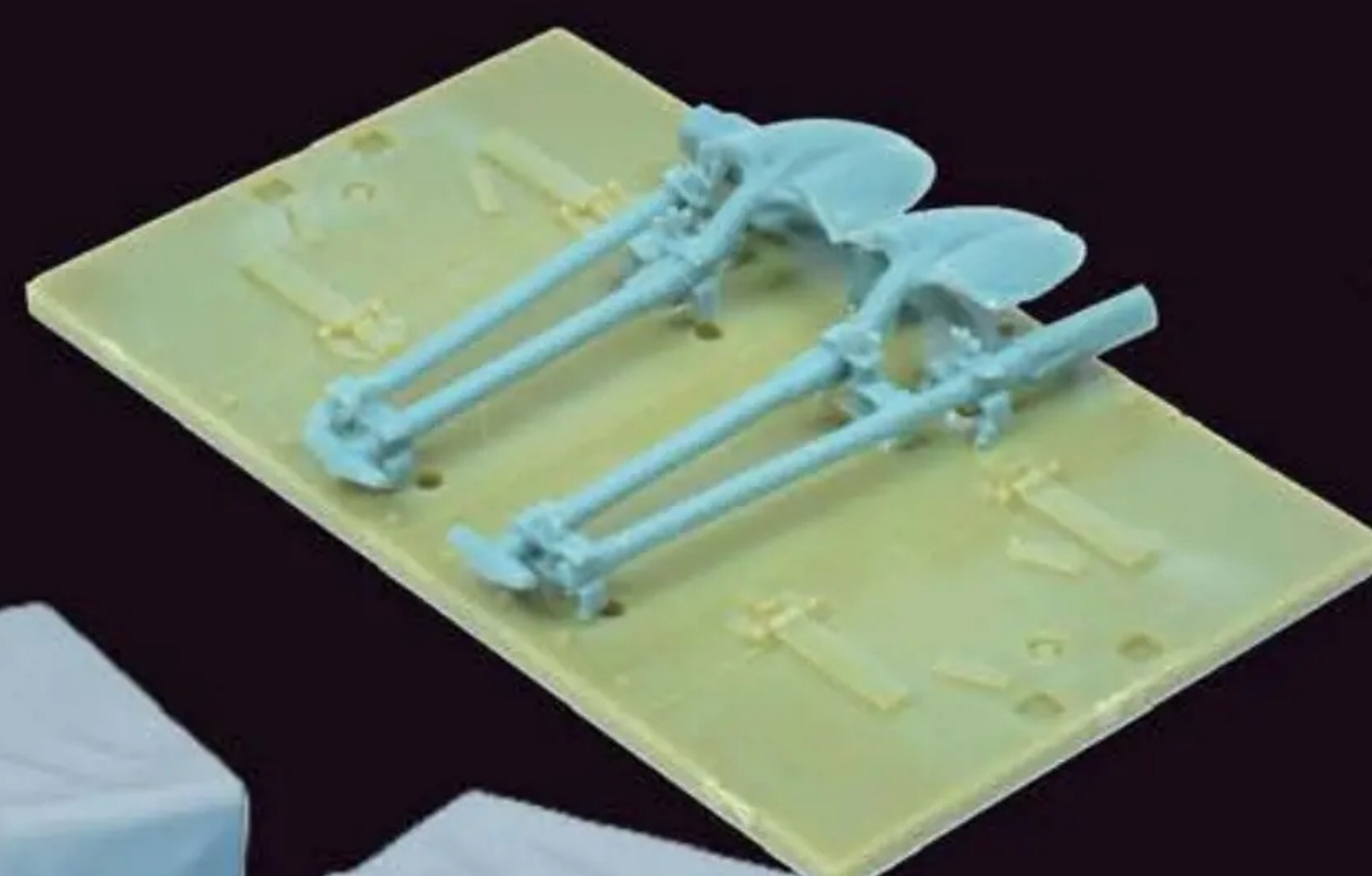
PAUL ALDERTON'S NORMANDY TIGER



FIGURES



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THE FINAL ROAR OF THE TIGERS

RAURAY, FRANCE, JUNE 1944





Along with the Sherman, the Tiger 1 has to be one of the most modelled AFVs of all time. I certainly have a soft spot for it. My first Tiger was the old, motorised Tamiya 1:35 kit, probably when I was about 8 or 9 in the early 1970's. I had to wait a while to build what I call a "proper" Tiger – the good old Tamiya late version around 1988 when I re-introduced myself to my childhood hobby.

My next was the Tamiya Otto Carius mid version, I dabbled with the Academy "full interior kit" then my last before this project was the Dragon late Tiger, released in 2005, which for me still sets the bar in 1:35 scale.

Then along came the fascination with 1:16 scale. I did buy the Tamiya static version of their RC kit but never really got into it, so I sold it on. The Tiger I've modelled here is a conversion of the fairly recently released Andys Hobby Headquarters Early Tiger 1, quite a nice kit which will build into a number of different early model Tigers, including a Command Tiger.

**Tiger "334", Schwere SS-
Panzer Abteilung 101
Modelled by Paul Alderton**

My conversion relies heavily on the Mid Production update set and other 3D printed accessories designed by David Parker of AFV Modeller, along with quite a few of Davids other Tiger 1 parts. I also used Voyager Model photo etched side skirts, track guards and exhaust shrouds and Panzerwerk Design tracks.

The Tiger 1 was on a constant programme of improvement throughout the short timeframe of its evolution and depending on how deep you want to get into the subject, there are probably eight or nine recognisable versions, from the initial production through to the very final production.

I would classify the mid production Tigers into three main versions - early, mid and late models.

The earliest mids were essentially late production early models, with the revised cupola and no zimmerit retaining quite a few early Tiger features such as the S mine launchers and twin headlight mounts.

The Tiger I've modelled here is what I would call a mid, mid-production model, built in around October 1943. The general distinguishing features of this model to what I would call the later mid are the small pistol port below and behind the commanders cupola on the left side of the turret, the retention of the air-intake plumbing and some other fittings from the Fiefel air cleaners associated with the early production Tigers, revised tool stowage and the lack of the gun travel lock on the right rear deck.

For those interested in the development, in my opinion the best book on the subject is probably Germany's Tiger Tanks - D.W. to Tiger 1, Design, Production and Modifications by Thomas L. Jentz and Hilary L. Doyle. This was the main reference I used for my model, and helpfully includes plans of this actual Tiger, fahrgestall (chassis) number 250570. I also had copies of all of the photographs taken during that evaluation, along with various photographs taken of the vehicle prior to and following its capture in both Belgium and Normandy.

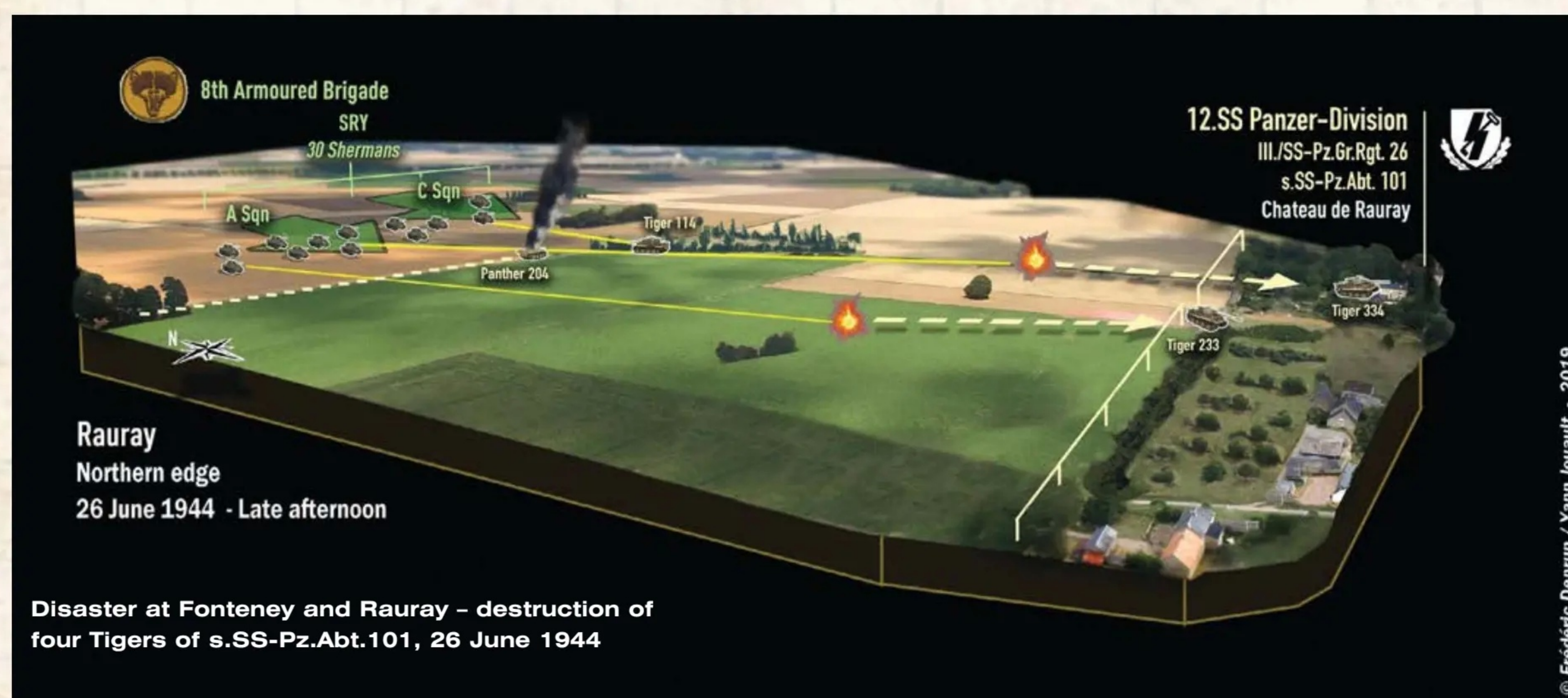
This Tiger first came to my attention when I saw a large photograph of it in the museum of the Durham Light Infantry (DLI) in the early 1990's, with two DLI soldiers looking up at it. That picture particular picture has appeared in numerous publications over the years, with a number of others taken at the same time. Tiger "334" from 3rd Company, of SS Heavy Tank Battalion 101

(sSS-Pz.Abt.101), of the 1st SS Panzer Korps was one of the first two working Tiger tanks captured on the same day, 26 June 1944, as part of Operation Epsom during the Normandy campaign. The other captured Tiger "114" from the 1st Company of the same unit, with a further Tiger "233" being destroyed in and around the small hamlet of Rauray, not far from Fonteney le Pesnel in Normandy. The vehicles were photographed and filmed quite extensively by the Army Film and Photographic Unit (AFPU). "334" was apparently abandoned by its commander, SS-Untersturmfuhrer Thomas Amselgruber in the middle of the road in Rauray. Eyewitness testimony from a civilian from the hamlet describes the Tiger being evacuated, with Amselgruber helping his wounded loader out of the Tiger.

After being left by its crew, it was pushed (or driven) by the British off the road and into the bankside/hedgerow to clear the road for allied vehicles. Eventually the weight of the turret and gun forced the turret to rotate under its own weight to the position in the famous photograph. It is evident that the Tiger suffered some damage to the rear plate and around the escape hatch on the turret. The vehicle jack on the rear plate is missing and the zimmerit is heavily scarred; the jack retaining bracket is missing, and there is a small penetration on the lower portion of the plate. On the turret one of the spare track links has been blown off and one is damaged and a lot of the zimmerit is damaged. There is also evidence of small arms fire to the turret bin.

The Tiger was photographed with various British troops from a number of angles and there is an account that the British wanted to press it into service in Normandy, however it was considered too valuable a prize for that and it was sent back to the UK for evaluation and examination. The Tiger ended its days being destroyed on firing ranges at Shoeburyness. A significant photographic record of every part of its destruction and demise was created along with a report by the British army, which proved to be an excellent reference for this model.

For those interested in the capture of the Tiger, and the action around Rauray, the following research was provided by my great friend Yann Jouault.



Introduction

Reconstructing the actions involving Tiger tanks in the Fonteney/Rauray sector presents significant challenges. This complexity stems from the loss of the battalion's logbooks and the limited, often fragmented, accounts from surviving veterans. To

gain a clearer understanding of the fate of the Tigers from s.SS-Pz.Abt.101 at the end of June 1944, it is necessary to compare these accounts with British testimonies, analyse available photographs, and assess the situation on the ground.

Fontenay-le-Pesnel - Rauray
26 June 1944
Identification and location
of s.SS-Panzer-Abteilung 101 Tigers

I./SS-Pz.Rgt.12

Panther 204



2.Kompanie (3.Zug)



2.Kompanie (1.Zug)



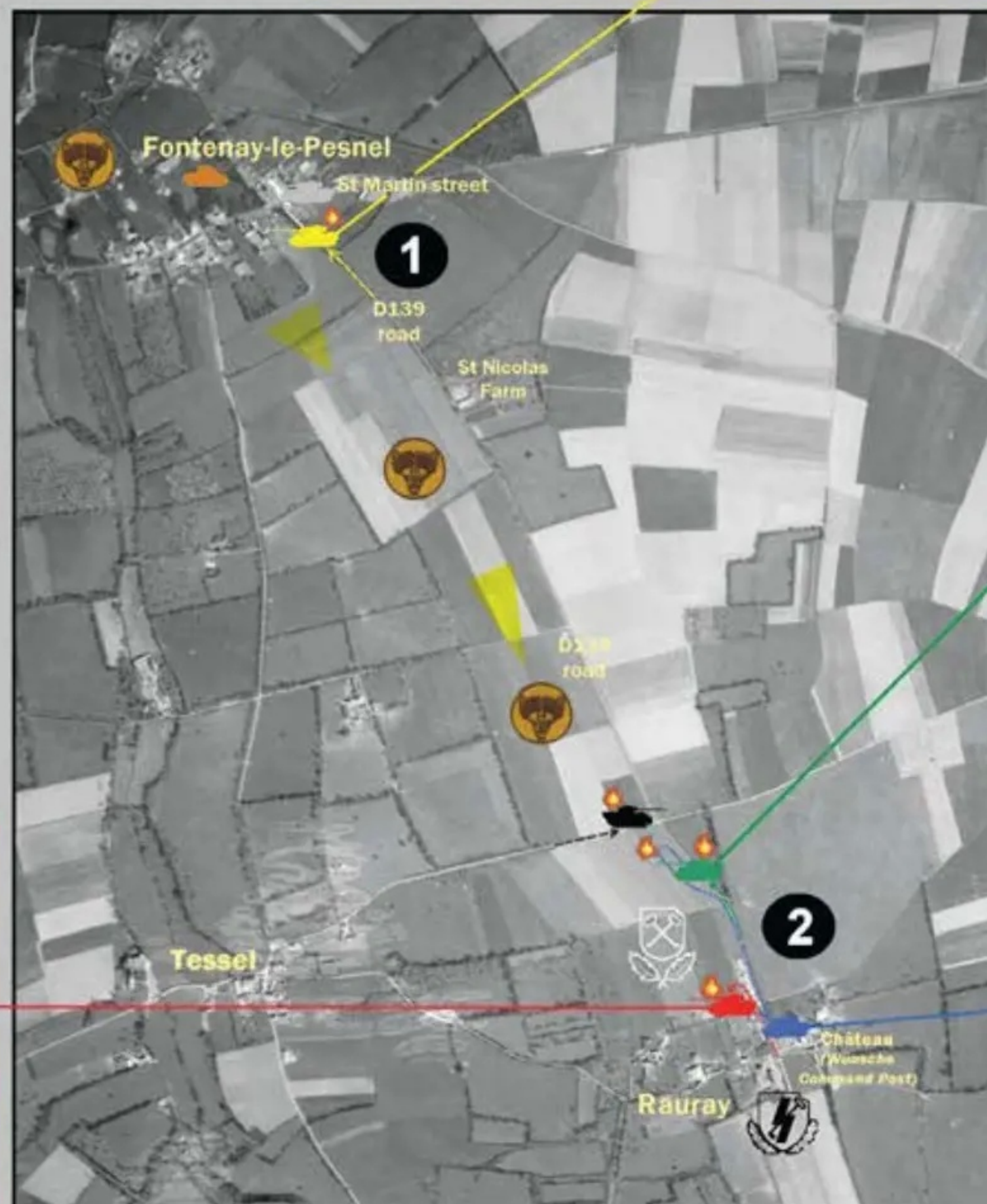
Operation phases

- 1** 14.00 / 15.00 hours
- 2** 17.30 / 19.00 hours

1.Kompanie



3.Kompanie



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Situation of SS-Panzer-Abteilung 101 on 25-26 June

By late June, following heavy losses at Villers-Bocage and the bombing of Evrecy, the remaining Tiger tanks were deployed in small, scattered groups. Their mission was to halt the enemy's advance across Route Nationale 175, west of Caen. SS-Hauptsturmführer Rolf Möbius, commander of 1./s.SS-Pz.Abt.101 and operations leader for all Tiger companies, reported maintaining constant contact with several divisions and having 18 Tigers in operational condition at the Hitlerjugend Division headquarters.

The capture of most of Fontenay-le-Pesnel on the evening of 25 June by British forces put German troops in the Tessel-Rauray sector under intense pressure. On 26 June, the 1st SS-Panzerkorps ordered several Tigers from s.SS-Pz.Abt.101 to Grainville-sur-Odon to support a counterattack alongside the Hitlerjugend Division against the British 49th (West Riding) Infantry Division.

Veteran Werner Wendt, a former Tiger commander, described British attacks aimed at capturing Rauray Ridge and breaking through to Noyers and Aunay-sur-Odon. The British failed to take Rauray and Fontenay, and on 26 June, the Tiger Battalion was brought up to reinforce a counterattack with the Panzer Lehr and Hitlerjugend Divisions. The Tigers played a crucial role in halting further enemy advances and supporting German positions.

Morning of 26 June

Although no detailed report from s.SS-Pz.Abt.101 exists for this period, it is likely that a small number of Tigers fought around Tessel-Bretteville in the morning, supporting Panthers and Panzer IVs of SS-Panzer-Regiment 12. British testimonies referenced groups of two to six Tigers, though there was confusion between Tigers and Panthers. Despite Möbius's claim of 18 operational Tigers, their distribution over a wide area and mechanical issues limited their tactical effectiveness. Typically, Tigers were deployed in small groups for increased flexibility.



A German logbook entry for 26 June records that the 1st and 2nd Companies took up defensive positions northwest of Tessel-Bretteville, but their advance failed to relieve the encircled unit. Möbius later recounted losing most of his tanks under enemy fire, with only three left—one of which had lost its gun. He managed to prevent a British breakthrough by destroying six tanks from a concealed position.

SS-Untersturmführer Thomas Amselgruber, commander of 3./s.SS-Pz.Abt.101 and Tiger "334," reported fighting alongside another Tiger near Grainville to protect a gap without infantry support, destroying three British tanks during the engagement.

Afternoon of 26 June

It appears the Tigers – probably an ad hoc Panzerzug of 4 tanks – withdrew to resupply and reorganise around midday. Preparations for further counterattacks were noted but subsequently suspended, with the Tigers redeployed to new positions. SS-Sturmbannführer Heinz von Westernhagen, commander of the Tiger Battalion, described the difficulties in transmitting orders during a British counterattack at Rauray. SS-Hauptsturmführer Rabe volunteered to restore communications, ultimately contributing to the success of the German counterattack.

Reassignment of Tigers to Rauray

German resistance east of Tessel Wood forced British forces to redirect their attack towards the Fontenay-Rauray-Grainville axis. By midday, Fontenay-le-Pesnel was largely secured by the British, prompting German Panzergrenadiers to retreat south towards Rauray. SS-Obersturmbannführer Max Wünsche was ordered to defend Rauray at all costs, as it had become a focal point of the German defensive line in Normandy. In the afternoon, German units took up strong positions in Rauray, supported by anti-tank weapons and tanks camouflaged in the terrain. At 15:00, the encircled unit received orders to break out, which was successfully carried out.

Early in the afternoon, shortly before or while German troops started to fall back from the southern outskirts of Fontenay, one of the Tigers – callsign 211, probably commanded by SS-Untersturmführer Heinz Belbe – appears to have ventured north towards the village, possibly on a reconnaissance mission to ascertain enemy positions.

A dramatic confrontation ensued when Major John Semken's Sherman encountered this Tiger tank head-on. Semken fired armour-piercing rounds, most impacting the front without

penetration, until a hit at the base of the turret forced the crew to abandon the tank.

Following the fighting south of Fontenay, British units prepared to advance on Rauray. The attack commenced at 17:30, with tanks leading and infantry following in support. Colonel Stanley Christopherson, commander of the Sherwood Rangers Yeomanry, noted difficulties coordinating with infantry and ordered a heavy artillery barrage on suspected enemy positions along the axis of advance.

Three Tiger tanks advanced north from Rauray late in the day, two taking the D139 road. None returned: Tigers 114 and 334 (from the 1st and 3rd Companies) were abandoned on the road, while Tiger 233 (2nd Company) was destroyed on the northern edge of the hamlet.

British / German Testimonies and Combat Reports

British accounts

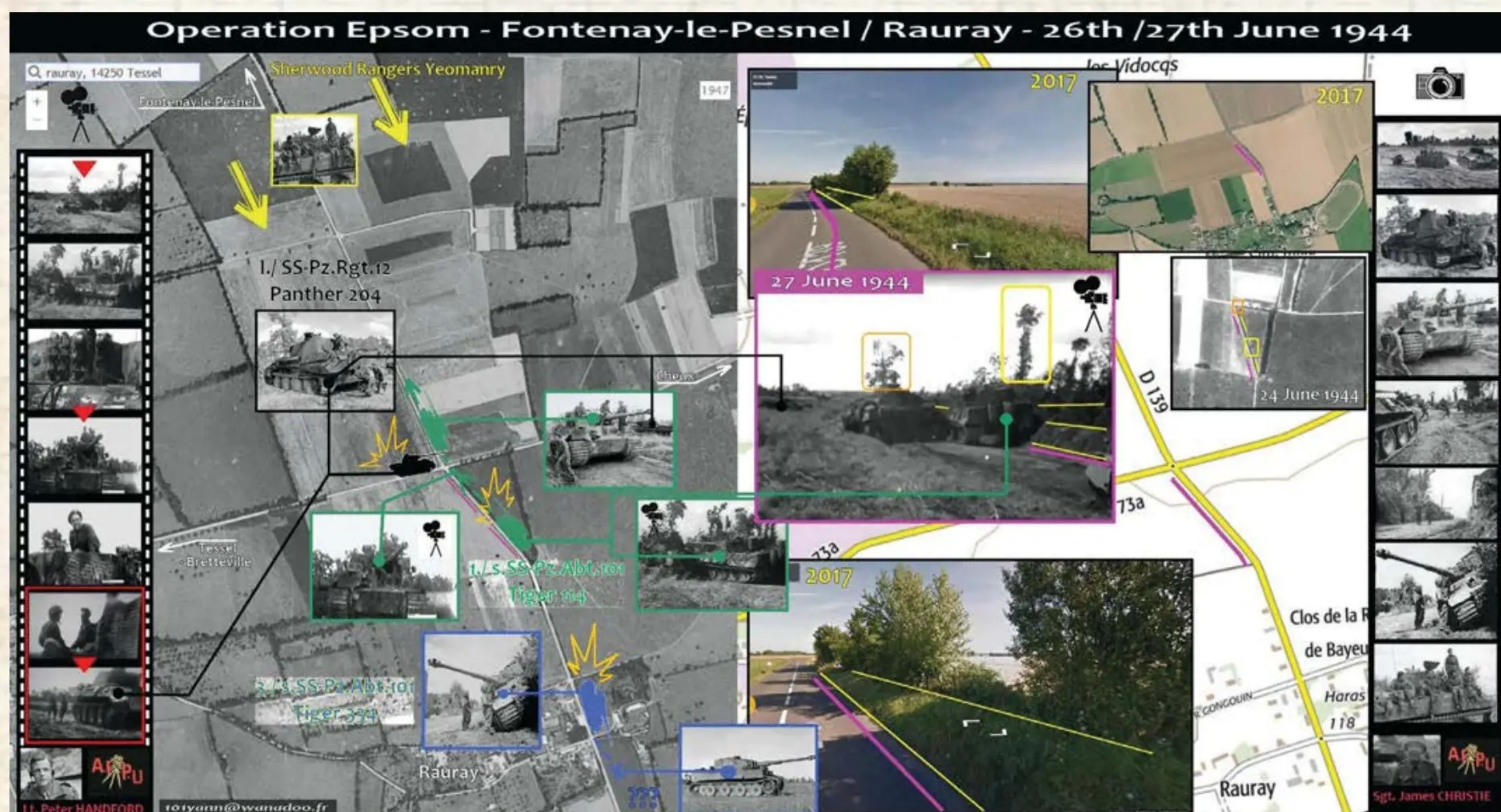
Tiger 211 (Fontenay-le-Pesnel)

Second Lieutenant David Render recalled identifying a German Tiger tank and alerting his unit, resulting in a close pursuit and engagement. The British tank opened fire from as little as 60 yards away, catching both sides by surprise.

Major John Semken was A Squadron Leader and had already heard from C Squadron that there were enemy tanks about, so his gun loader put an AP shell up the spout, just in case. As they cleared Fontenay, they were suddenly confronted by an enormous tank coming around a bend in front. It was hard to know who was more surprised, but Semken shrieked, 'Fire, it's a Hun', and they fired off about ten rounds into the smoke.

"Although the range had been only sixty yards, not one Sherman shell had penetrated that armour. The fire in the Tiger, we discovered, had instead been caused by a shot hitting the side of the driver's observation visor and showering white-hot splinters into the tank."

Lt. Neville Fearn saw his Squadron Leader, Major Semken, engage a Tiger, as previously mentioned, on the road. At 120 yds the Tiger was head on. The 75mm put three shots into it and the crew bailed out without firing. He put in three more. The tank brewed up. Four shots had scooped on front plates. One had taken a piece out of the lower edge of the mantlet and gone into the tank through the driver's roof, and one had ricocheted off the track and up into the sponson.



Panther 204

Lt. Fearn engaged a Panther side on with his 75mm with APC. It was moving about 12 mph at 80 yards and stopped it with one hit through the vertical plate above the back bogie.

Tiger 114

Sergeant Dring started out south from Fontenay le Pesnel with his 75mm Sherman and came upon a Panzer IV which he shot through the driver's visor. It brewed up and the crew bailed out. Next, he spotted a Tiger at 1000 yards. The Tiger fired whilst Dring was traversing but missed. Dring then pumped five shots in without further retaliation. The last one hit the driver's periscope and the crew bailed out. (This tank is believed to have been recovered for shipment to the UK).

Stuart Hills described how his squadron encountered a Tiger, fired multiple shells, and watched as the crew evacuated under smoke and flames.

Panther 204 (again!)

Next, he came on a Panther at the crossroads – "204" from HJ. This he got with one shot with an armour piercing round in front of sprocket from about 500 yards, the crew bailed out and the Panther brewed up.

Tiger 233

Next, he took on a Tiger at 1400 yds just outside Rauray. He fired 6 shots, of which 4 hit and the last one brewed it up. His Troop leader thought he had missed it and only hit the wall behind, Sgt Dring's next shot brought the sparks and the remark:

"You don't see a brick wall spark like that. This tank has been seen and is much shot up. It now has one scoop in front vertical plate, five penetrations in rear, four strikes with no penetration in rear, plus a scoop and one plate of engine hatch smashed".

German Accounts

Tigers 114 and 334

SS-Hauptsturmführer Möbius of the 1st Company of the Tiger Battalion recalled those days of constant action:
"I lost one tank after another to enemy action and had three left, one of which had its barrel shot away. I myself stopped an advance by the English through a defile by destroying six tanks. I (Tiger 114) then attacked an armoured column with another tank (Tiger 334, Ustuf. Amselgruber) and knocked out three tanks; my gun jammed and I was shot up by ten tanks. I bailed out; Amselgruber had already done so".

26 June 1944.

Amselgruber of the 3rd Company remained in his old location during the night and the entire day, repelled probing English infantry, and was attacked by a superior number of English tanks. Amselgruber was able to knock out two Shermans before his tank (Tiger 334) was disabled by several hits. Amselgruber's left leg was badly injured as he abandoned the tank; however this failed to prevent him from pulling his gunner, who had been seriously wounded in the belly by shell fragments, from the tank and taking him with him.

Tiger 233

SS-Unterscharführer Warmbrunn of the 2nd Company described the events of that day:
"On 26 June I drove through the enemy lines to assess the situation, which was uncertain. I had volunteered for this mission with the concurrence of my crew. When I drove over a

hill, I found myself facing a group of thirty Shermans. They showered me with a hail of shells and all systems went out. We owe our lives to the self-control of my driver, who did what we had always practiced, namely placed the Tiger at an acute angle to our armoured foe. The crew and I then made our way back through the enemy to our departure point".

Assessment of German Losses

British reports and photographs indicate uncertainty regarding the exact number and types of tanks destroyed. Sgt Dring claimed to have destroyed four tanks, including a Panther and two Tigers, often by targeting vulnerable spots. German accounts from Möbius, Amselgruber, and Warmbrunn confirm the loss of three Tigers at Rauray, though discrepancies remain between British and German reports.

Identification and Location of Tigers

The Tiger lost on the D139 road at the southern edge of Fontenay-le-Pesnel :

•**Tiger 211:** Abandoned on the main road near the crossroads with the St-Martin street.

The three Tiger tanks lost on the northern edge of Rauray were:

•**Tiger 334:** Abandoned on the main road near the castle entrance.

•**Tiger 114:** Captured by the Sherwood Rangers Yeomanry near the intersection north of Rauray.

•**Tiger 233:** Destroyed on the northern edge of the hamlet, its crew forced to evacuate.

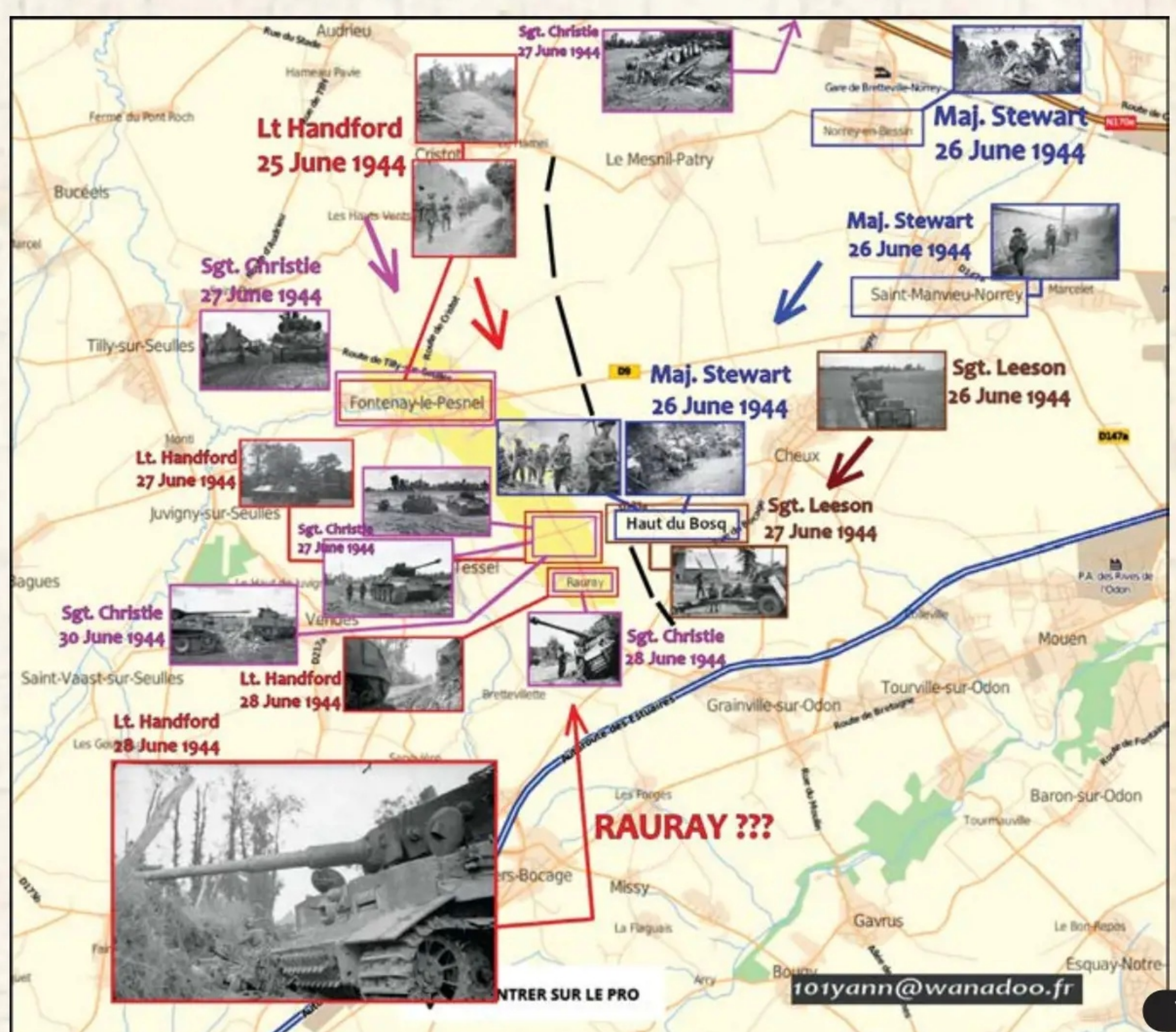
Both photographic evidence and post-battle reports confirm these losses.

The Fate of the Tigers

Of the four Tigers lost, Tigers 114 and 334 were recovered in working order and transported to the United Kingdom for examination and testing. Tigers 211 and 233 were too severely damaged to recover and were destroyed in situ.

Conclusion

The events at Fontenay-le-Pesnel and Rauray on 26 June 1944 highlight the confusion and chaos of armoured warfare in Normandy. Despite the formidable reputation of the Tiger tank, British tactics and firepower proved decisive. The loss of three Tigers in a single engagement in Rauray was a significant setback for s.SS-Pz.Abt.101, demonstrating that even the most feared tanks could be overcome in battle.



Building 334

As explained earlier, the base kit is the Andy's Hobby Headquarters Early Tiger 1 in 1:16 scale. I had initially planned to build the model from the box (famous last words), then AFV Modeller produced first a 3D printed upgrade set for the early, which included much improved parts for tow cable ends, Bosch headlamps, toolbox, tool clamps, etc so of course I bought that. They then produced a Mid Production conversion set (now discontinued after Trumpeter released a Mid production kit), and other details for the Tiger so the out of the box build went out of the window and the rest is produced here in this article. I highly recommend the AFV Modeller parts – they are a testament to David's skill and attention to detail. Their quality is second to none. With hindsight, it would have been better to have planned the conversion from the start, but it evolved as parts became available. The base kit itself looks fine to me, but no doubt there will be those that will find some inaccuracies.

The main areas of modification in relation to the mid-production version centre around the turret – with the replaced cupola, repositioning the turret ventilator, and adding the smaller pistol port – and of course the zimmerit coating to the hull and turret and some relocated tool stowage. The tracks were replaced with the later version with ice cleats.

The AFV Modeller conversion set provided all the parts needed for the version of the mid that I have modelled, or for the later late mid depending on your chosen subject, along with a helpful instruction sheet with exact measurements as to what goes where.

Zimmerit Texture

I see a lot of modellers who use aftermarket zimmerit sets to add the texture to their models. None of these ever look right to my eye, and for me the best way to replicate zimmerit is to add it

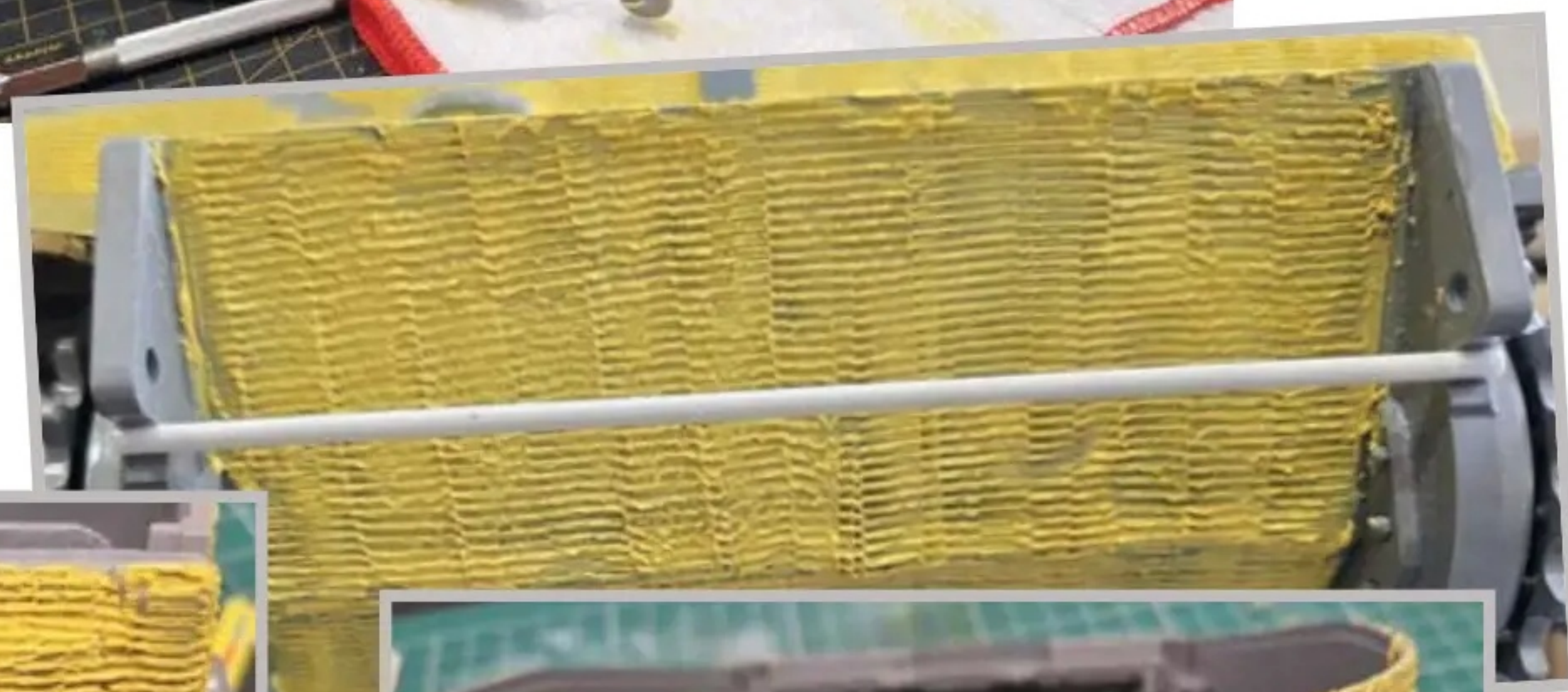
yourself from textured putty – it's really not that difficult. There are many different articles available, and numerous tools and media to use for the putty. In 1/35 scale I prefer to use photo-etched metal rakes. In 1/16 scale for the Tiger, AFV Modeller has made custom rollers which are superb.

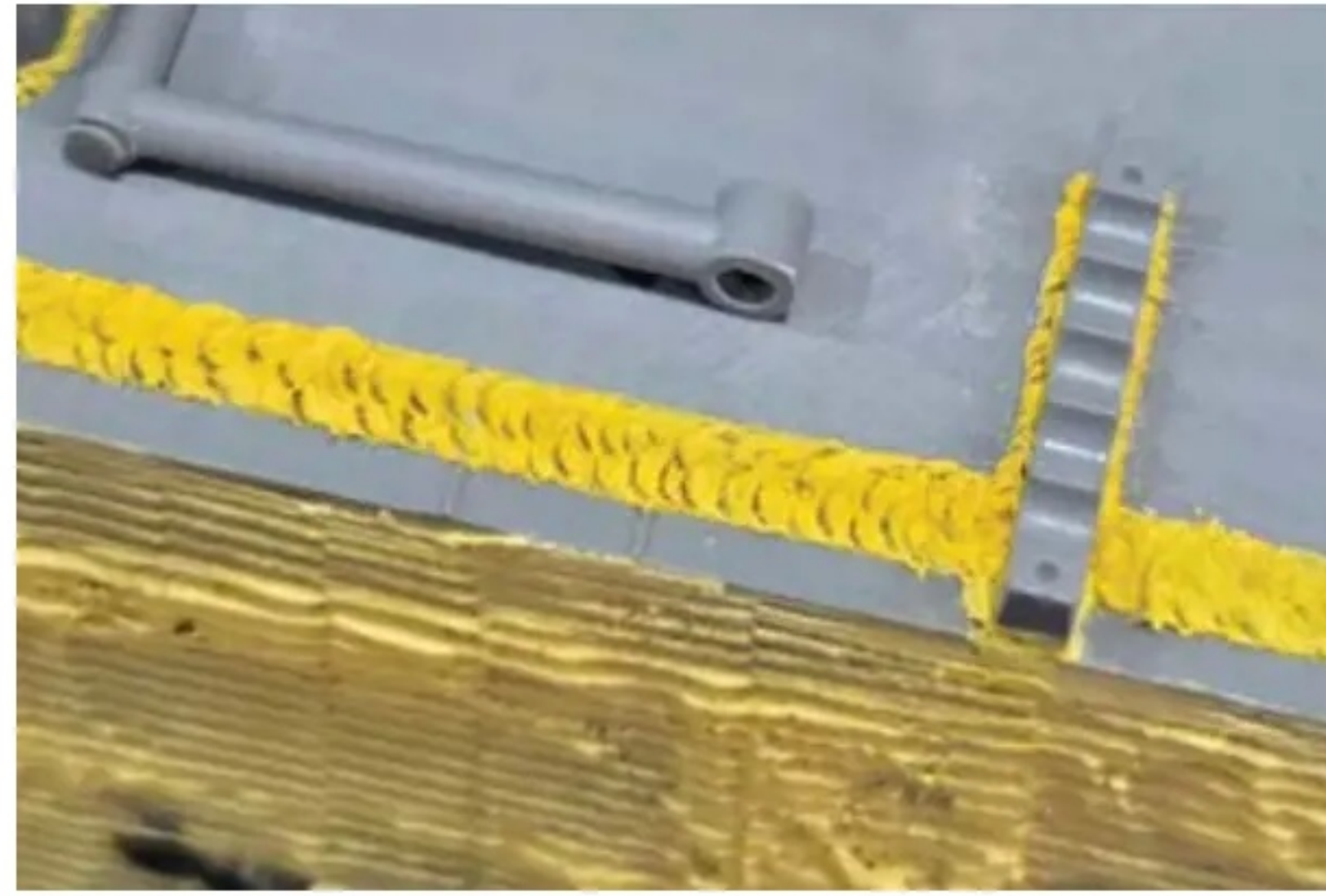
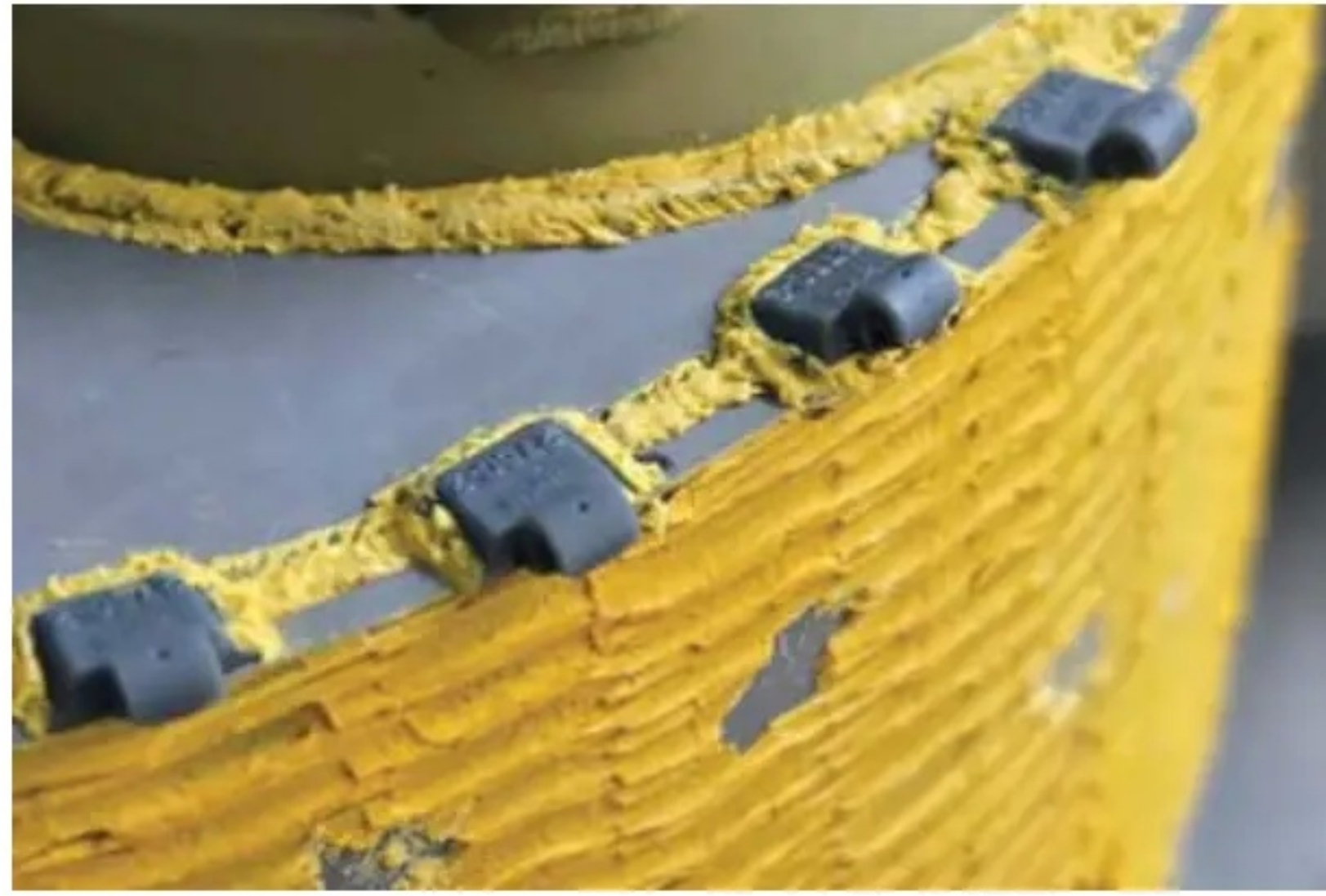
My preferred medium is Tamiya polyester putty. This is a two-part putty where the putty is mixed with a hardener until the colour of the putty cap is achieved. Before mixing or adding any putty I mark the location of any fittings that would be covered by zimmerit by adding small pieces of plastic strip. I also added items such as the lower track hangers on the turret and the pistol port. I also marked off where the turret bin would fit and, in this case, I masked off a part of the rear right-side hull where there was significant damage to the zimmerit.

Wherever possible I add the zimmerit before assembly so that fittings don't interfere with the rollers. Where this isn't possible, then I use a rake or flat blade to create the pattern in the missing areas.

Once the putty is mixed on a small wall tile, I spread the putty onto the area to receive zimmerit one panel at a time nice and thin, with a small metal spatula, and/or a chisel tipped hobby knife blade, before allowing it to dry for about 5 – 10 minutes. The putty is workable for about 30 mins in total. I do final smoothing with a flat brush dipped in acrylic thinners. It doesn't have to be perfect, as the real stuff wasn't.

Then using the AFV Modeller zimmerit rollers, secured in a pin vice, I began applying the texture. If the putty hasn't quite cured enough then the texture will lift off so leave it a little longer, however you'll soon get the hang of it, and you can move along quite quickly. Clean the rollers frequently using a brush moistened in acrylic thinners if the putty sticks to it. If you make a mess just smooth it over and start again.





Practice on one of the spare mantlets or the spare frontplate in the AHHQ kit till you get the hang of it. I also purchased a second set of rollers which I cut in half to make them narrower for harder to reach areas. Once the texture has hardened a little you can flick off bits of zimmerit to simulate battle damage, etc. Most (but not all) Tigers had the wider over-rolled pattern on the turret, so if you are modelling a particular vehicle don't forget to check your references. To create this wide turret pattern, you need to first roll the pattern with the narrow roller and then go over it with the wide roller.

Weld Seams

I chose to replace the majority of the weld seams on the Tiger, grinding out the areas on the hull and turret roof and then adding my own for consistency using the Tamiya putty, using techniques described in the excellent article by Lee Lloyd in an early edition of AFV Modeller (still available to purchase by download). I also added welds to tool clamps and other fittings including the AFV Modeller additions (cupola, spare track holders, etc) for uniformity.

Another difference of the mid version to the early production was the relocation of the tool stowage, so referring to the scale drawings in my references I went around the model and filled the various location holes and marked the revised locations. In the photograph of the original abandoned Tiger, the hatches are open, so I decided to add a few interior parts to the drivers, radio operators and loaders positions. This included ammo boxes, gurtsacks and the drivers gyroscope from AFV Modeller, and parts from the Trumpeter late Tiger kit. It's fair to say that very little can be seen apart from to the nosiest inspectors.

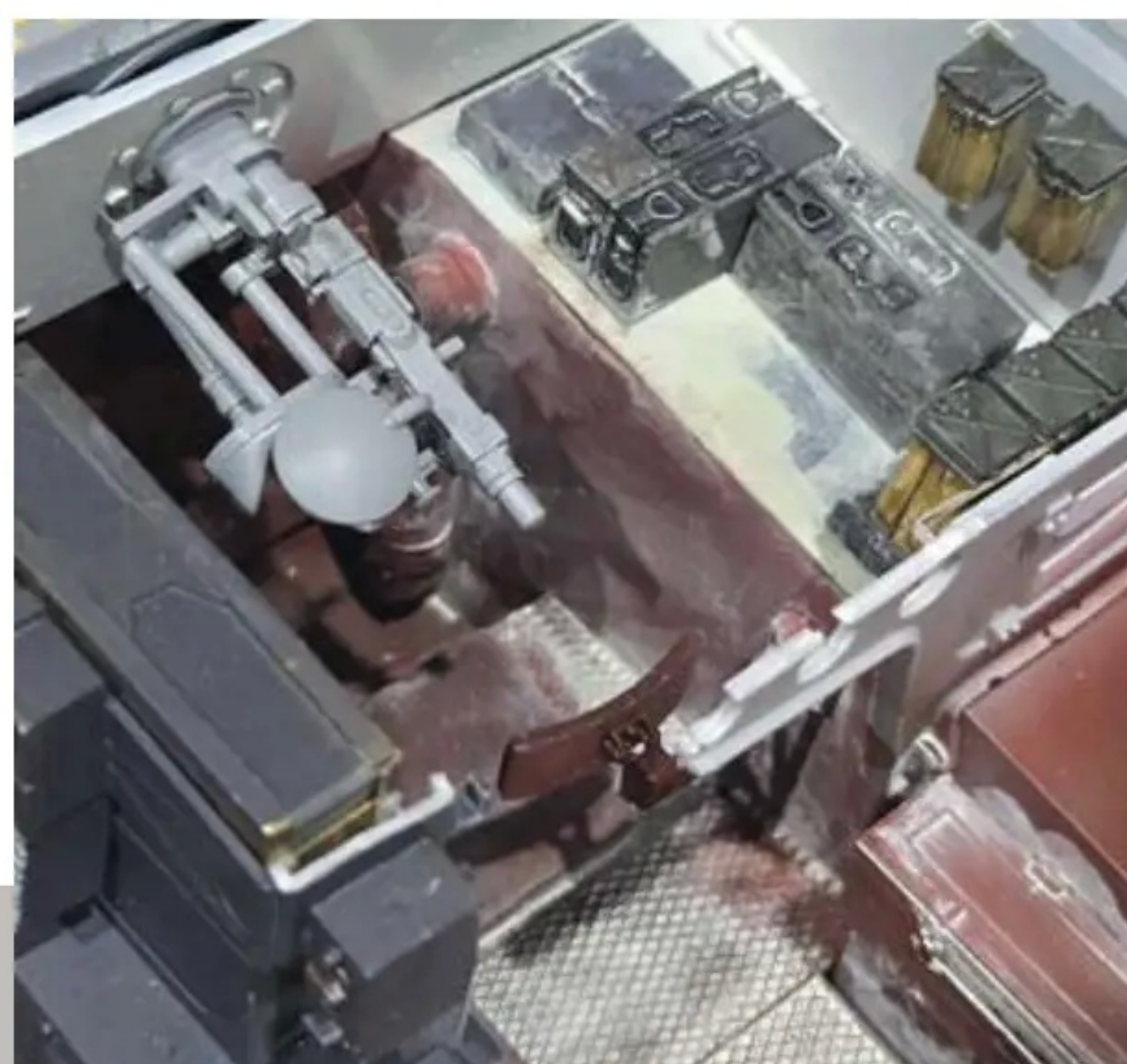
To the front hatches I also added the far superior AFV Modeller periscopes, in this case without the rubber pads as per the reference photos.

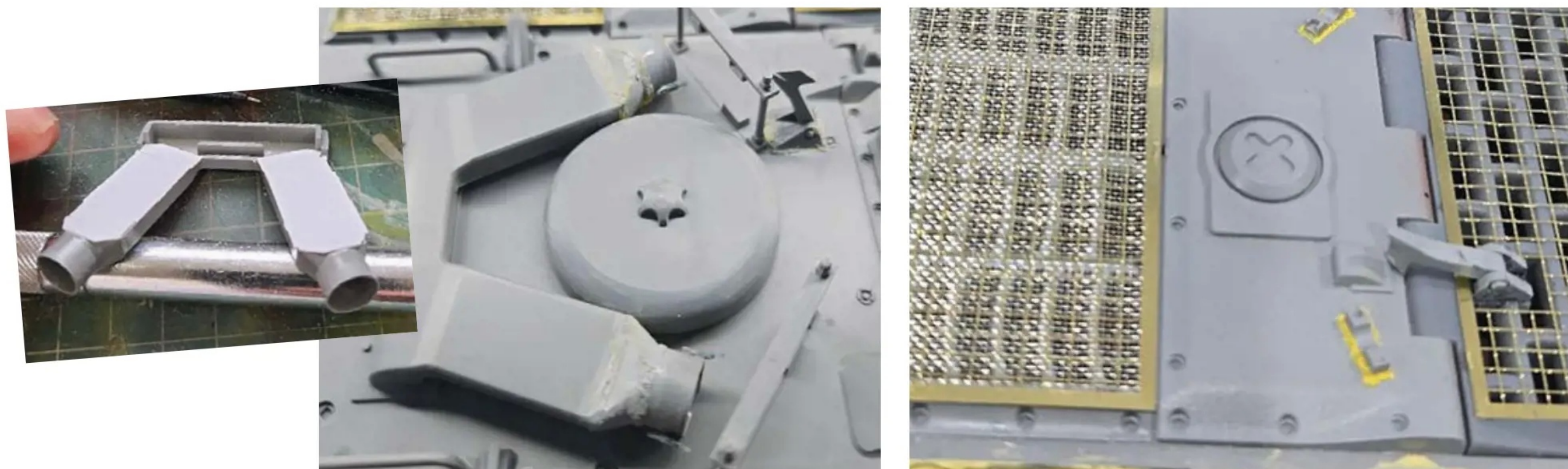
Photoetch

Adding the photoetch parts was my least favourite part of the build as I struggle with soldering and given the size of this kit soldering would be preferable. Instead, I decided to use black flexi superglue with proved to be a very effective alternative. "334" had the right front side skirt missing, and the right rear side skirt was quite badly damaged. To simulate the damage, I first annealed the required parts over a camping stove and then bent them to the required shape. A word of advice here – unless you need to soften the whole piece of brass, only heat the part of it you want to manipulate otherwise it's easy to distort the whole part. I also originally attached the PE bolt heads to the side skirts but later removed them to allow me to fit the side skirts more solidly.

I also used the side skirt attachment points from the Voyager PE set to simulate the same on the kit where they were visible as those on the kit are quite shallow. In a couple of cases, I added tiny watch screws (Ali Express) inside the mount before gluing to the kit to simulate sheared bolt heads. The same PE mounts were added to the rear plate for the PE exhaust shrouds.

I mentioned earlier that I needed a more solid means of attaching the side skirts. My solution was to fix them and the exhaust shrouds using miniature brass bolts, drilling through the plastic and gluing them in place towards the end of the main construction. I got the bolts from www.primeminatures.co.uk . This provides a much more solid attachment for the side skirts which are easily knocked off otherwise.





Damage was also added to the front right track guard which again was constructed from the Voyager PE parts. David Parker very kindly custom made me some 3D printed hinges for the front and rear track guards as I struggle to create the rolled section of the hinge.

The front and rear track guards were left off until the main painting had been completed. David also printed some wingnuts for me, and I later used these on all the track guards and replaced all the moulded wingnuts on the rest of the kit.

All of the moulded-on tool clamps were removed and replaced with AFV Modeller 3D printed parts in the revised locations, some before and some after painting. I also fashioned the starter crank handle from a modified spare kit part and added it to the upper deck near the antenna base, so often missed from Tiger kits.

One of the AFV Modeller tow hooks was modified by removing the mounting points, as the photo of the abandoned Tiger shows it was removed from the clamps and left on the front deck. I made new mounts and clamps from plastic strip and rod, detailed with resin wingnuts and weld seams from putty.

I also separated the gun cleaning rods into individual parts and drilled out on end and added the watch screws to the other for threads.

I replaced the tow cable ends in the kit with the AFV Modeller parts, the tow cables themselves were from the kit, chemically blackened and added following final painting. I also used some

spare 1/35 scale Dragon Tiger 1 tow cable ends for the kit track cable. The U clamps for the track cable ends were made with strips of PE and plastic rod, and once again the track cable was added after final painting. I chose to leave one of the tow cables hanging down the rear of the vehicle and cut the track cable and frayed the ends to add to the abandoned look of the tank.

I added damage to one of the road wheels by grinding the plastic through with a small burr and using a knife and tweezers to get the effect that I saw in the pictures.

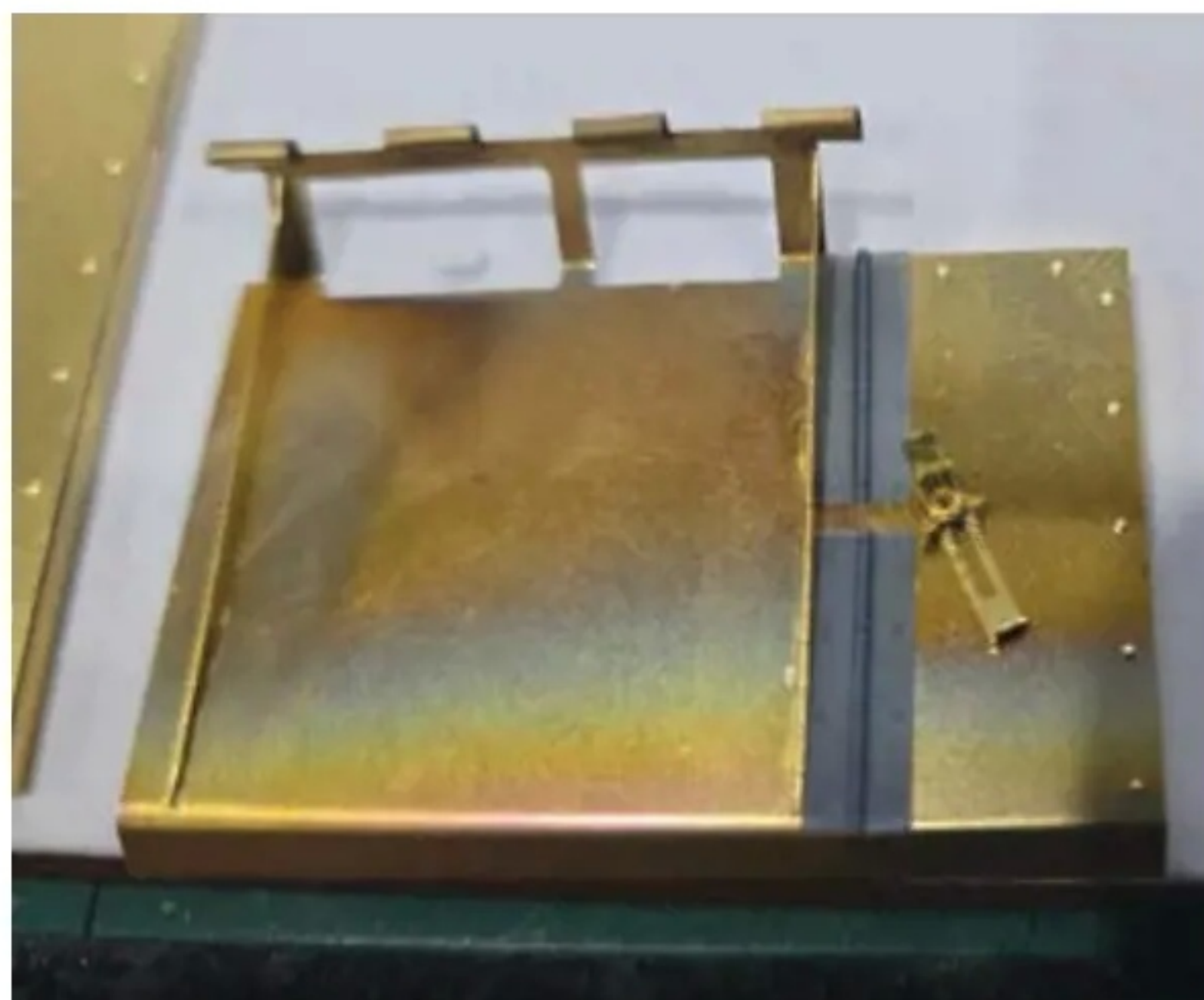
The kit sprockets had the AFV Modeller centre sections attached to bring them up to date and all of the wheels and running gear were added prior to painting.

The Panzerwerk Design tracks are superb, simply put them together and add the pins.

I also added a bar for spare links to the front of the Tiger as often seen on Tigers of s.SS-Pz.Abt.101 in Normandy. Careful study of period photographs shows that the bar was actually welded under the tow hooks where the tow shackles attach, not between them as I had originally thought.

This Tiger retained some of the Fiefel parts on the rear deck, notably the clamps and the V shaped air intake. I modified the intake by drilling out the hose ends and blanking off the bottom. I also added welds and latches for the hoses, the latches being those designed by AFV Modeller for the turret bin. I also rounded the edges of the round cover between the V intake.





To the snorkel cover on the rear deck, I added casting numbers from Slaters. I also added these to the top of the mantlet and the armoured shrouds for the exhausts.

I decided to use the front hatches from the Trumpeter late production Tiger 1 kit as I felt the interior detail was slightly better than the AHHQ kit, and I plan to build the front hatches closed on the Trumpeter Tiger.

Photoetched engine grills were from the kit, and I also added the smaller mesh under the larger grills from an Aber set, just because I had it to hand.

That concluded most of the assembly so time to paint.

The first thing I had to overcome was fitting the model into my spray booth; it only just fits! I primed the model in Mr Surfacer 1500 black, thinned with Mr Color Levelling Thinner. I then painted white and then over sprayed yellow patches on the turret sides and rear of the turret bin in preparation for home-made masks for the turret numbers. I created the masks by photocopying a Star Decals sheet in 1/35 scale, increasing the size on a photocopier and then using the cut-out numbers to create masks in Tamiya tape, first checking the size against photos of the original tank. These masks were stuck over the yellow before any of the camouflage painting began.

I wanted to use stock colours wherever possible, so I didn't have to do a lot of mixing. The base dark yellow was done with Mr Hobby Dark Yellow, straight from the (four!) jars. I built the base up in three or four layers, probably thinned around 60/40 thinners to paint. The red brown and green were standard Tamiya XF shades, again thinned with the levelling thinner.

3rd Company Tigers seemed to employ quite large bands of colour. Looking at the one available colour picture of "304" abandoned in northern France you can make out the green and the brown, as well as the blue and yellow turret numbers along with the grey barrel, seen on a lot of 3rd Company vehicles. I assume that as these Tigers were delivered in early 1944 and a lot of training was done by the unit before deployment, some of the barrels were replaced with dark grey lacquered ones and not repainted.

The actual camouflage pattern is my own interpretation, based on the many views of the vehicle, but whether the brown should be green or vice versa I don't know. There are no photos of the upper surfaces so that part is pure fiction. All of the camo colours were then lightened slightly and this lighter colour sprayed into the centre of the main colours and on raised areas, but it's so subtle you can hardly see it. I'm not a fan of the cartoon like modulation you see on so many models as it looks so unrealistic but each to their own.



Once I'd finished the camouflage, I removed the masks and hand painted the numbers with Vallejo and Prince August Acrylics. Even though this is a large kit hand-painting these was pretty daunting for me but I'm happy with the final finish. The numbers were toned down with the final weathering. The unit emblems were decals which were applied using setting solutions over a gloss coat in the black painted cutouts on the front and rear hull.

don't really have any painting technique, I just mess about till I think it looks right. Damaged areas of zimmerit were painted in light grey edges with red oxide primer on exposed areas beneath.

All of the tyres were hand painted in Tamiya Rubber black, thinned with my own home brew acrylic thinners which I prefer to use when hand painting Tamiya paints. The area behind the wheels and sponsons were stippled with dark brown AK diorama texture. I also added this to the inside of the sprockets, and it also formed the basis of my groundwork on the base.



I chose not to apply an overall wash, but I did dry brush the edges of the zimmerit with lightened tones and I added pin washes from various commercial washes, mainly Tamiya but really whatever I had to hand. I

Once this had dried, I mixed up a very dark brown shade from Tamiya acrylics and sprayed thinned down coats over the lower hull and inside of the side skirts and track guards until I got the dark dusty effect I was after.

The tracks were primed in Mr Surfacer 1500 black, and then base-coated in the same dark dust and left to dry for a couple of days. I then used Tamiya brown enamel wash, followed by AK splatter effects brushed over the whole track and then wiped off with paper towels to add the ingrained dirt. Again, I don't really follow any instructions, just mess about till it looks right.

Finally, the tracks were given a rub all over with AK gunmetal graphite powder to give the raised areas a metallic shine. I used my Mark 1 index finger for this task!

The tracks were then fitted and now the model looked like a Tiger and also took on a significant weight. The model was further weathered with light, heavily thinned over sprays of Tamiya Deck Tan to build up the dust so often seen on Normandy vehicles (a lot of the roads in Normandy were made from limestone), and I also used some controlled localised washes of light enamel (AK Rain marks), along with pastels mixed with acrylic thinners for further texture and dust, again just messing around until it looks right.

The Base.

I had been thinking of how to display the model from the outset, whilst I didn't necessarily think I could fully recreate the famous photograph I wanted to get somewhere near it. The base was cut from a suitably sized piece of 9mm plywood, to which I added the main flat track area from polystyrene foam. I cut further pieces of foam to build up the basic contours. The whole base was then edged with balsa wood and white Das Pronto clay was added to smooth out the contours.

The basic ground colour was the AK Dark Brown acrylic texture, stippled all over with a large brush. Before adding this texture, I had positioned the hull and marked how the tracks would be positioned. The place where the Tiger was abandoned was actually a bocage style hedge, very tough and unlikely (I figured) to have been churned up by the tracks. I added static grass of

assorted colours and lengths – 2mm up to 12 mm using a static grass applicator, not much success with the 12mm lengths, but I got the effect I wanted of a tangled mess of unkempt brush. I also used coloured leaves to add a little more variation and texture and some broken dried roots just to add interest. The foliage shrubs and leaves were all bought from Ali Express and TEMU for a very reasonable cost. I cut them into assorted sizes and used different colours to give the impression of random hedgerow. Before adding the shrubs, I sprayed them with thinned down Mod Podge matt glue to minimise the number of leaves that would fall off. I also used this product thinned with water sprayed over all the grassed areas to keep it all in place and used neat to stick down accessories onto the deck of the Tiger and the scenic base.

Once the Tiger hull was in position on the base, the gun barrel was painted in Mr Color Extra Dark Sea Grey and added to the turret. Before finally securing the turret, I glued the tracks to the base using 5-minute epoxy and used the same glue to fix the road wheels to the track to prevent any unnecessary movement. I added a few additional accessories such as headphones (AFV Modeller) hanging out of hatches – the cables were obtained from ANYZ Models (<https://anyz.io/shop>) empty shell cases (from the Trumpeter late Tiger kit) the turret MG mount abandoned on the back deck and some pieces of MG ammo belt (AFV Modeller) an SS decaled helmet and a couple of copies of Signal magazine from JFL Miniatures (<https://www.afcfef.fr/jfl-miniatures>) just to add more interest and give it a bit of a looted look. I also added a few broken twigs, leaves and dirt from various pigments. And that's about it. I built this project over about 30 months, with lots of down time due to life getting in the way. It almost went in the bin on numerous occasions and probably would have were it not for the support I had from my good modelling friends, particularly Yann Jouault and David Parker.

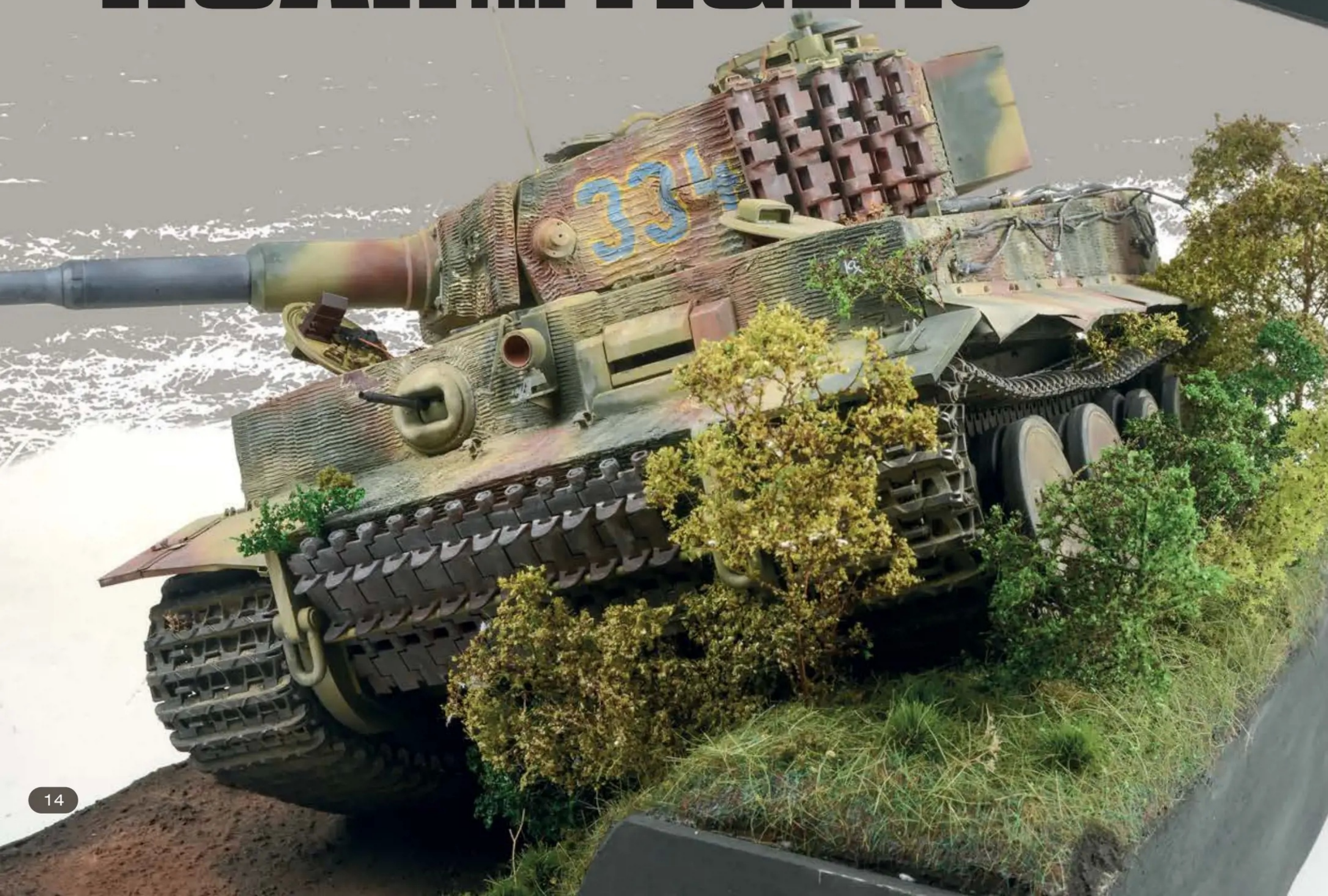
I swore I wouldn't do another Tiger for a long while, but as I write these last words, I have a 1/16 late production Command Tiger conversion on my bench in front of me, hopefully a three-month project this time.....







THE FINAL ROAR^{OF}_{THE} TIGERS





1:72



DIAMOND T 980



ANDREA VIGNOCCHI'S HEAVY-HAULER DIORAMA

**RED
BALL**
Express



KEEP ON TRUCKIN'

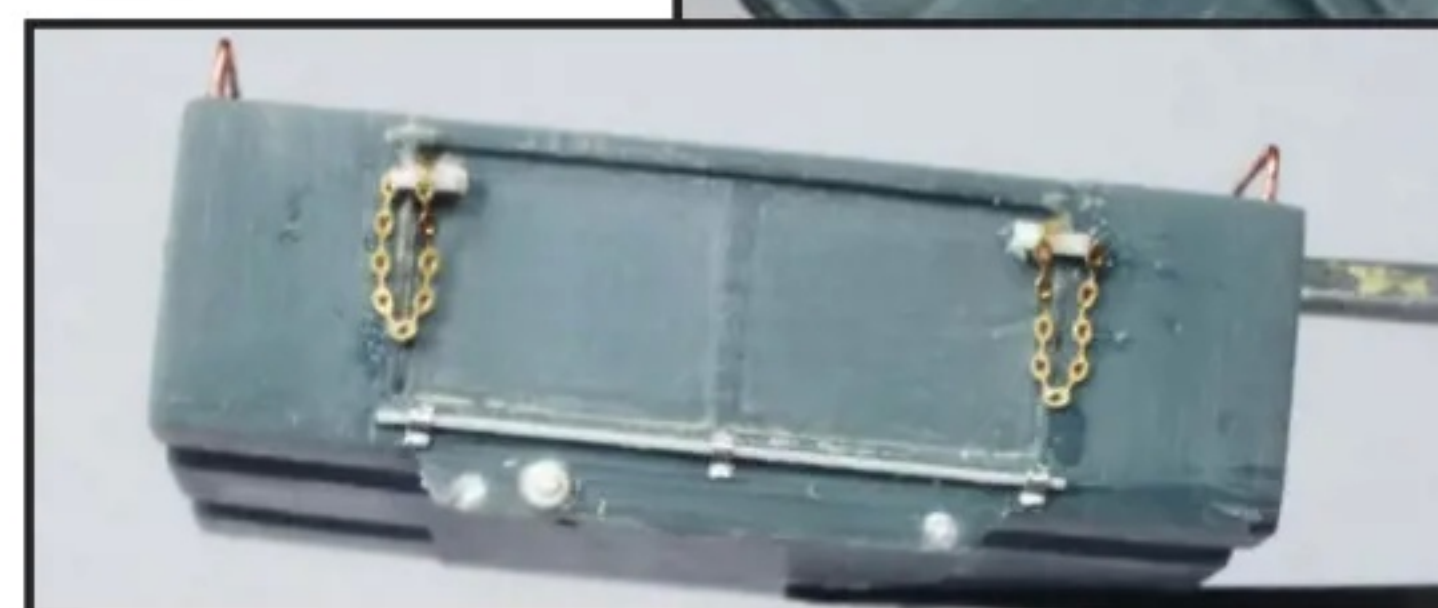
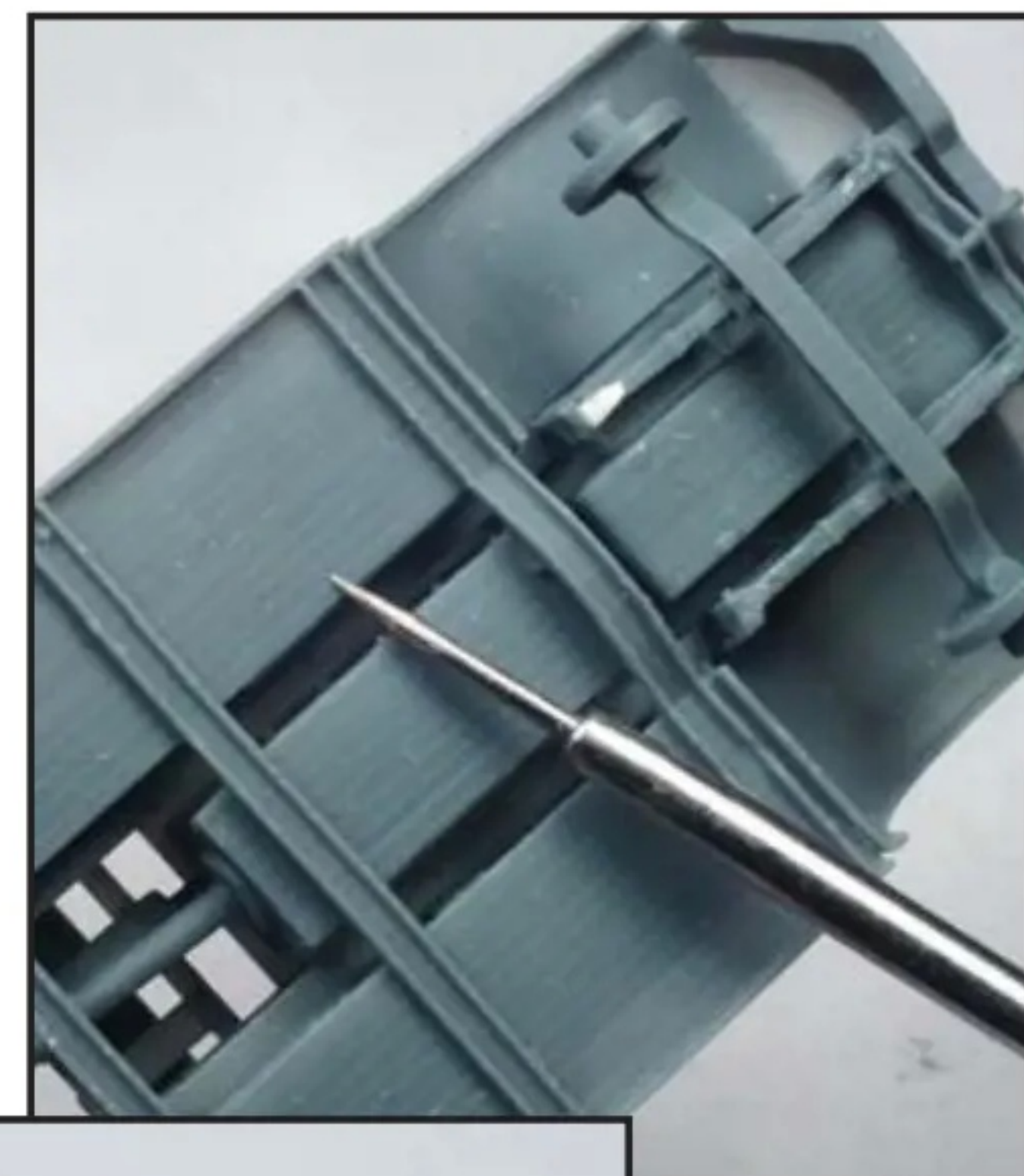
The Diamond T 980 was a large truck designed to transport tanks, using the M9 12-wheel trailer. The vehicle was powered by a 14.7-liter, 185-hp Hercules diesel engine, which, thanks to its powerful torque, could tow tanks weighing up to 52 tons. Of these, 6,548 were built and were used on all fronts by the various Allied forces, particularly the British and Americans. In 1944 the US replaced the Diamond 980 with the M26 Dragon Wagon, subsequently using the vehicle to transport munitions and heavy loads, especially during the Red Ball Express, the gigantic logistical effort undertaken to supply the front lines after the Normandy landings.

Roads were created exclusively for the transit of thousands of trucks loaded with everything needed by the troops and armoured divisions. The diorama is set during this period, a tribute to the

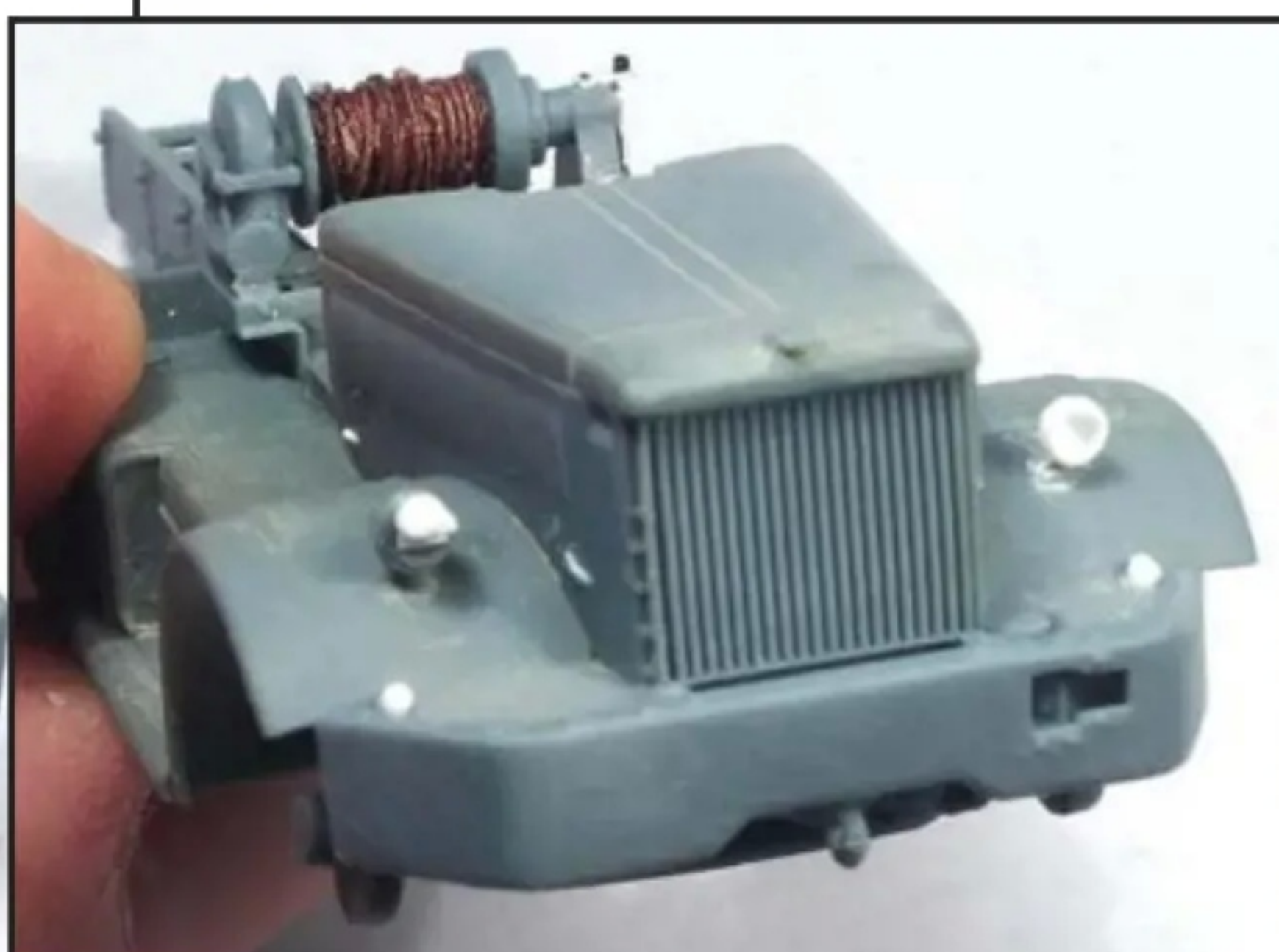
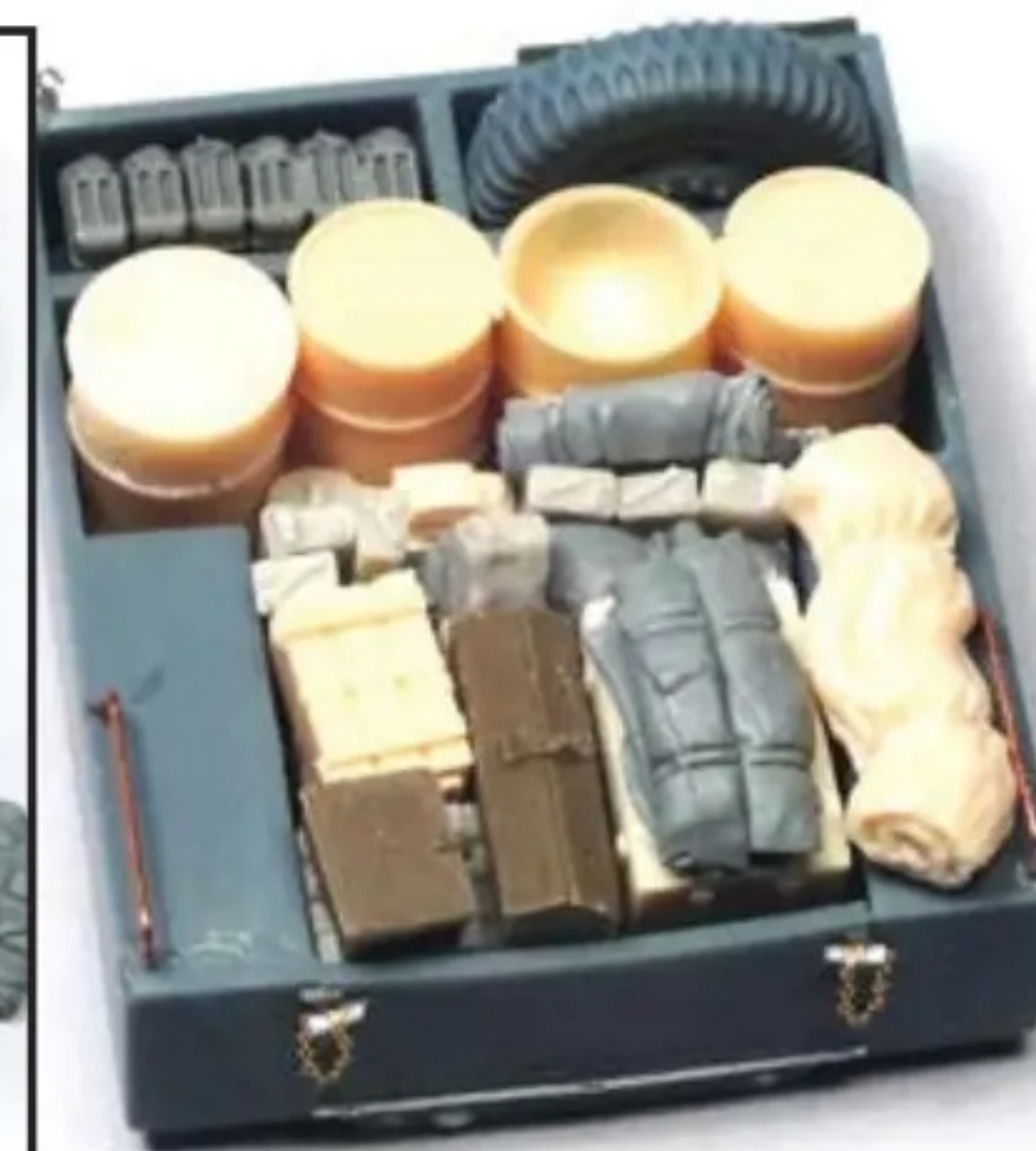
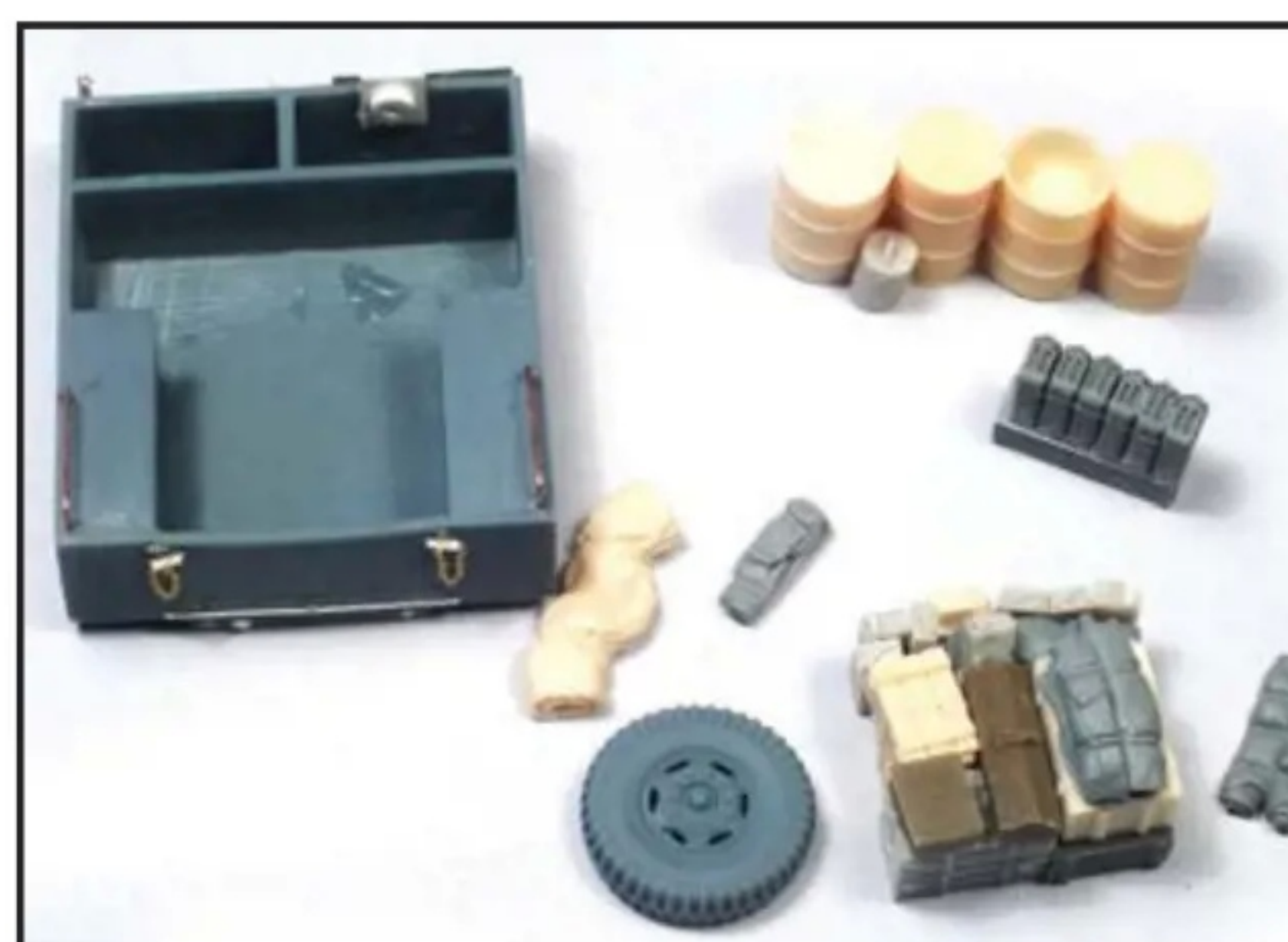
incredible logistical capacity of the US Army.

Currently the only Diamond T 980 kit available is the 3D printed Military Scale one, while the trailer is from Wespe Models.

There's really not much to say about assembling the truck: the main difficulty is separating the few parts from the resin gates. Some parts are very thin and it was impossible not to damage them; I had to redo the rear-view mirrors and the winch control levers. The quality and precision of the parts would be fantastic if the entire kit wasn't marred by the moulding lines left by the 3D printing process; removing them, at least partially, proved to be a real pain because the 3D resin is very hard and doesn't sand easily, giving the parts a dusty appearance.



I'd heard that isopropyl alcohol levels this type of resin, but that only happens before the resin cures, so the attempt failed and all that remained to do was to sand all the exposed parts...what a hassle, especially considering the price of this kit. A few missing details were added, such as the chains on the tailgate, the tools, and some low-visibility lights on the nose, but overall there's really not much that must be added. The rear cargo bed of the Diamond T 980 was always loaded with equipment and ballast to improve traction; in my case, I placed four drums filled with rocks or liquids and assembled the rest of the load so that it could be painted separately and installed in the cargo bed after



The two drivers are made from old Milicast figures, which are really ugly, but fortunately you won't see much of them inside the cab; the final details on the nose and the winch cable are added, and I'm ready to paint.



This time, I used Gunze Mister Surfacers 1500 as a primer, diluted with the same brand's retarder; the result is truly excellent, aside from the "scent" it releases. To obtain a light enough olive drab tone for the various colouring steps, I used this recipe: 80 drops of H52 Olive Drab, 20 drops of H34 Cream Yellow and 10 drops of



H81 Khaki, plus a good dose of flat base to make the colour opaque. Once I had a good amount of the base colour, I mixed light and dark colours for highlights and shadows, layering the various coats until I achieved a satisfactory result.



The dust is obtained by first applying layers of H72 Dark Earth and then H85 Sail Colour; the areas to be treated are the sides of the body, the underside of the truck and the outer edges of the fenders. The few decals are recycled and are applied with standard softening liquids over a gloss coat.



After airbrushing a matt layer, the decals were toned down with highly diluted Olive Drab, until the white of the American stars became less bright. The interior was painted with acrylic paints and the figures were inserted into place. Setting this piece aside, a wash of Burnt Umber was applied to all parts of the truck, as always removing the excess from the highlighted areas.



Once the front windows and side windows were installed, the cabin was assembled, which unfortunately formed a large gap with the nose; I filled it with PVA glue to avoid ruining the paintwork, but then I had to use more filler and eventually repaint the area. As with all my work, the finishing touches are achieved with acrylic paints, defining all the details and creating the various weathering effects. The cargo in the truck bed is then painted and glued, adding a touch of colour and interest to the entire truck.





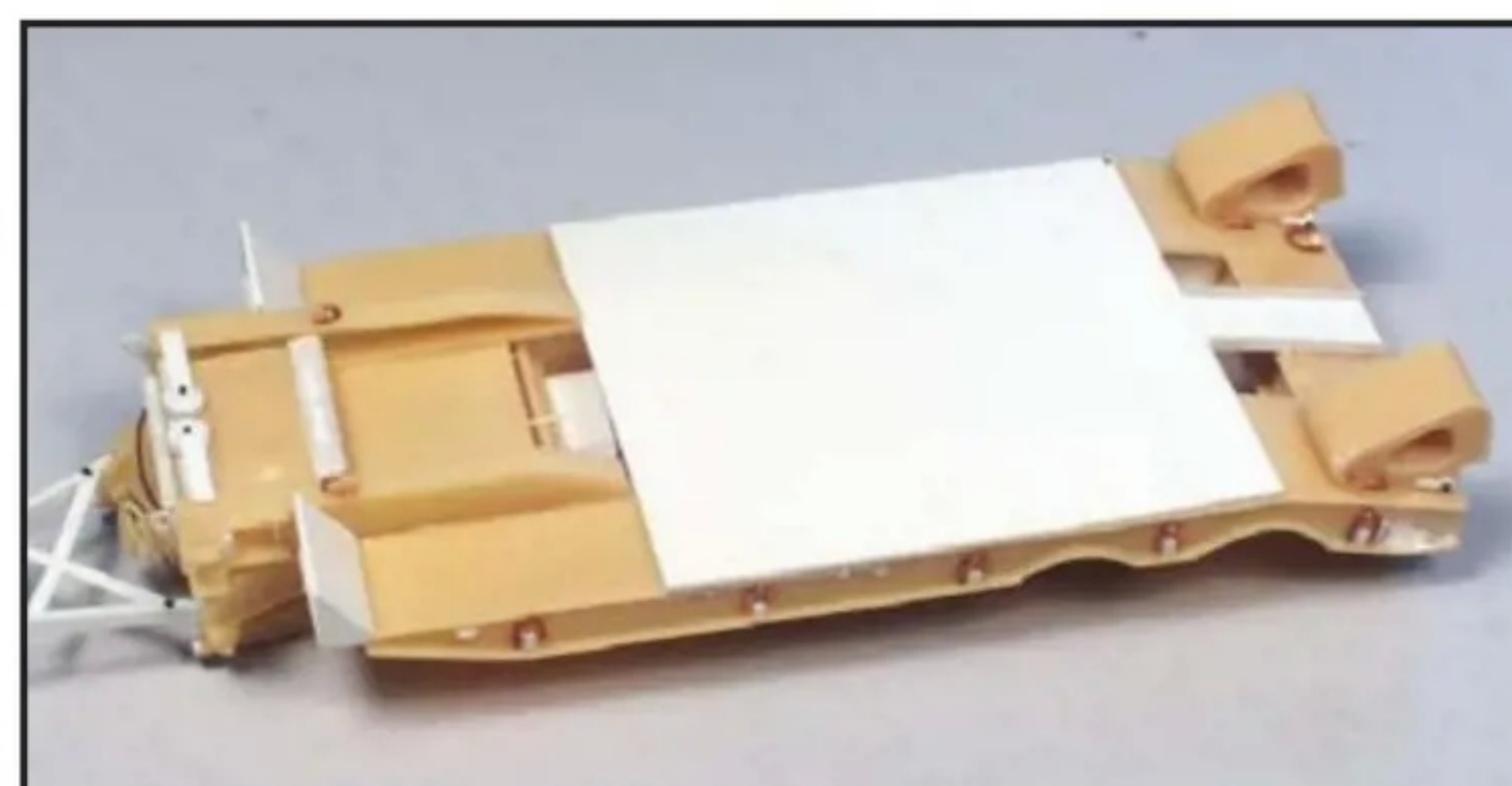
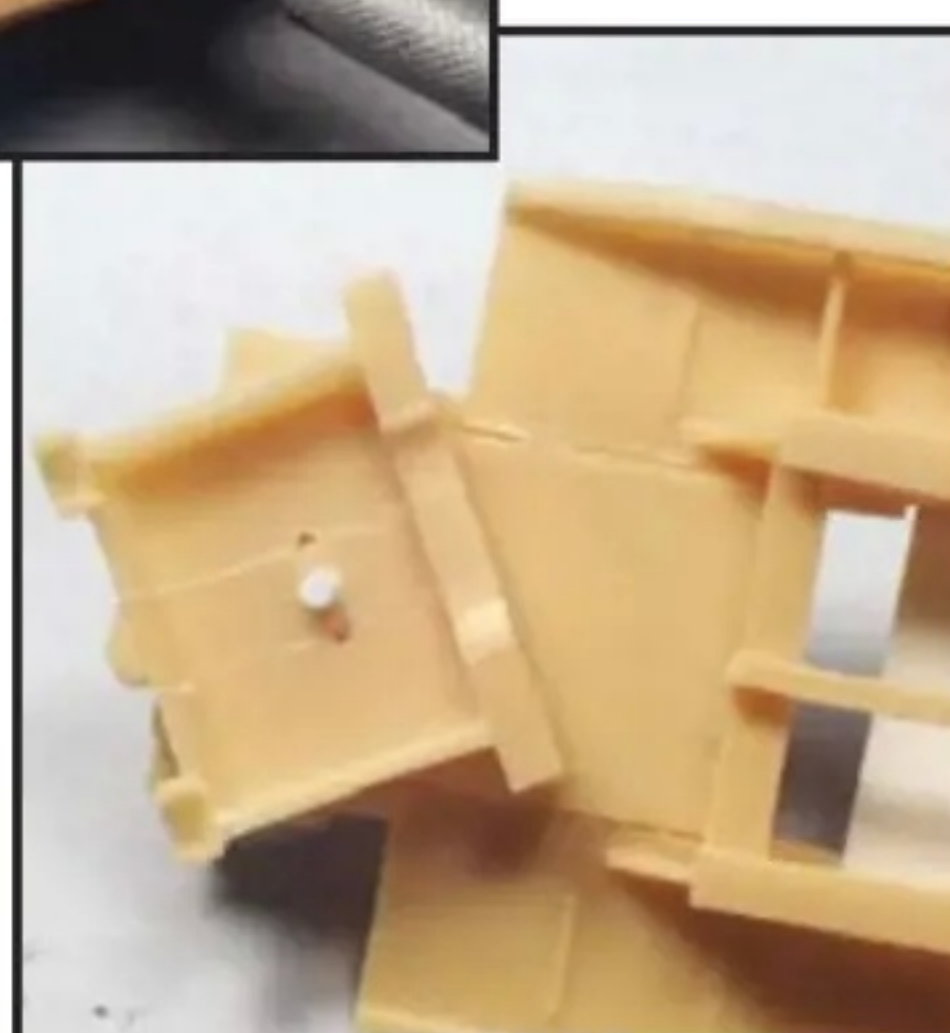
The assembly of the long rear-view mirrors and the winch control levers completes the model, which was finished in record time, to the point that I wonder if making 3D printed models can still be called model making... well, maybe it's because I'm old-fashioned and I like to give my personal contribution to the models.



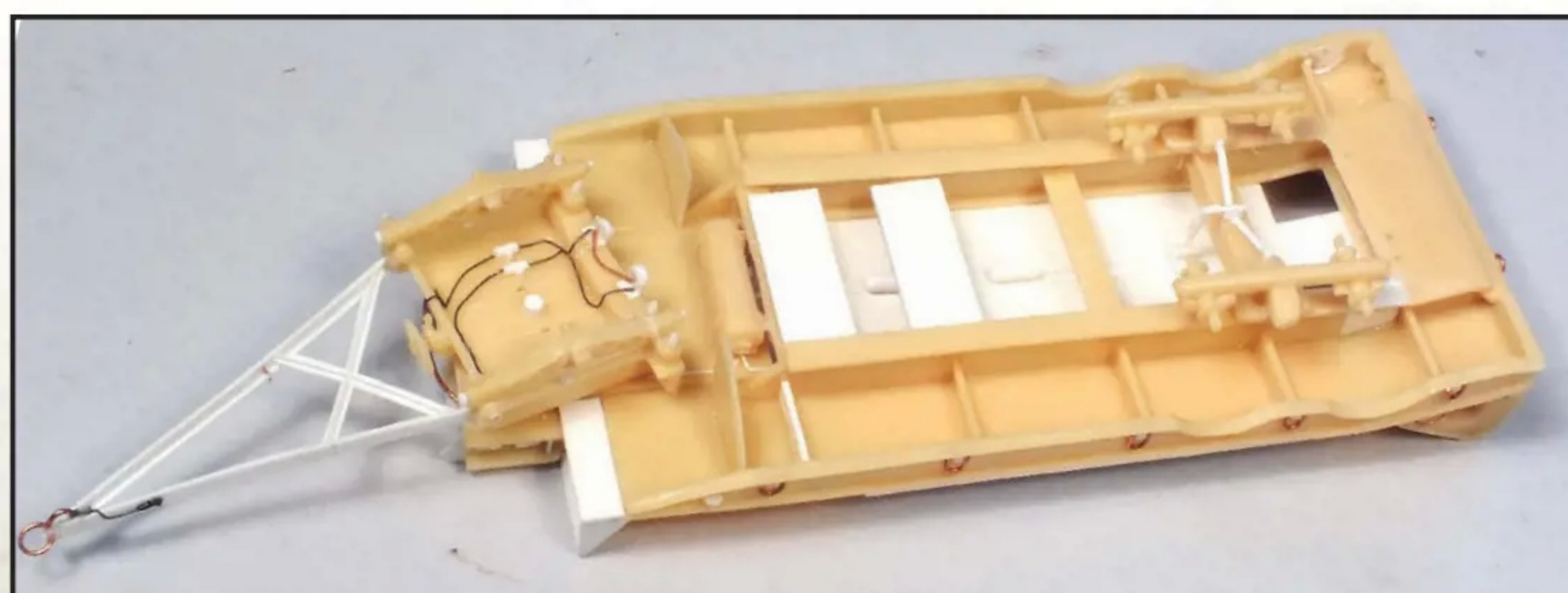
TRAILER SWIFT?



As mentioned before, this is a Wespe model kit, and I won't say more...some genius thought it was a good idea to attach the resin parts with hot glue, providing hours of fun as I separated the pieces and removed the glue and paper residue from each individual piece. The trailer frame was very crooked, but fortunately, by gently heating it with a hairdryer, I managed to straighten it out.



In order to be able to use the trailer for loading, the American engineers removed the tracks for the tanks' tracks and welded PSP sheets onto the floor to create a flat surface. Since the floor will be covered by the cargo, I simply glued a rectangle of plasticard onto the trailer. To allow the front bogie to be oriented as desired, I created a pivot to allow it to rotate. Some detail work was necessary on the front and underside of the trailer and in the end the piece looked quite realistic.



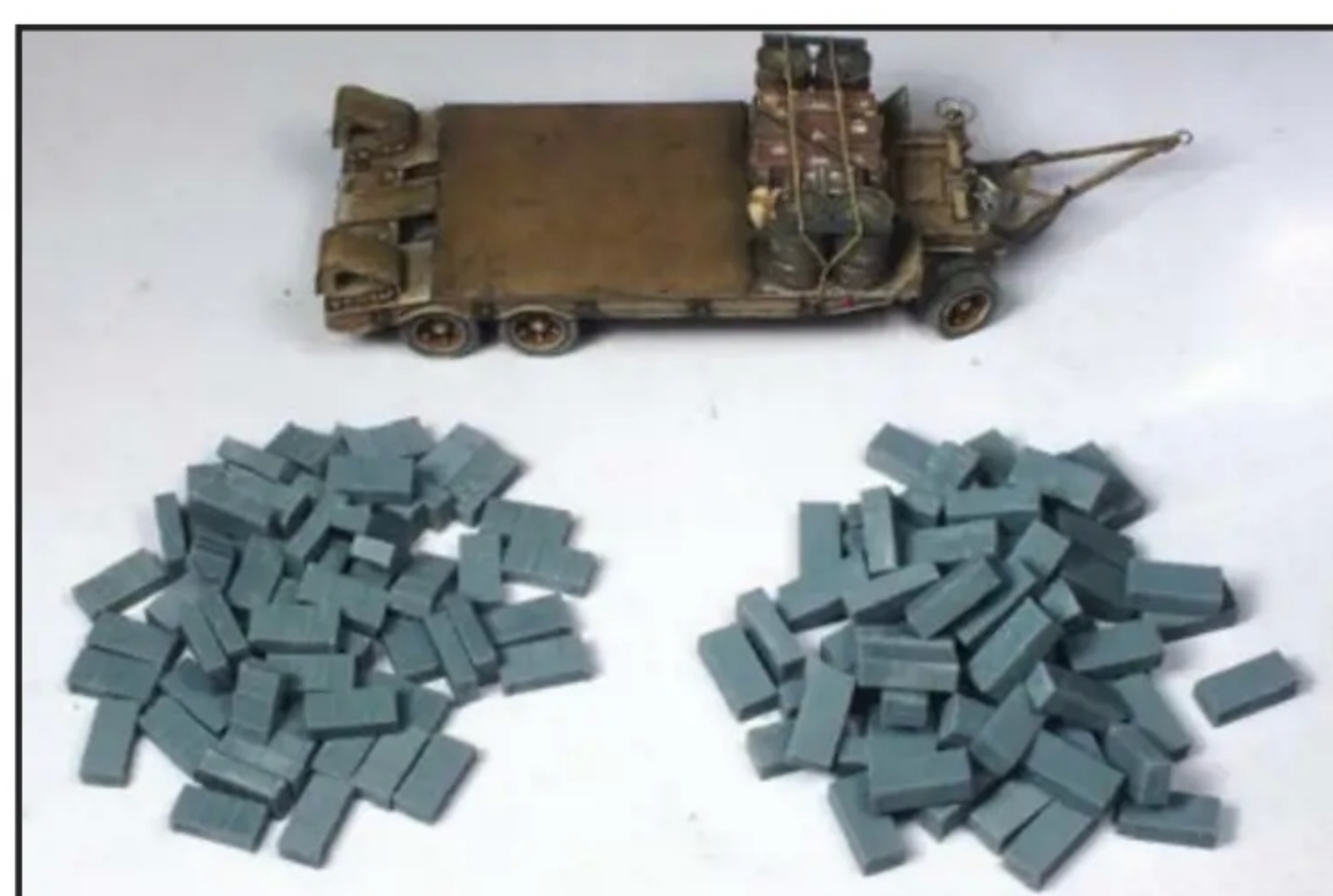


The front of the trailer is raised, so I divided the load into two parts: the bins and various crates at the front and the bulk of the ammunition crates at the back. Again, the loads are removable for easier painting.



The trailer is painted similarly to the Diamond T 980, further emphasizing its worn and dusty appearance; the wheels are abysmal, but fortunately they remain barely visible under the bed. There really isn't a single decent thing in this kit! Once painted, the front load looks great on the trailer.

Since I needed a large number of crates to make the load, I asked a friend to 3D print a couple of sets in two sizes, gluing them together so they filled the space on the floor. I used a plasticard mask that reproduced the exact space available. To add variety to the load, I also included crates of other sizes and some tarps used to cover the loads in case of bad weather.



To convert the Diamond T 980s to freight transport, the American engineers built metal angled brackets to support the stacks of crates. I created this detail from plasticard of various sizes, cutting the angle brackets from a C-profile and eliminating one of the two sides. The cargo was painted with Vallejo acrylic paints and a fair amount of weathering and detailing completed the load. Once installed on the platform, the load of crates creates a notable point of interest in the diorama.





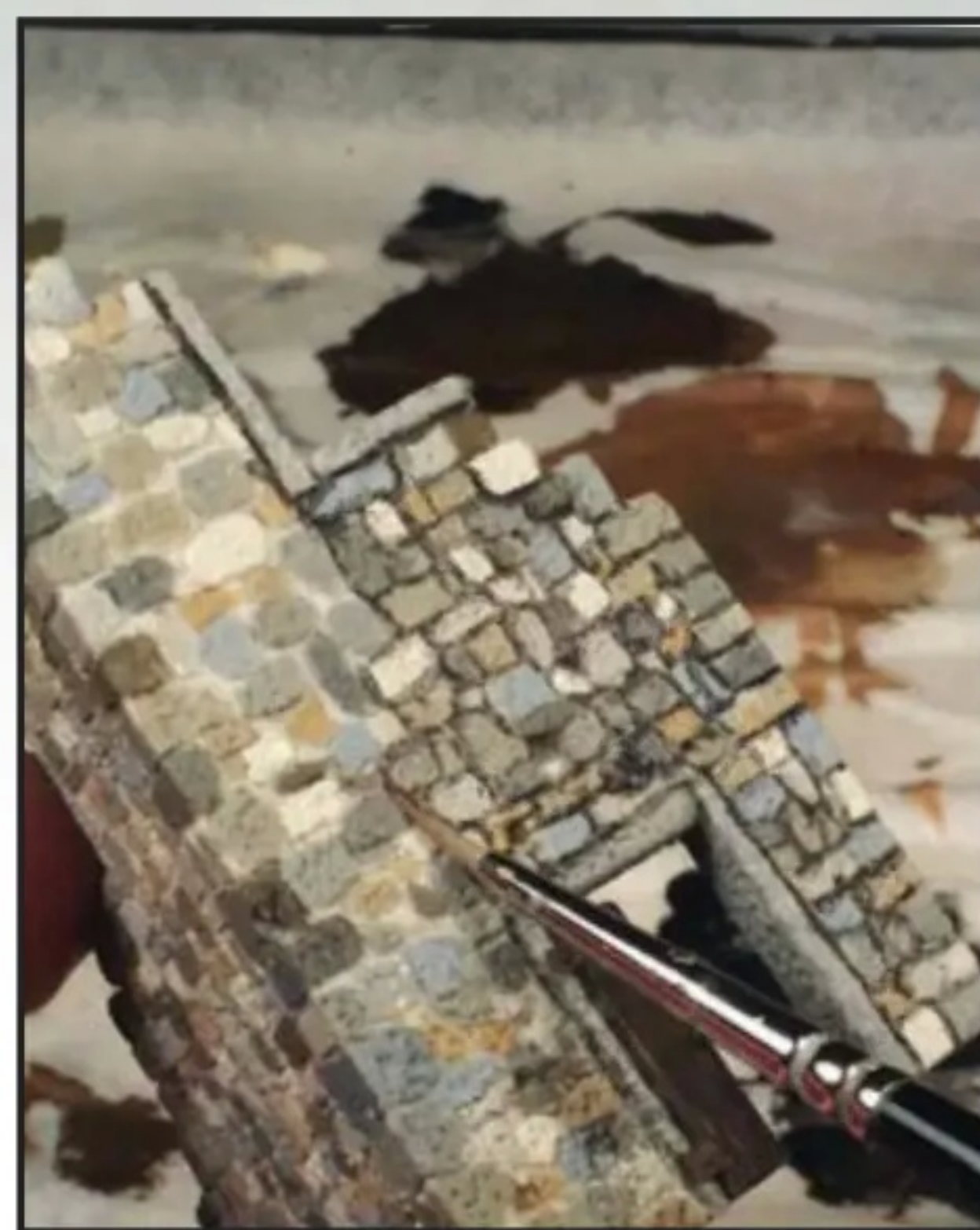
The tiny Harley Davidson is also 3D printed; the details are magnificent, but freeing it from the moulding sprues proved difficult and some small parts broke, forcing me to rebuild them. After painting, the bike is stunning, with details that would be impossible to reproduce with traditional plastic mouldings.



The scene I created is inspired by a picture seen in the book "Red Ball Express," where two Diamond T 980s pass through a completely destroyed French city. As always, it's very difficult to condense the reality of a picture onto a small base: it needs to be adapted to the size of the model, so I reduced both the height and quantity of the ruins, so as not to overwhelm the truck that will be the main character of the diorama. The first problem to overcome is that it's difficult to find ready-made houses or ruins suitable for the scene; the solution is to scratch-build them with Styrofoam, a high-density polystyrene.

Once the proportions of the ruins are defined, the walls of the ruins are shaped and the details are delicately engraved. The roof and the remains of the floor are made of plasticard, adding various debris and scrap.





To break away from the monotony of my usual flat dioramas, I decided to create a higher area where the main ruins are located and make the road slightly uphill with an initial curve, as seen in the picture in the book. This adds movement to the scene, making everything more interesting and believable. It's very important to test the placement of the model and the ruins to achieve a balanced effect.



The technique for painting the ruins varies depending on the type of house: the smaller ruin on the left of the scene represents a stone house, so the stones were painted one by one, trying to use similar colours, then the spaces between the various stones were defined with a very diluted dark colour. A drybrush with a light gray evens out the appearance of the walls and the work is completed with traces of drips and dirt.

On the inside of the walls, the plastered areas are coloured with hues typical of the period, namely fairly light pastel shades ranging from green to light blue or very pale yellow, almost white. The main house has a plastered facade painted light yellow, a hue that will add a pop of colour to the diorama. The stones that make up the wall appear through the cracks and flaking caused by collapses; the painting is more complex, but the result is interesting.



The paving was reproduced using a Green Stuff rolling pin: simply press it onto a semi-dry surface of DAS clay, and the effect of an irregular paving stone is achieved in an instant. It's obviously not that simple and you'll need to touch up any areas where the pattern hasn't been printed perfectly, but it's still much quicker than cutting out the bricks one by one.



Around the ruins, there's a large amount of debris from the collapses; the ruin on the left received some stones and parts of the wooden floors, but since it's literally right on the edge of the road, I didn't want to overdo the piles. The larger house on the hill is a different story: in this case, the debris is much more abundant.



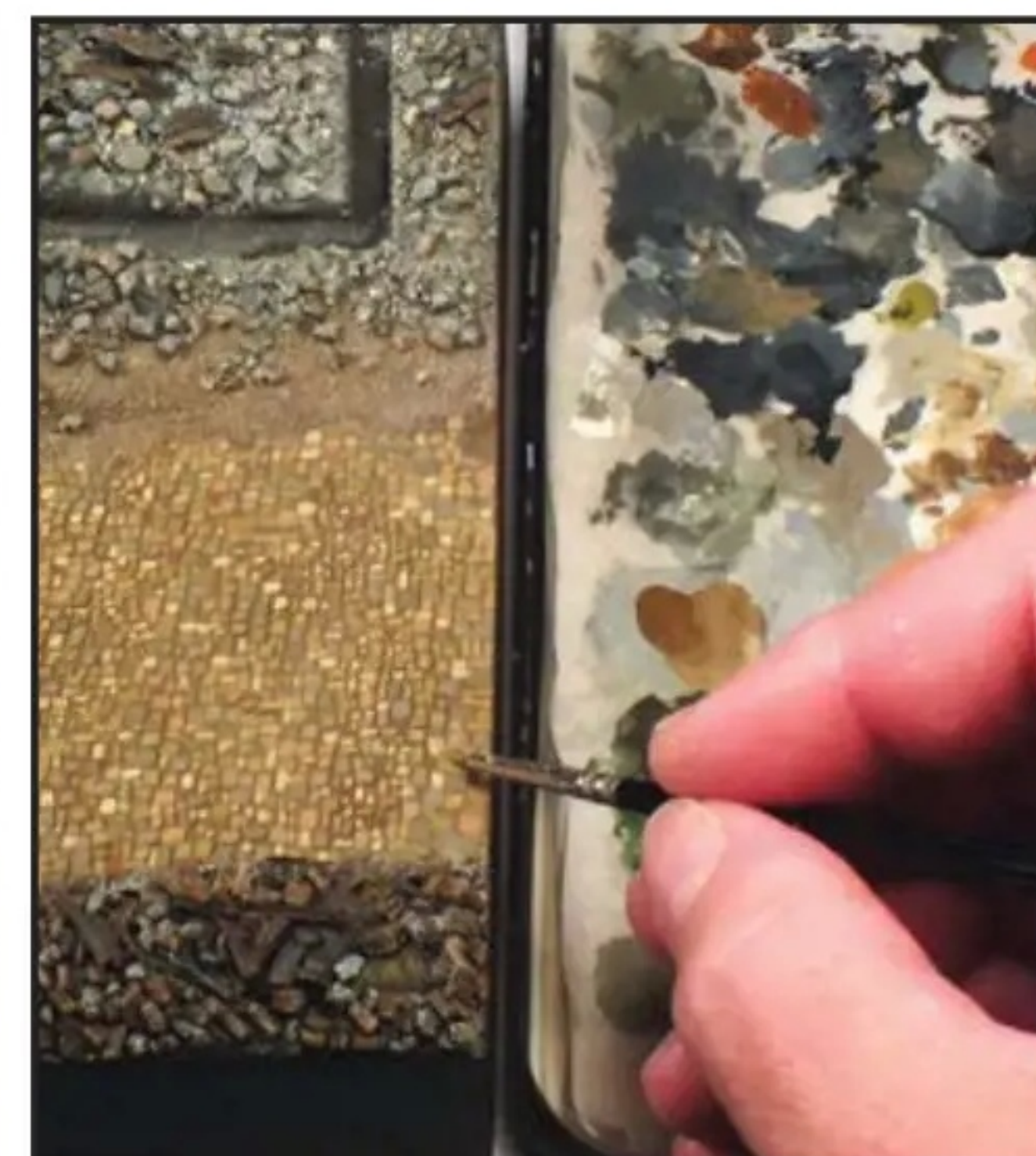


Now let's see how to create realistic piles of rubble: we begin by creating a base of DAS, textured with an old stiff-bristled paintbrush. Before the DAS dries, we add stones, bricks, pieces of beams, and wooden planks; it's important that the debris "sink" slightly into the DAS. Once this phase is complete, I apply a layer of fairly diluted vinyl glue and sprinkle sand and pebbles of various sizes, creating a fairly shapeless mass. At this point, the rubble is mixed with sand and stones, and I then add more stones, pieces of a table, broken chairs, roofing sheets, and larger parts of the collapsed floor.

This gives the impression of collapses stacked on top of each other, making the appearance of the rubble more realistic. The house was used as a template to delimit the piles of rubble around the various wall segments; it's important that the piles don't have unrealistic gaps around the remaining walls.



At this point, the base is almost complete and the only problem remaining is deciding what to place at the front of the scene, next to the road. Once again, the real picture served as inspiration: in that area you can see a pile of debris with bricks and undefined metal parts, undoubtedly pushed and piled up to the side of the road by American engineers' bulldozers. The idea was perfect, especially because in such a context of destruction and ruin, the green lawn I usually place in these areas would have been quite out of place. The pieces of guttering, pipes and twisted metal sheets are made of lead sheet.



The real challenge of this diorama, besides achieving realistic rubble, lies in the painting process: there are thousands of small details to paint, like rubble, cobblestones, rusty scrap and much more. I started with the base colours: a light shade like Tamiya Buff for the areas of the terrain free of rubble, an earthy colour for the cobblestones, a dark gray for the rubble of the houses and a more reddish colour for the scrap metal. A drybrush with an oil-based dust colour highlights the details of the rubble.

Once the easy part is over, a demanding task begins, both for my eyesight and for my patience: every single brick of the cobblestones and every stone of the rubble must be painted with

different colours, but not too much. It's also important to pay careful attention to the colour balance, distributing the various shades evenly; a palette with various Vallejo colours is a great help, allowing us to continuously vary the tones of the details. After a long period of stress, everything was finally painted to perfection—a truly beautiful feat... Oil washes with a dark earth, drybrushing to even out the road with dust colour and countless touch-ups completed the terrain painting process. The addition of dark green Noch railway grass and variously shaped tufts from Mininatur completed the base; in the end, the effect is very convincing, at least for me.



After gluing the houses, the contact areas of the walls were finalized with more rubble, pieces of wood, and pebbles; care was needed to avoid dirtying the walls of the house while painting these details, but the result was worth the effort. Along these roads, one often saw piles of empty jerry cans and drums left by units that had refuelled, so much so that trucks with large magnets on their fronts had to be sent around to remove the

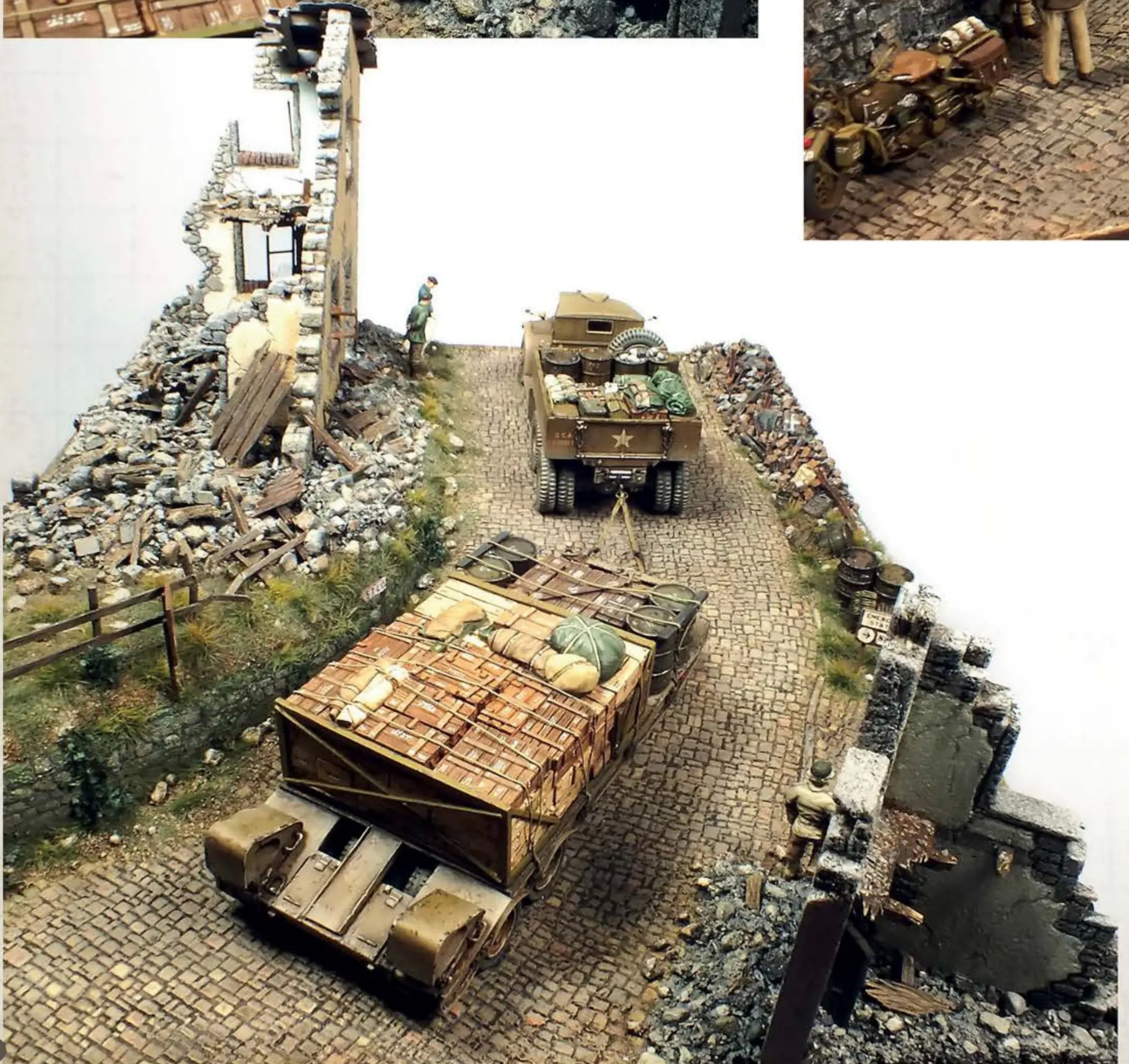
scrap metal from the roadway, which was constantly causing the trucks to get flat tires. Signs with all sorts of information were placed along the roadsides: one indicated an emergency repair station, another advised driving slowly on a dangerous curve. A half-destroyed fence filled the space near the main house and at this point the base was complete, only the main actors were missing.



A large number of Military Police officers on motorcycles were employed to monitor and direct traffic on the Red Ball Express. I based the figure on a Milicast infantryman, adding the armband and the typical truncheon that MPs also used to direct traffic. The civilian figures are from White Stork and are truly beautiful. When

painting them, I tried to use the colours of the clothing of the period. Once placed on the diorama, the figures bring the scene to life, creating many points of interest. The two soldiers with the dog watching the Diamond passing by and the character talking to the officer are truly impressive.





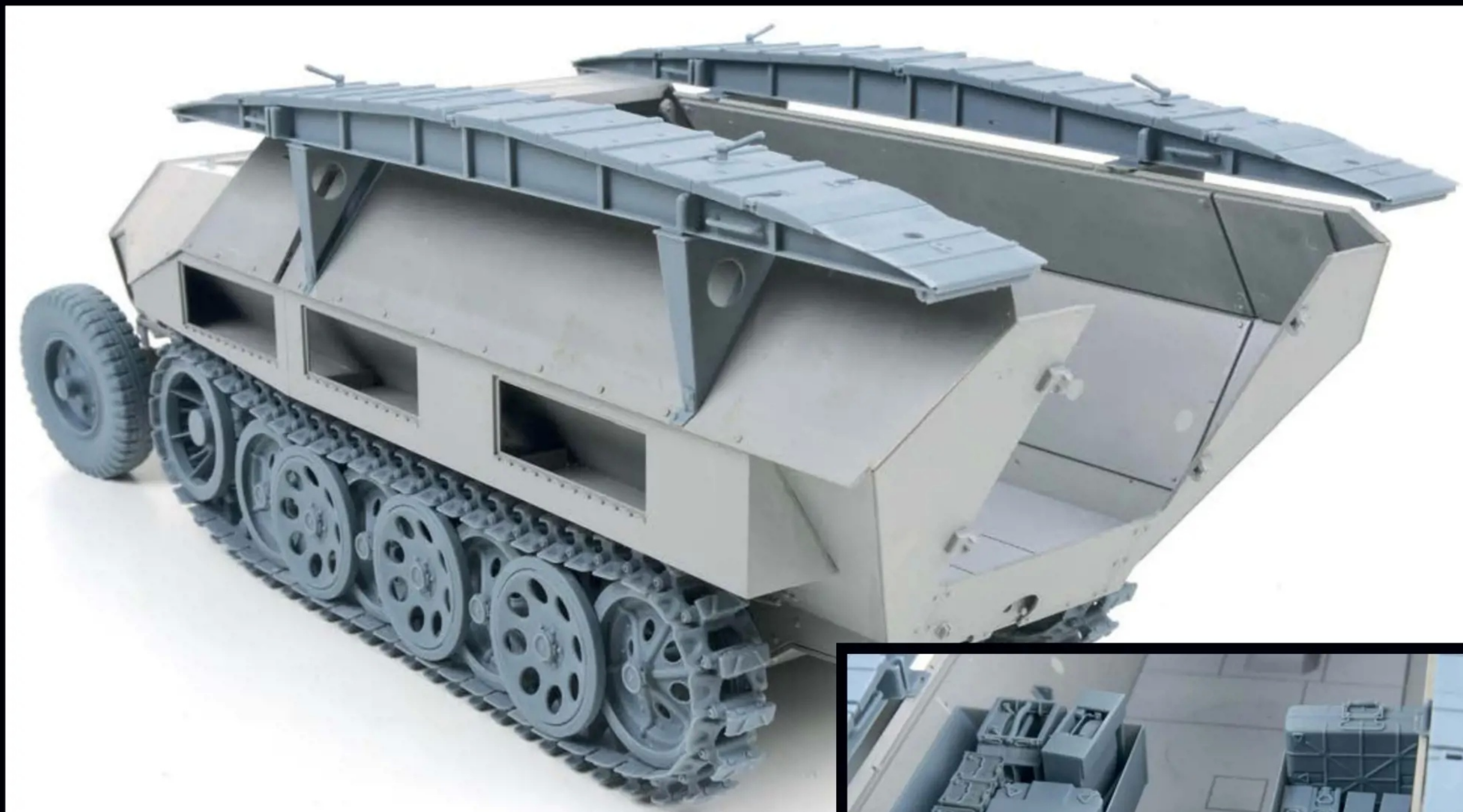


RED BALL *Express*



Sd.Kfz.251/7 CONVERSION

AFV
modeller
1:16

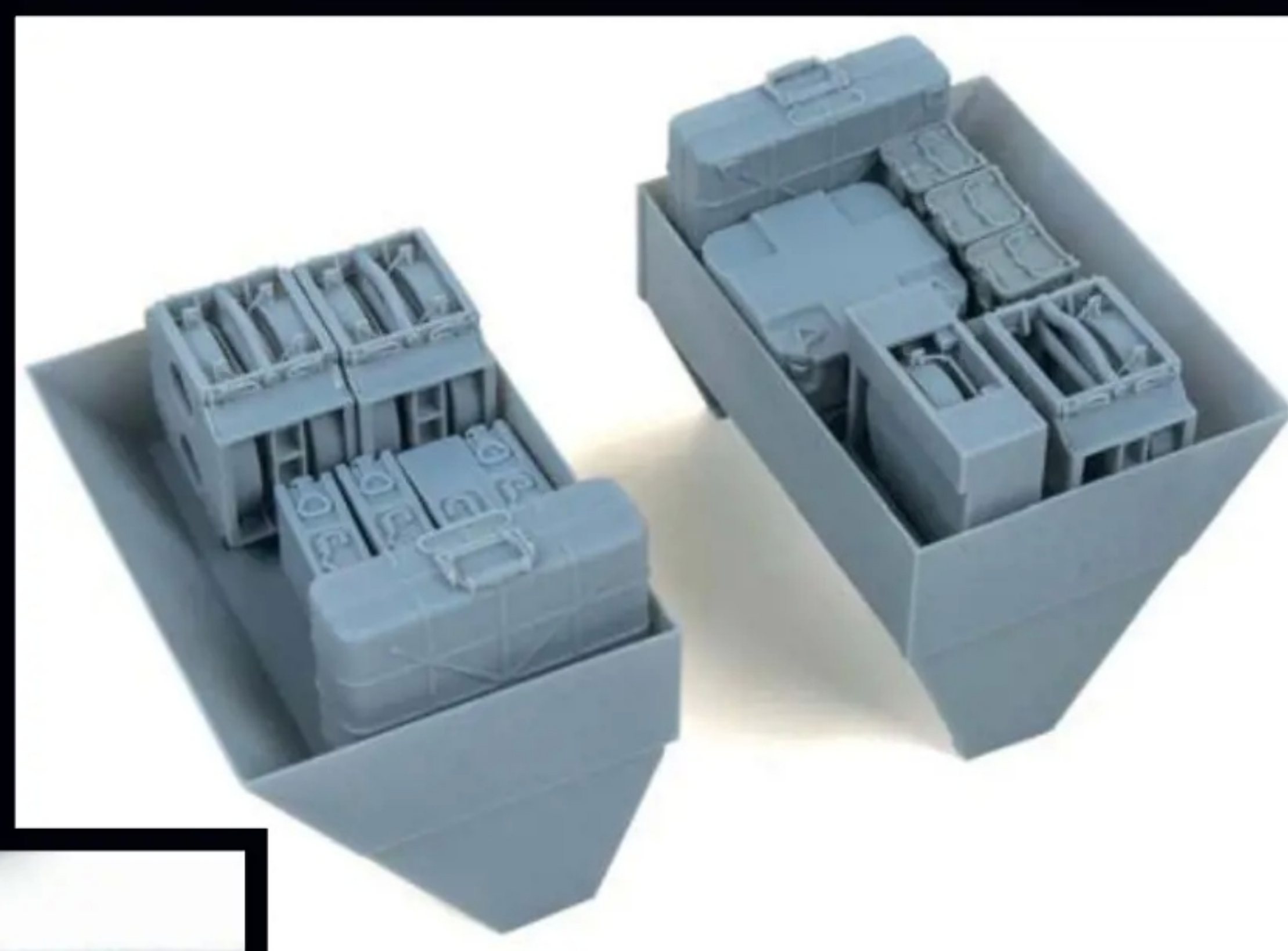
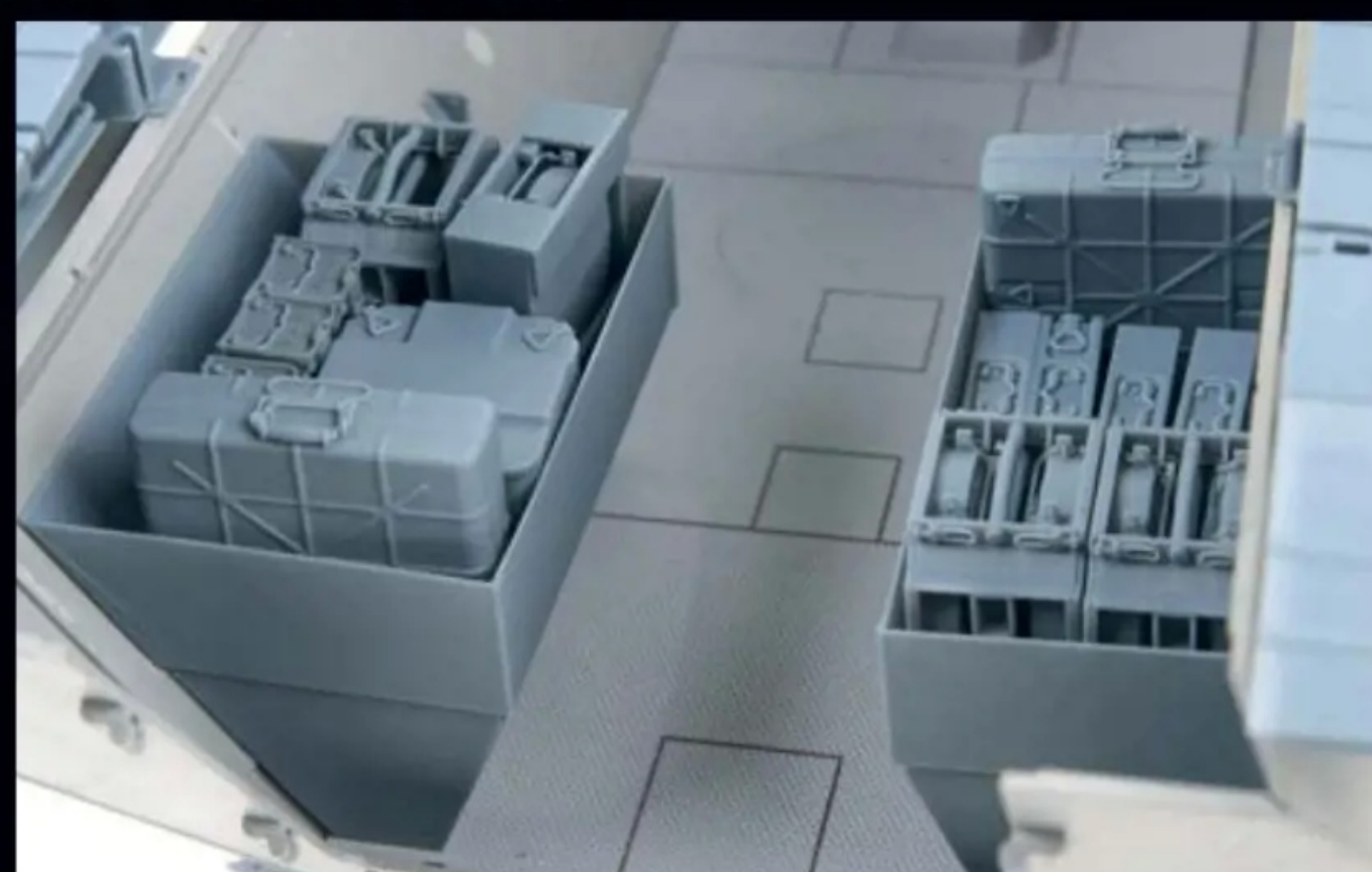


Sd.Kfz. 251/7 Pioneerpanzerwagen 8ton Portable Bridge

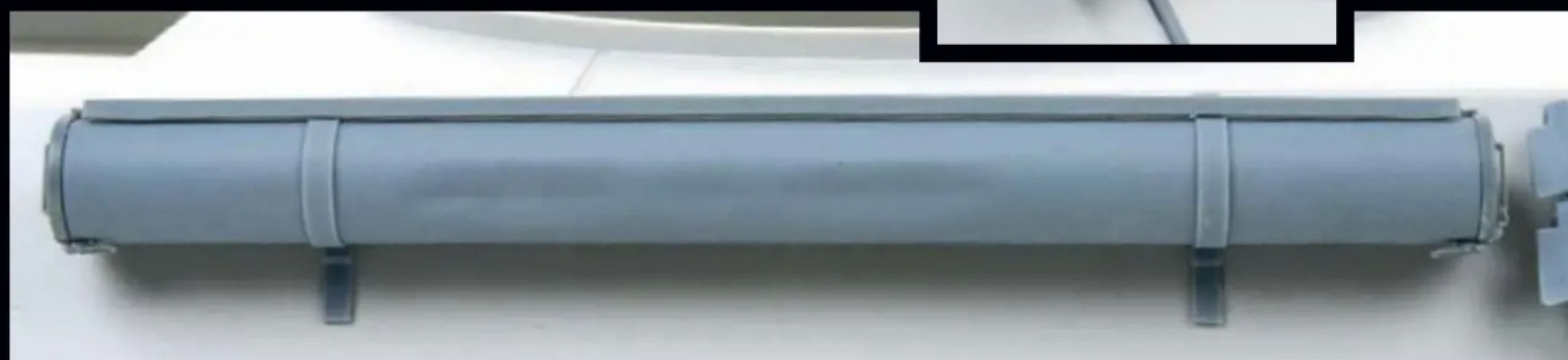
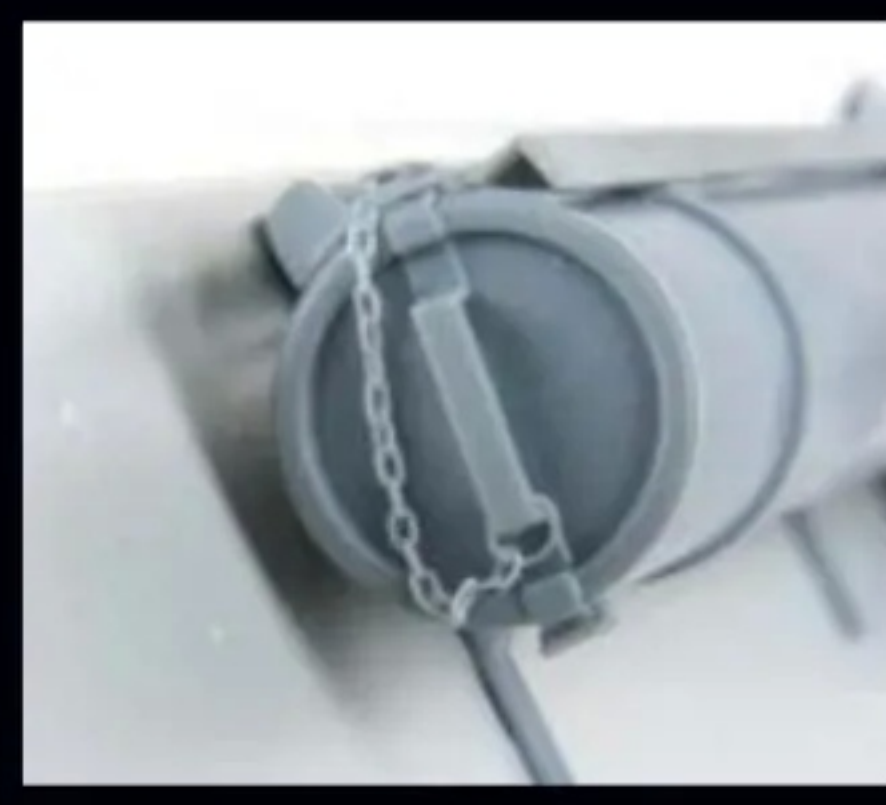
Designed to fit the Das Werk Sd.Kfz.251 kits this 3D printed set provides the supports for the hull sides, requiring the removal of 4 bolts from the side armour to locate these brackets making it extremely easy to fit. The Bridge itself accurately replicates the real thing with the correct hollow underside detail and 8 ton weight limit on the ramps at each end. The bridge is printed in two parts which simply interlock for a self-supporting assembly.

Sd.Kfz. 251/7 Pioneerpanzerwagen Interior Stowage Set

Designed to compliment our 251/7 Pioneerpanzerwagen bridge conversion this 3D printed set provides the two stowage bins which replaced the two rear bench seats in the vehicle, providing space to carry the additional Pioneer equipment. The set also includes a selection of 15 different stowage items which, based on photos of the real vehicle stowage arrangement. This gives you sufficient stowage to fill the bins as our photos show.

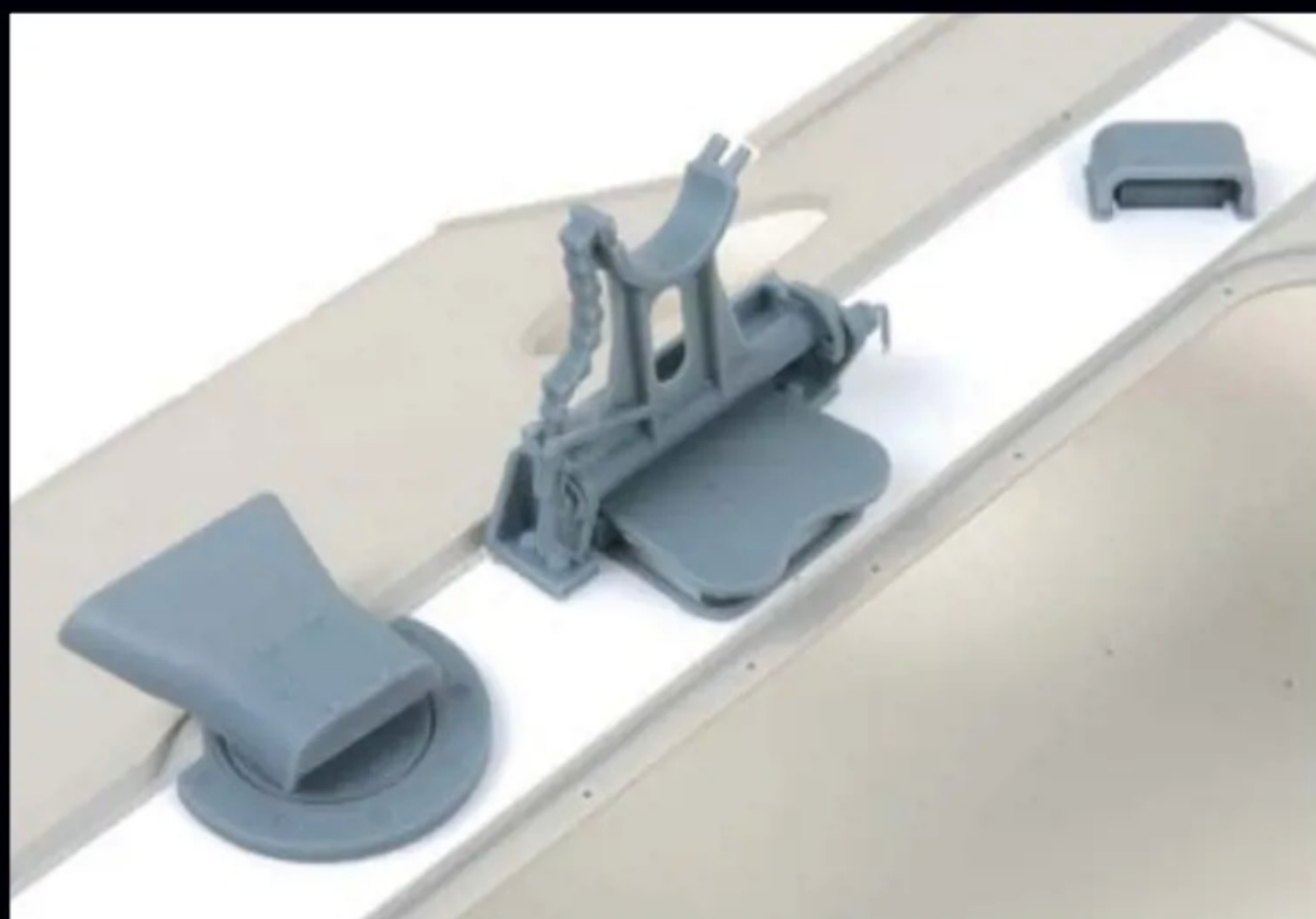


PANTHER



Panther/Jagdpanther Gun Cleaning Rod Stowage Container

This 3D printed set upgrades the distinctive stowage tubes carried on both Panther G and Jagdpanther. We have recreated these as exactly as possible right down to the working micro chains used to retain the caps to each end of the tube and the subtle often overlooked welds joining the three sections of the tube together. Available as dented or undamaged versions.



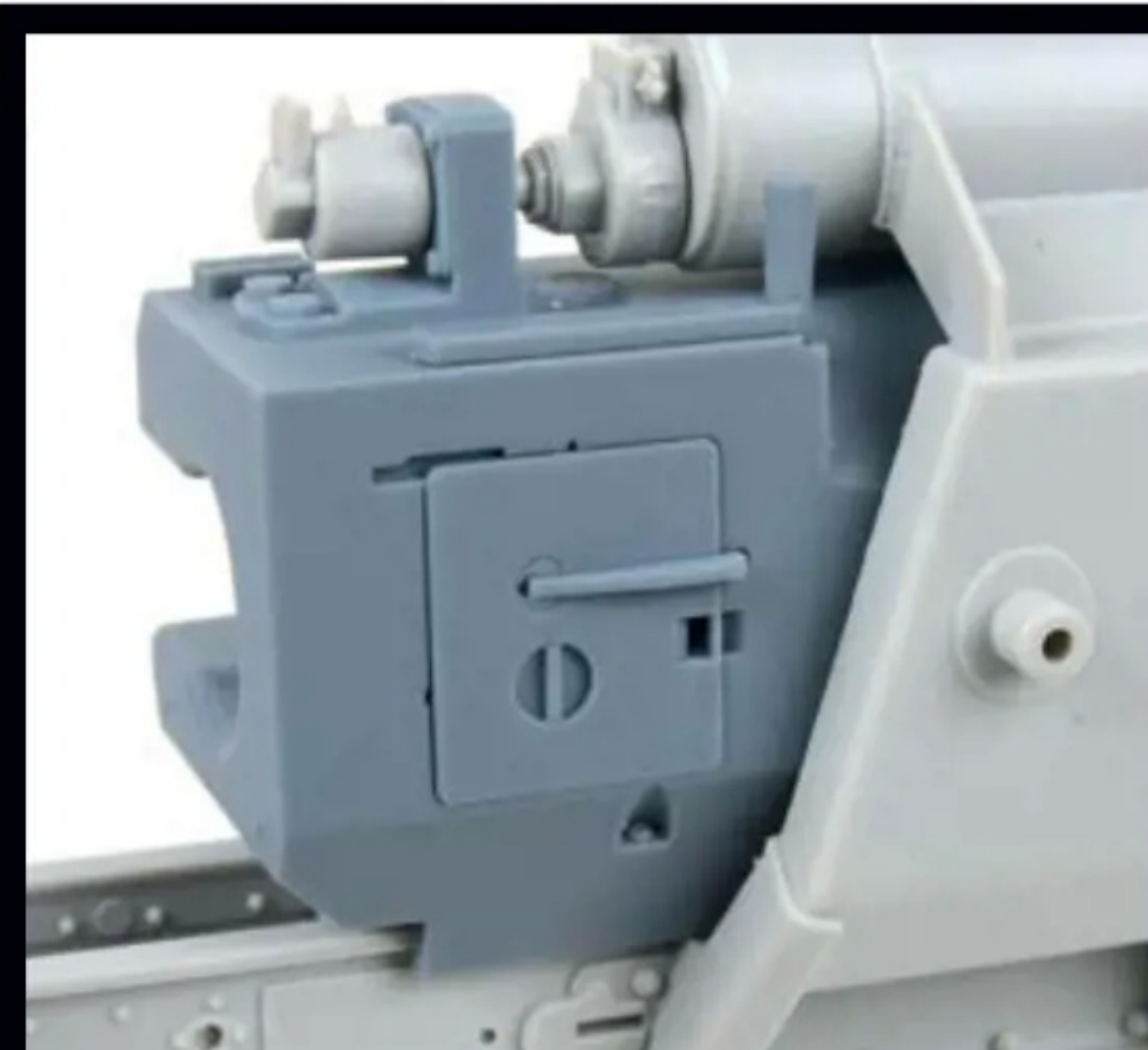
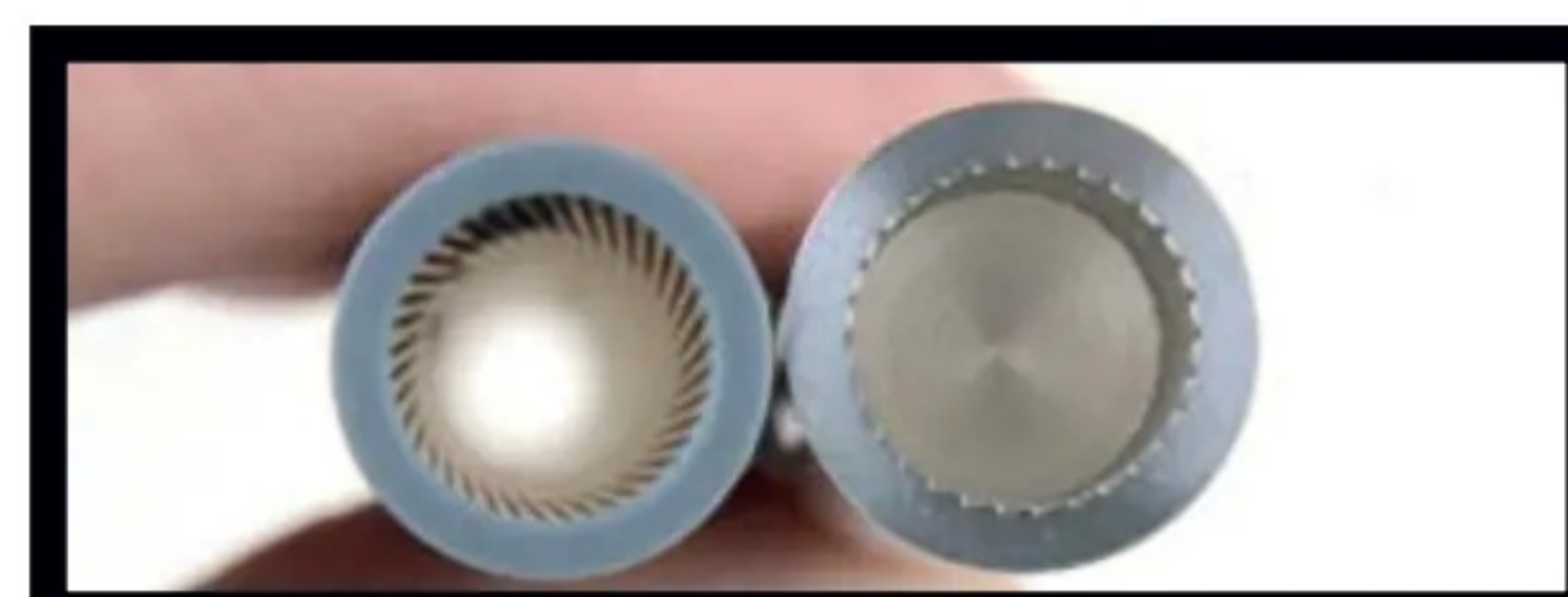
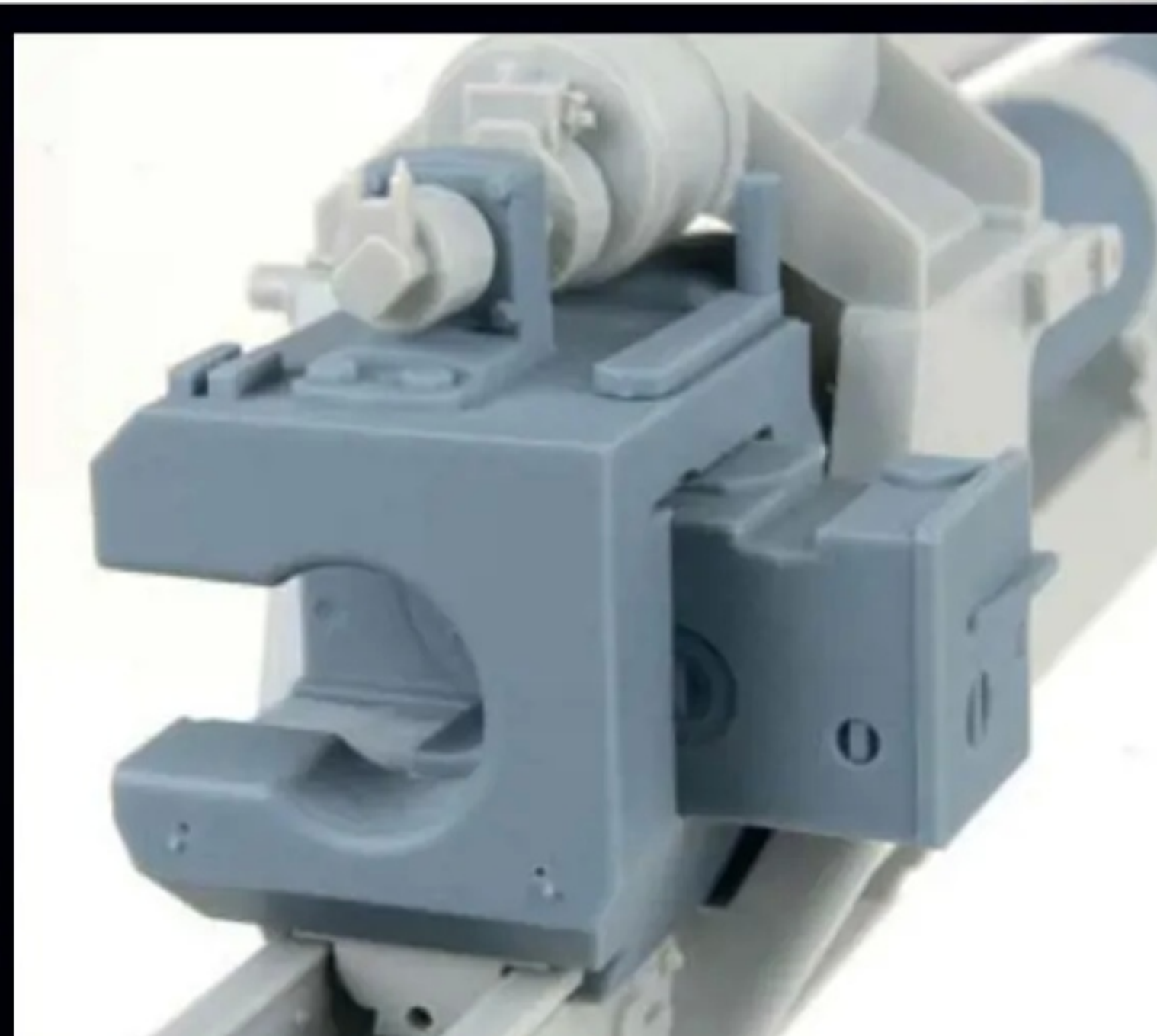
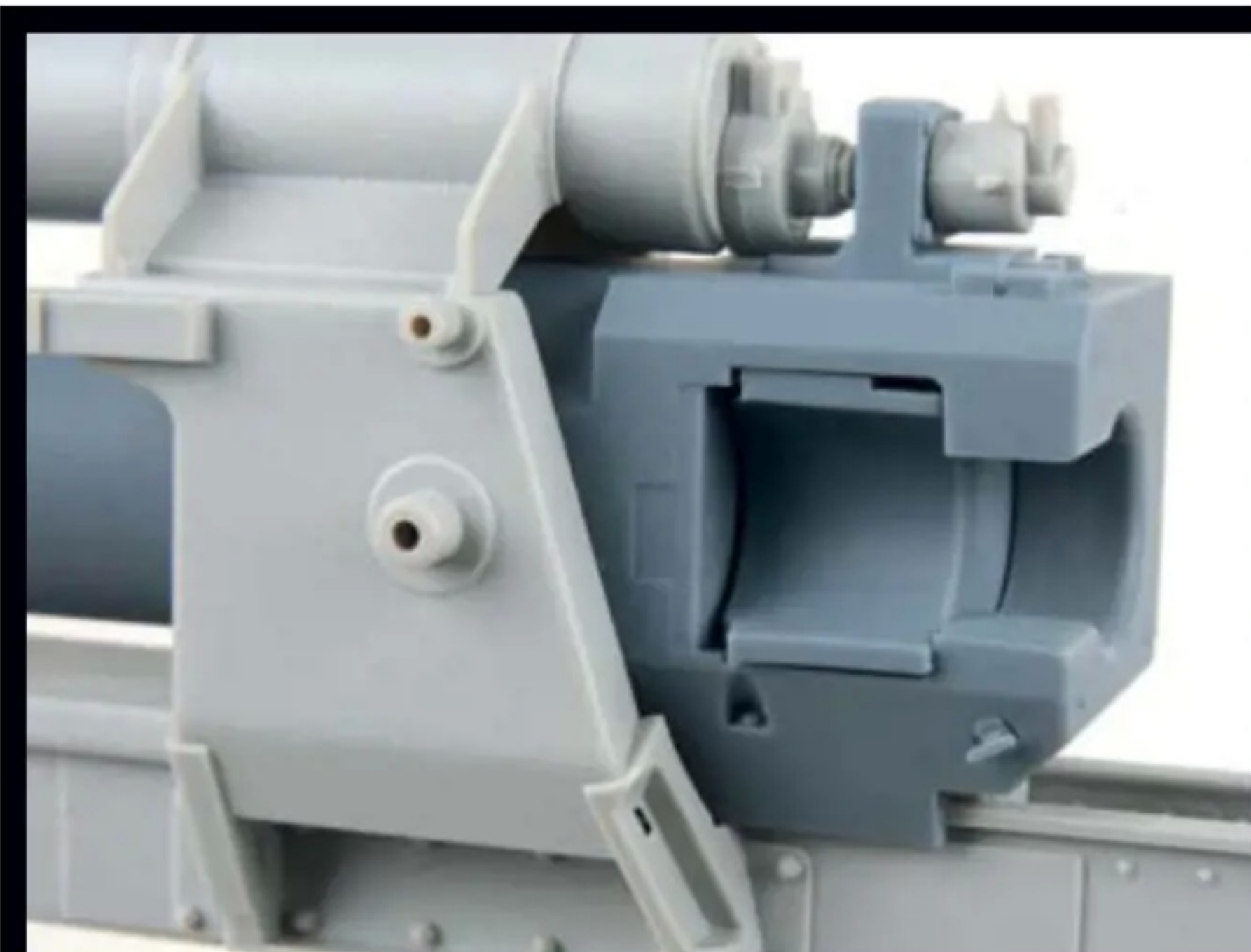
Panther Ausf.G Hull Correction Set

Trumpeters Panther G kits have the common error of the front hull roof section being flush with the rest of the roof. It's not an easy correction as you have to recreate all the fittings sitting on top. However with this 3D printed set you can erase all the fittings, laminate a new roof section from 0.5mm plastic card on top and then replace all the periscope, ventilator and gun crutch details.

Panther Ausf.G Hull Hatch Springs

This 3D printed set of corrected springs for the front hull hatches is based on the manufacture's drawings. They correct the errors and simplifications of the kit versions for the best finished appearance.

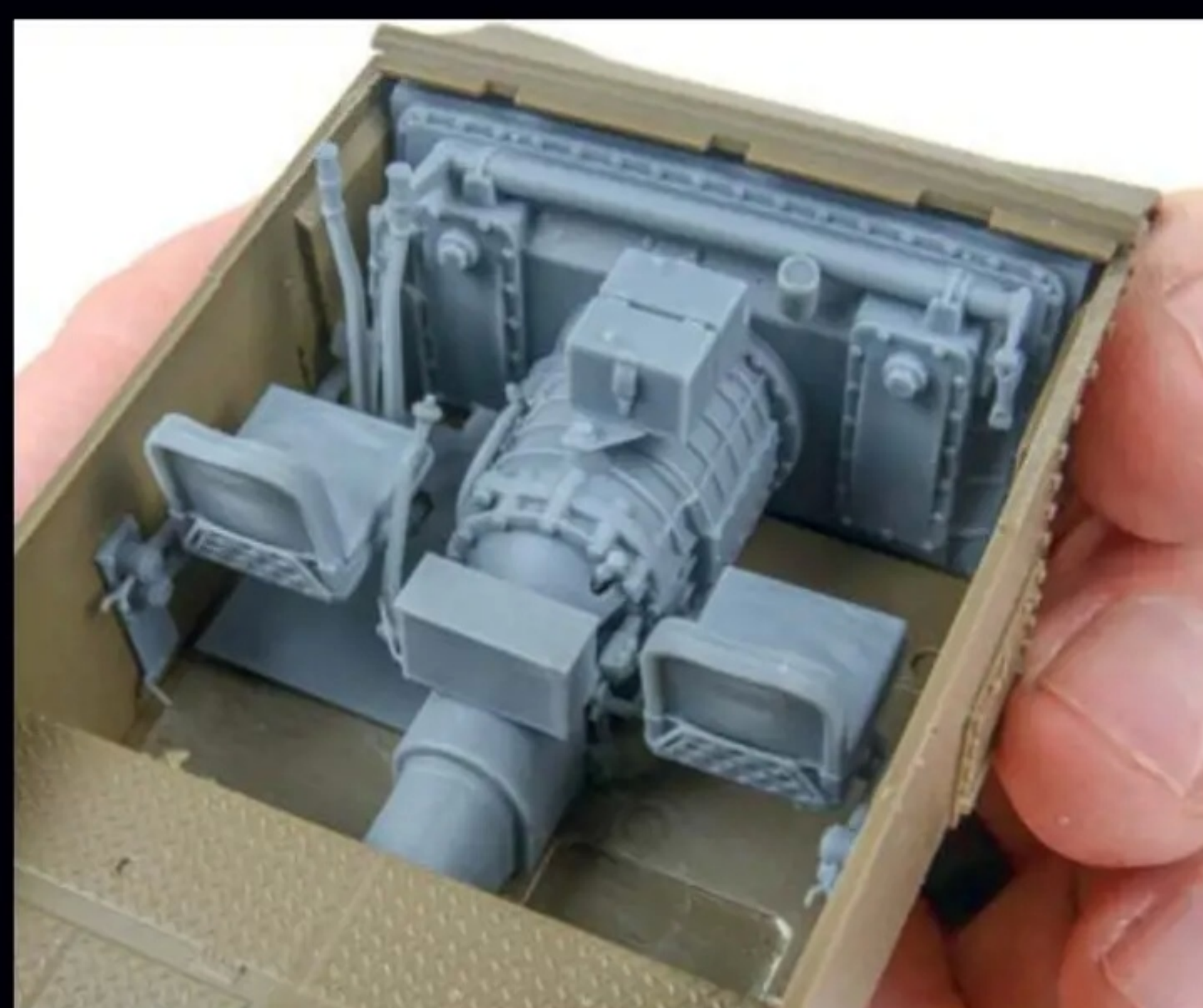
HUMMEL LATE VERSION



1:16 Hummel Corrected Breech and Barrel

Our corrected breech fixes all the filling and sanding needed on the kit part and will work with the kit barrel. The barrel is realistically hollow with the correct rifling and reduces the considerable weight of the kit barrel by about 100 grams

TAMIYA 1:35 M10/ACHILLES



1:35 M10/Achilles Driver's compartment for the Tamiya kits

We have scaled down our popular 1:16 M10 driver's compartment to fit the Tamiya kits which are supplied without any detail in the front of the hull. We have also combined some parts to make assembly simpler. This 3D printed set provides the main components to add the missing parts. The set includes the gearbox, final drive housing, Driver's floor, driveshaft tunnel, instrument panel and crew seats.



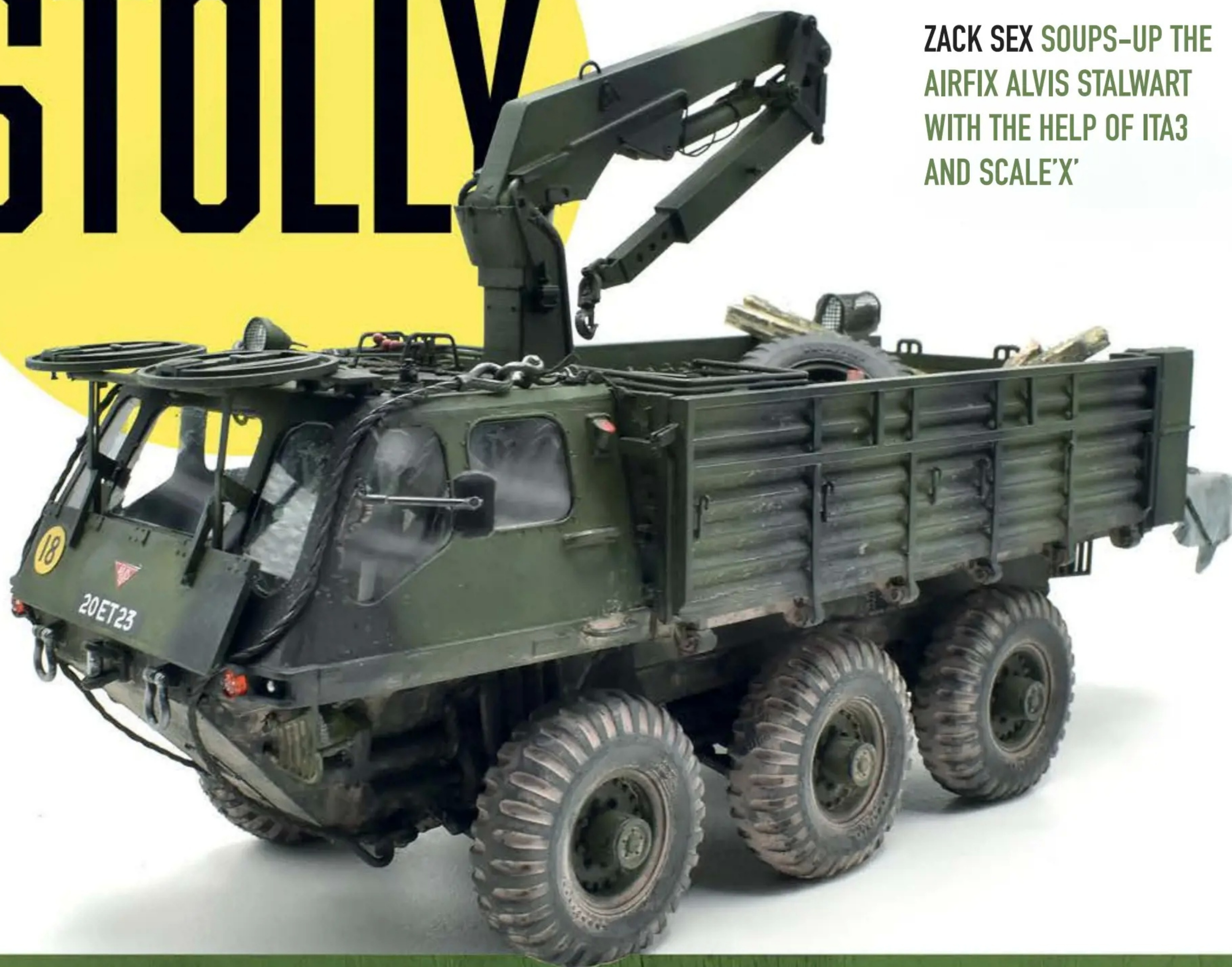
1:16 15cm Hummel Ammunition and wicker transport tubes

Single piece shells remove the joint lines in the two-part undersized kit ammunition. To compliment these we have also modelled the wicker transport tubes for the shells.

ALVIS HAS LEFT THE BUILDING...

STOLLY

**ZACK SEX SOUPS-UP THE
AIRFIX ALVIS STALWART
WITH THE HELP OF ITA3
AND SCALE'X'**



Having achieved major sales success with the FV 603 Saracen APC and FV 601 Saladin armoured car, Alvis Car and Engineering Company set about a private venture to create off-road vehicle with a 5-ton load capacity and high mobility. The first iteration of this concept or idea came with the combination of the Six wheeled Saracen chassis and the cab of their Salamander airfield crash tender. This, in turn, gave way to the Alvis Camion or PV1 (Project Vehicle 1) it was envisaged as having civilian and military applications. The Camion was a rather old-fashioned looking lorry but had very good cross-country handling. The military wanted to know if it could float and be made amphibious, and Alvis went back to the drawing board and produced the PV 2. The PV 2 was a major makeover and reworking of the PV 1 to create the very futuristic looking Alvis Stalwart. The PV 2 featured full-length side boards, a pair of forward opening top hatches above the

angular cab. In the mid-1960s, it must have really looked like the future of military supply vehicles. Stalwart was tested with both Sweden and Britain. Early in its development, Alvis mounted an Atlas crane in the back of one variant, which would go on to become the basis of the MK 2 limber and fitter variants. In service, the standard transport Stalwart became the FV622, while the crane variant became the FV623. In many ways, the Stalwart design and layout were very simple, utilising an all-welded waterproof hull, with the engine positioned below the load deck. The load deck consists of a series of floor plating sections allowing for easy maintenance, while the drop-down aluminium side and rear panels make for ease of loading fuel cans and ammunition stores. The concept or perceived need for an amphibious fuel and ammunition supply vehicle for British forces in Germany may well have been sparked by Soviet developments in this area in the 1950s and 60s.



The Red Army committed itself to the development and production of a series of amphibious platforms during this era, including the K 61s, BTR 60s, PT 76, BTR 50s, while Red Army tanks such as the T55 and later T62 models all came with snorkel systems which when set up allowed Soviet forces to cross medium sized rivers. Thus, it must have been understood that in the event of a major confrontation Soviet and Warsaw pact envisaged that bridges across western Europe could be either blown up by retreating Western forces or destroyed by the Red Air force and before need to be bypassed by Soviet amphibious units. Such a situation would leave NATO and / or British forces tank and artillery cut off and lacking fuel, ammunition, and other supplies. The initial answer was obviously a vehicle like the Stalwart until later large bridge layers on Chieftain and Challenger tank chassis or specially built pontoon bridges units could do a better job fording river obstacles. A very good example of how such battles over waterways would play out was the Yom Kippur war of 1973, which saw Egyptian forces cross the Suez Canal in a surprise attack, with the Soviet amphibious vehicles mentioned above, while the Israelis counter struck two weeks later re-crossing the canal on a giant rolling pontoon dragged across the Sinai desert.

Thankfully, BAOR forces and the rest of NATO never had to find out if they could resist and defeat an all-out Warsaw pact invasion of western Europe, mind you with more recent Russian behaviour in Ukraine they may not be out of the woods yet. As a response to the almost strategic need for such a vehicle, the MOD procured over 1100 Stalwart of all marks between 1963 and 1971. Small numbers were purchased by Germany, Austria, and Sweden, with Sweden passing five on to Sri Lanka. With its vectored thrust system, the Stolly easily crossed most river obstacles, while its all-wheel drive system and multiple gear box made it very effective on off-road and muddy conditions. However, the very system that allowed the Stalwart could cause "wind ups" in the transmission and lead to rapid wear and tear in the tracta joints, when used on tarmac or concrete road surfaces. The transmission could be easily damaged. To keep transmission wind up to a minimum, Stalwarts were driven between railway sleepers or driven up

against kerb stones where possible when parking. These were just some of the issues with the complex drive train system for such a unique vehicle of its time, the Stalwart for example was designed to be driven fully loaded, being driven unloaded caused increased wear to its drivelines to the wheels, all in all the Stolly was a complex vehicle which required a lot of maintenance and extra cost to keep fully functioning as intended. Over the years, there were a number of Stalwart model releases in the form of Matchbox diecast 1/76 version, an early Airfix 1/32 variant and more recently ACE kit 1/76 kit, and of course a number of Resin 1/35 and 1/24 Accurate armour and KFS respectively. All this said a plastic 1/35 scale Stalwart was long overdue, and you're like me and fancy one with a crane (an MK.2) you're now spoilt for choice...like double decker buses, you wait for an age and then along comes two or three. The Stalwart MK 2 complete with crane is just such an example, Airfix released the standard Stalwart and Inside The Armour, or ITA3 brought out an 3D printed update set complete with Atlas crane, as did Scorpion Miniature Models and later this year Airfix are due to release their own Stalwart Mk.2 with crane. It never rains, but it pours, I hear you say.

ITA3 update and conversion sets for Airfix Stalwart

Upon purchasing an Airfix Stalwart kit, I examined in some detail and for 47€ I was less than impressed with much of the outer details, including the front light guards, rear exhaust mesh (both of which are moulded in solid green and transparent plastic respectively. The side panels of the truck body also have reinforcing ribs moulded solid, whereas they should have space behind them if that makes sense. On the positive side, the lower chassis goes together well, and the cab detail is reasonable. However, the windows of which come with moulded on widow wipers. In this day and age, this lack of detail for a kit of middle range prices is not great value in my book, but enough moaning let's get building....



As mentioned, Chris Meddings of Inside the Armour ITA3 produced a series of update and conversion sets for the Airfix Stalwart kit that will take the kit to a new level. The first set you will require if updating the Stalwart would be A335089 Stalwart exterior set, this includes the much needed guards, a set of early and late hatches of superior quality that those offered in the kit, some replacement tools and radio fittings. The interior of the Stalwart cab also receives attention in the form of set ITA335090, which contains replacement radios, clansman radio, and the all-important boiling vessel amongst others. Set ITA 335095 consists of replacement windows, individual wipers, and masks for said windows. Set ITA 335091 offers the modeller a finessed roof

section with correct mesh replacing the solid items on the kit roof. A number of these items are available in sets or as separate items, so you can decide your correction priorities. Next, we come items such as Set ITA 335097, which offers an Atlas crane to create a REME variant along set ITA335098 105mm ammo load, these two sets really set off the rear of the vehicle in REME mode. The last items to set off your Stalwart if so, which is a pair of figures representing a pair of British soldiers from the Cold War era, typical of Stalwart operators in the BOAR. These are modelled by Ukrainian master figure builder Sergiy Alekhno, which the box says works from Free Ukraine.

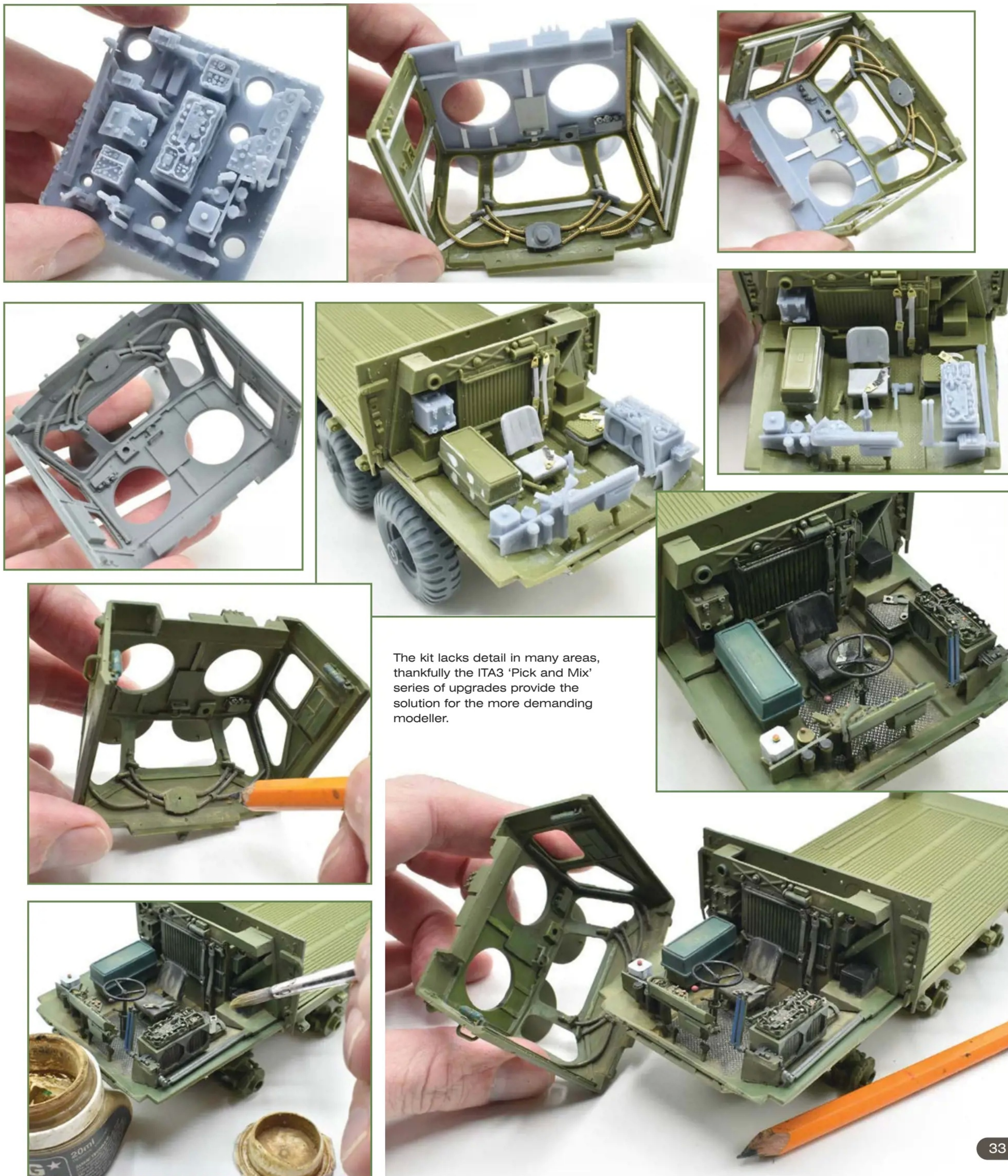


Figure ITAF001 is crouched with his arms on his knees while his pal ITAF002 was standing and pointing to his left. All of these 3D printed items are of very high quality and are highly recommended. I have set a number of them out in photos for modellers to get an idea of the potential for these really top drawer upgrades and conversions.

To top all of these ITA3 updates off, I used Ukrainian company ScaleX's sagged wheels as they were at hand. In terms of assembly, some care must be taken with a number of these items as they are correct to scale and delicate, but a few evenings careful cutting and attaching these updates transformed the Stolly and suddenly the kit was a very different proposition. Having assembled the Stalwart with the full range of ITA updates and

beautiful ScaleX wheels, I now started adding various additions in the form of thin ribs missing on the walls of the Airfix cab interior, along with tow cables tow German WW2 tow shackles and speaker wires.

The rear stowage area got the addition of wooden beams, foil tarpaulins, and a Centurion ARV Road wheel. This packing out of the Stalwart gave me an idea of which way the background diorama or stage set would go, but first, it was time for a BOAR spray job.

The ITA3 Atlas crane adds another dimension and scope to go with a full-on load or repair scene.



The Stalwart's six exposed wheels are a major feature, ScaleX to the rescue with their beautifully detailed and weighted wheels.





Post-War British figures are pretty scarce so these new releases are very welcome.



The ITA3 masks just make life easier! Fit is great.



Spraying the Stolly

Having completed most construction and painted and detailed the cab interior, it was now time to paint the outer Stolly. I masked the ITA3 windows with the masks provided in the ITA3 update kit. These masks have a type of rubbery feel about them and are very user-friendly. Having masked all the cab windows and stuffed tissue paper into the two top access portals, I sprayed the Stolly with a primer coat of dark grey car spray primer purchased in a Polish pound shop.



This grey primer was allowed set for a day and over which I then applied an overall coat of Tamiya NATO green XF-47 with waves of Tamiya Black X-1 and Tamiya Black Rubber XF-85 mix, creating the modern scheme applied to Stalwart in the later stages of their service.

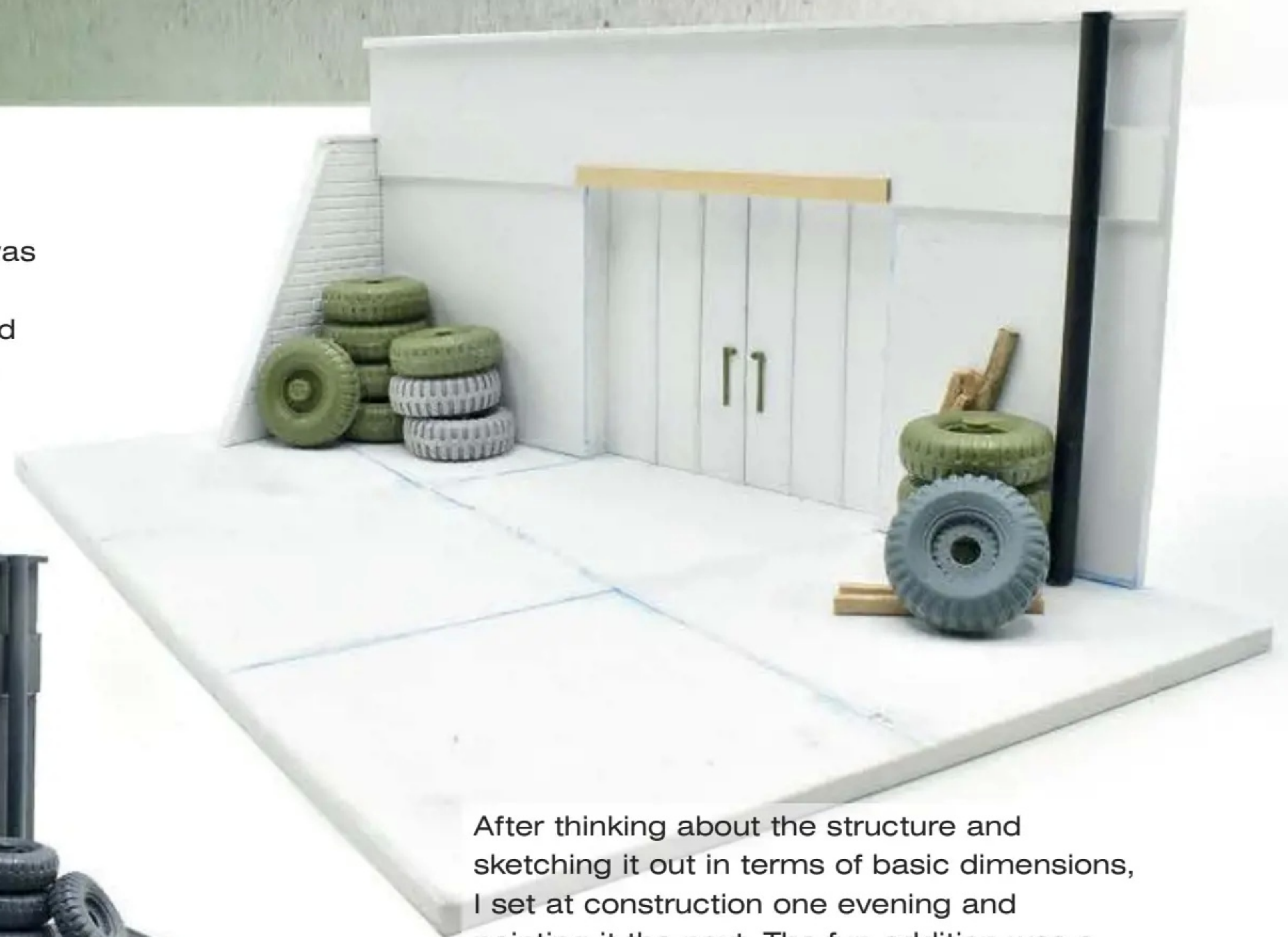
I gotta say that the simple Black and green camo scheme is rather fetching and so it was with a little interpretation that I began to weather the exterior sections and lower chassis with a mix of Wilder pigments and a series of oil paint washes. The cargo bay of the Stolly got special treatment with the wooden Halloween rocket handles being picked and scrapped back with a craft knife and some subtle pigment and oil paint washes applied in sparing amounts.



The Centurion wheel on the rear door, which I fixed in an open down position, was placed on a Mig Productions pallet, which fitted in nicely with the busy little composition. The two ITA3 figures injected that vital human element into the scene, I added a Sterling machine gun that Paul Kunkels generously donated to the standing figure along with a paper strap.



The last act in the Stolly production was producing a suitable set for the Stalwart, to this end I looked at some dioramas on the Internet, but in many ways I was recreating garages, yards and training centres I had worked in years ago. I chose to build a straightforward garage or storage shed front out of foam board I got from Louis King in Mark's Models.

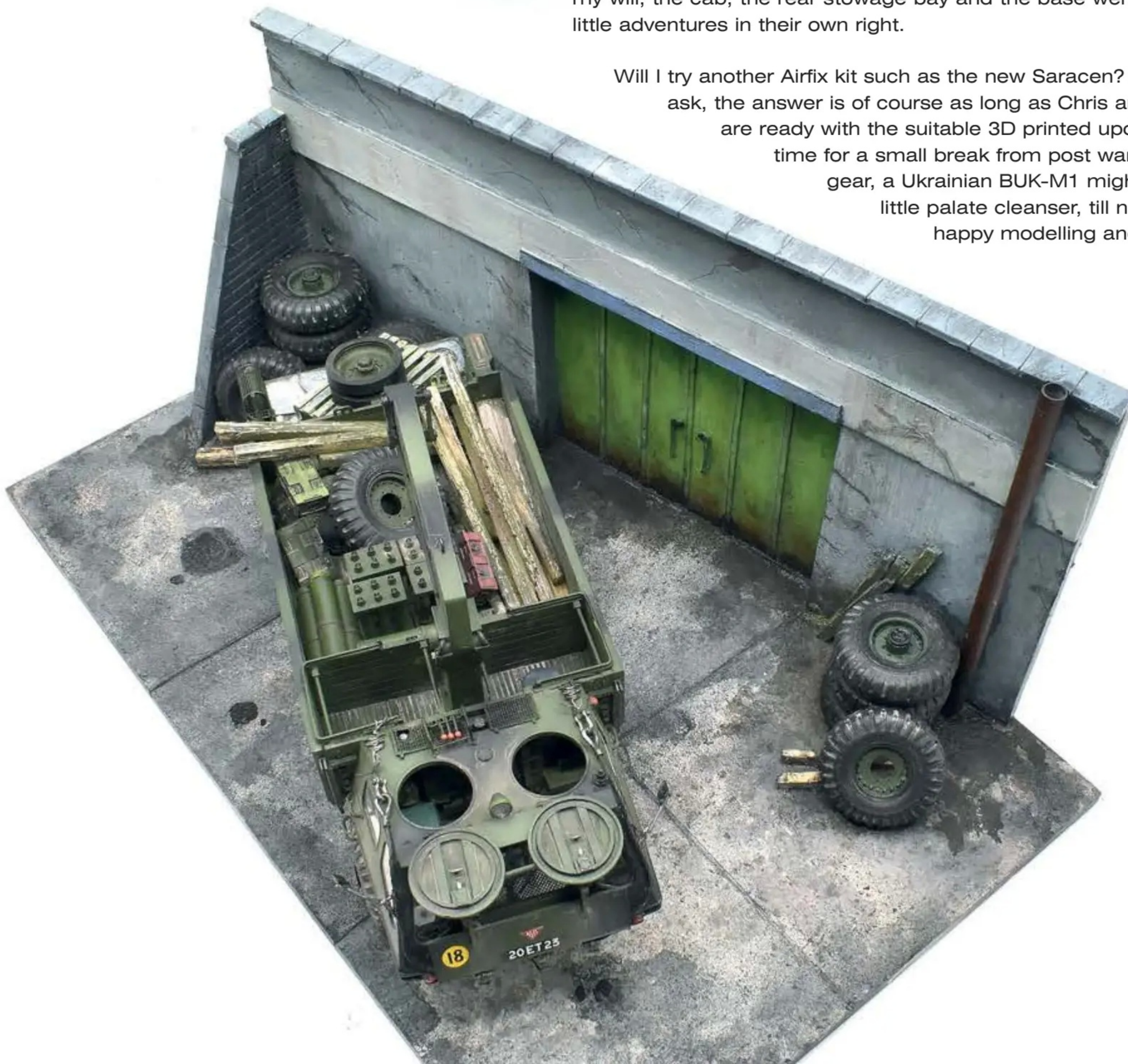


After thinking about the structure and sketching it out in terms of basic dimensions, I set at construction one evening and painting it the next. The fun addition was a bunch of spare Airfix Stalwart wheels, which look pretty worn to start off with, these were collected in two lazy piles with some Halloween rocket handles carefully placed by tired squaddies on a Friday evening. The concrete base consisted of textured art paper cut and glued into position and then splattered with all manner of paint and pigments to get a suitably filthy finish.

Conclusion

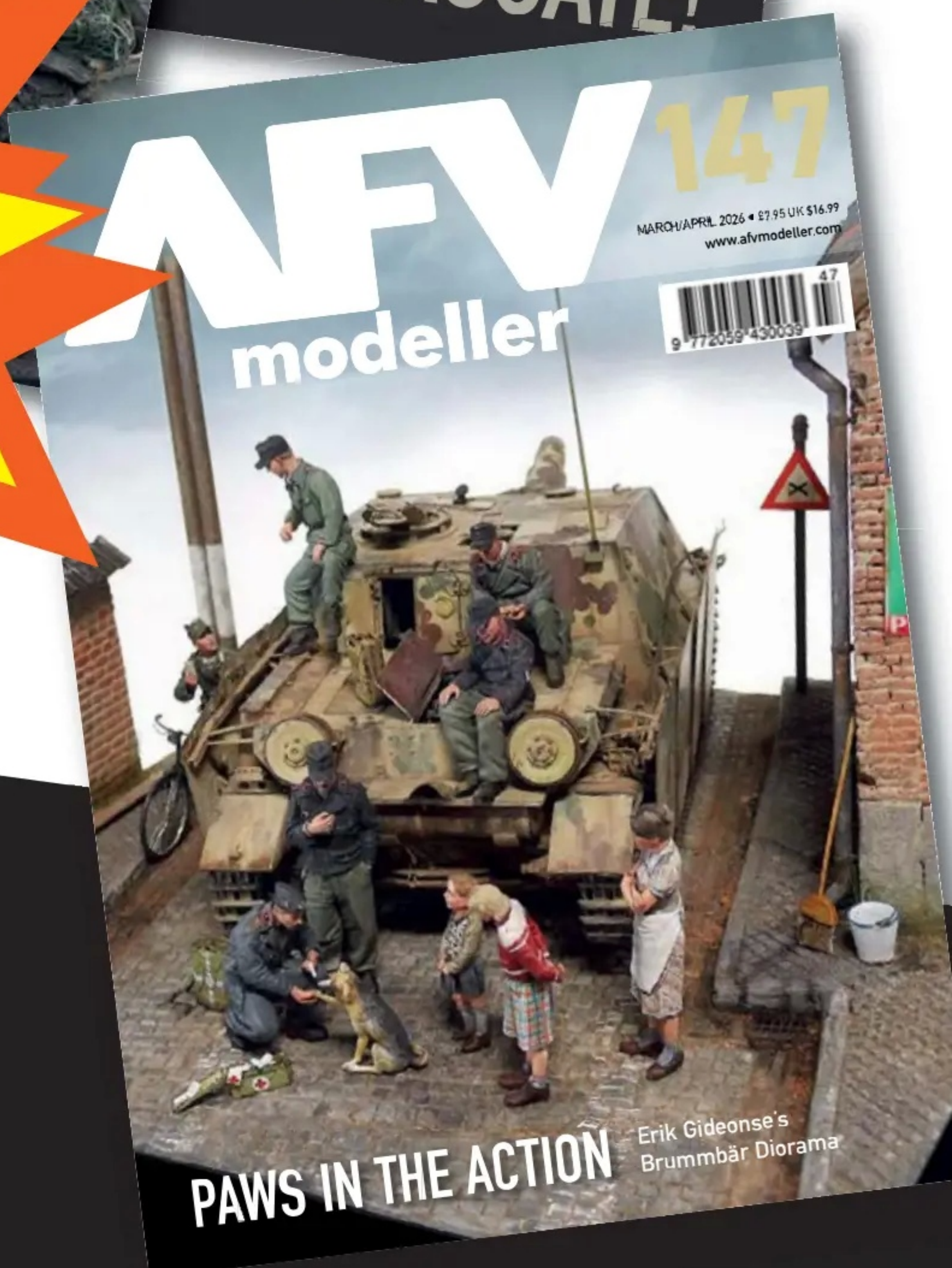
Having been somewhat disappointed by Airfix's Stalwart, which I would compare to a SKIF T55 or if I was being kind a SKIF MTLB, I have to say the ScaleX wheels and Inside The Armour (ITA3) transformed the kit, and I really enjoyed bending this particular kit to my will, the cab, the rear stowage bay and the base were rewarding little adventures in their own right.

Will I try another Airfix kit such as the new Saracen? I hear you ask, the answer is of course as long as Chris and Sergey are ready with the suitable 3D printed updates, now time for a small break from post war British army gear, a Ukrainian BUK-M1 might be a nice little palate cleanser, till next time happy modelling and stay safe.









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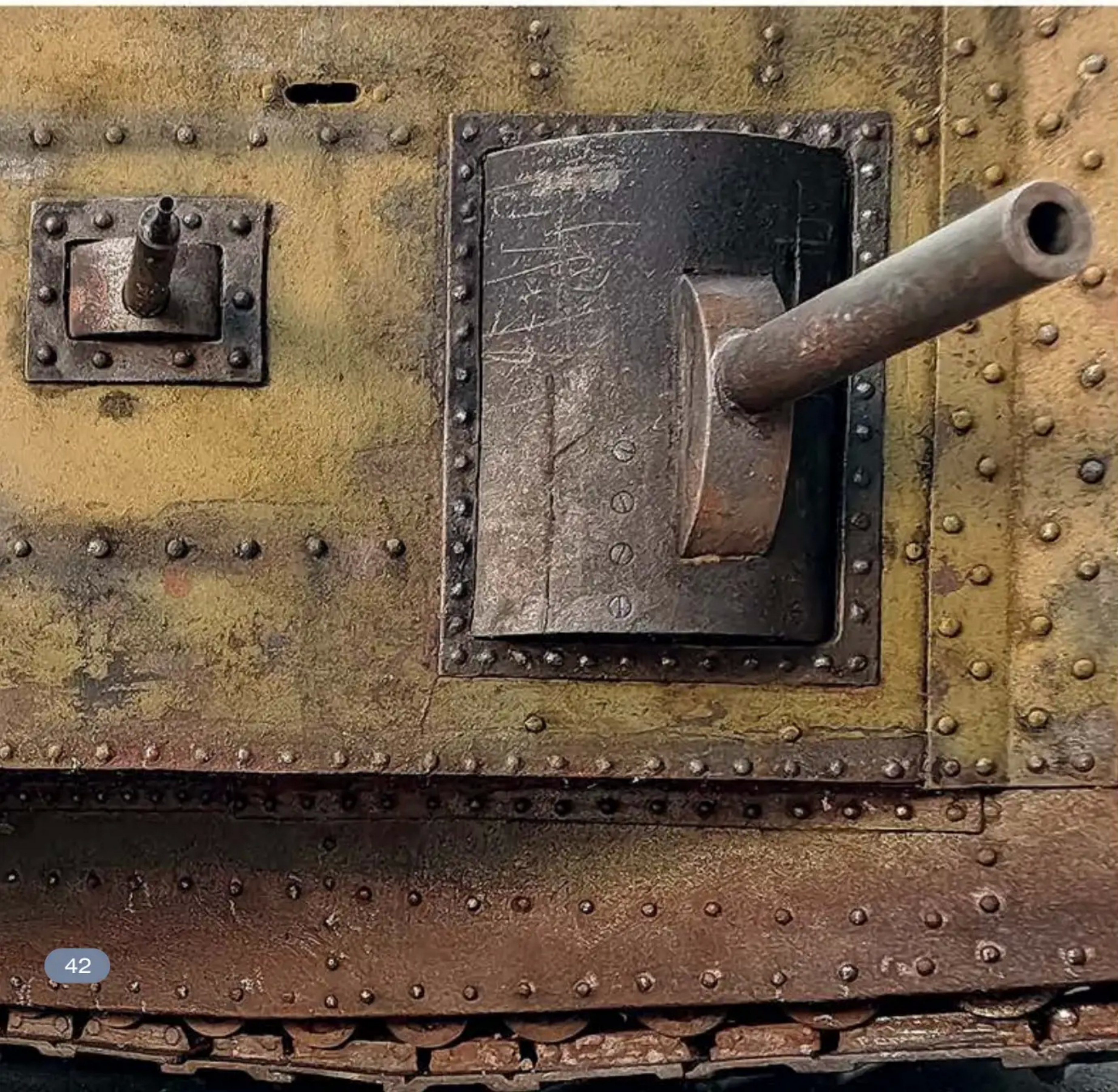
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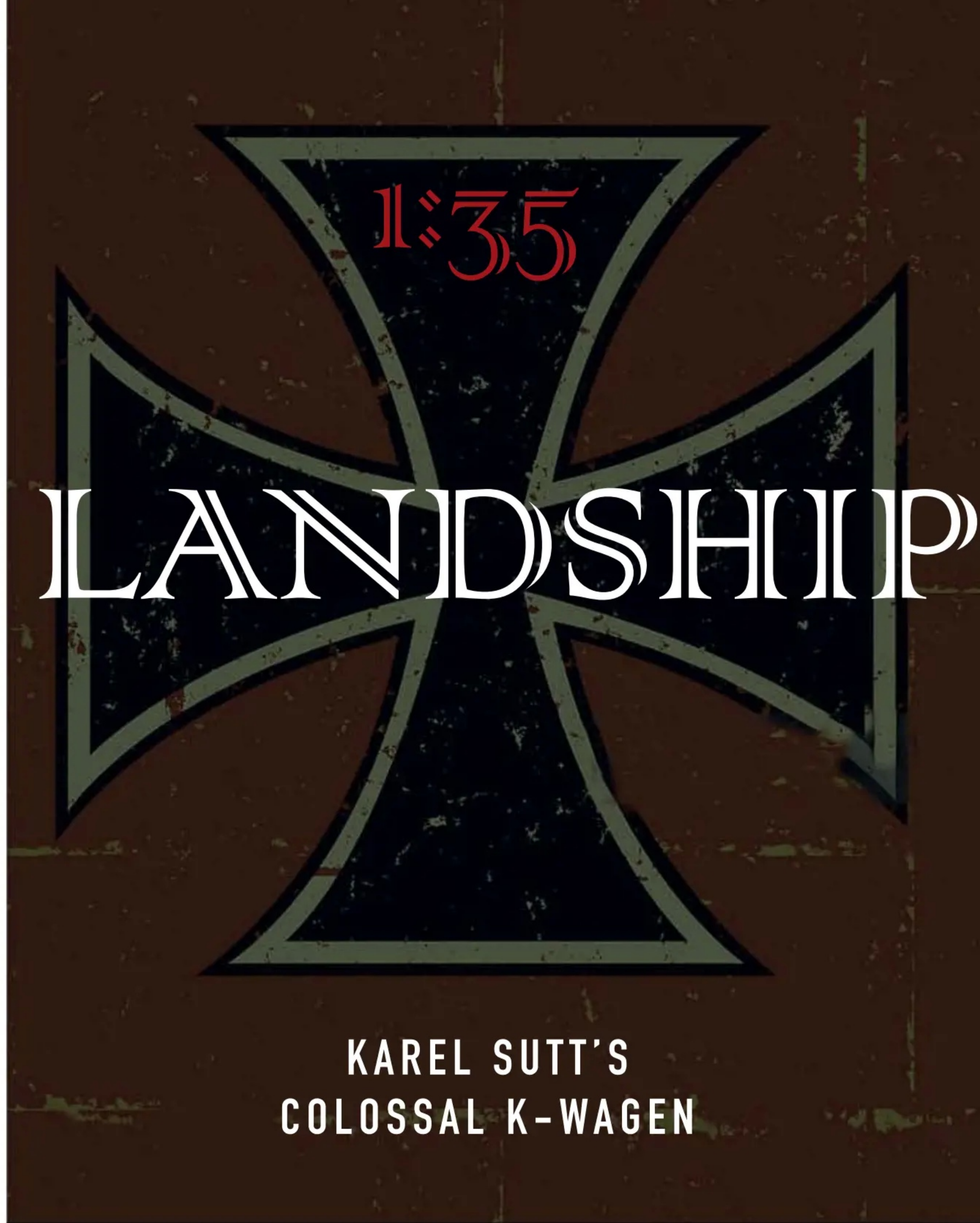
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Moson Model Show (Hungary) is one of the greatest annual events for our community and occasion to meet huge quantum of sellers face to face. Inside a large hall I was walking among dozens of sellers' stands with hundreds models when I suddenly stopped and stared like a pillar of salt at the Kora Model corner. Finally I had chance to see the biggest, 120 tons weighting tank of WWI in 1/35 scale. In fact only a box art and individual parts in not at all sturdy cardbox, nevertheless ... voila! this one had to be mine. Even a slightly exorbitant price, 133 pounds didn't put me off. By the way the answer to my question how many kits have already been sold was about 50.

Briefly to the history

In June 1917 the German War Ministry ordered the development of a new superheavy tank intended to be used break-through the „frozen“ western front. Design work was carried out by Joseph Vollmer and captain Weger. The War Ministry ordered ten examples, each weighed 165 tons but later reduced to a more

practicable 120 tons. The huge size and mass of the K-wagen for transport close at the front line was decided to realize by rail, splitting the whole into the sections and then to be reassembled. Two incomplete prototypes were built by the end of the war and then scrapped.

The K-wagen was to be armed with four 77mm fortress guns with 800 rounds and seven MG08 machine guns with 21000 rounds. Standard operating crew consisted 27 men. I improved this armament configuration by replacing the front machine gun with a more potential field gun to increase K-wagen effectiveness in a possible face to face tanks battle

Technical data:

- 43 feet long, 20 feet wide and 10 feet tall
- Engine 2xV6 Daimler 650 HP
- Hull armour 30mm



Construction

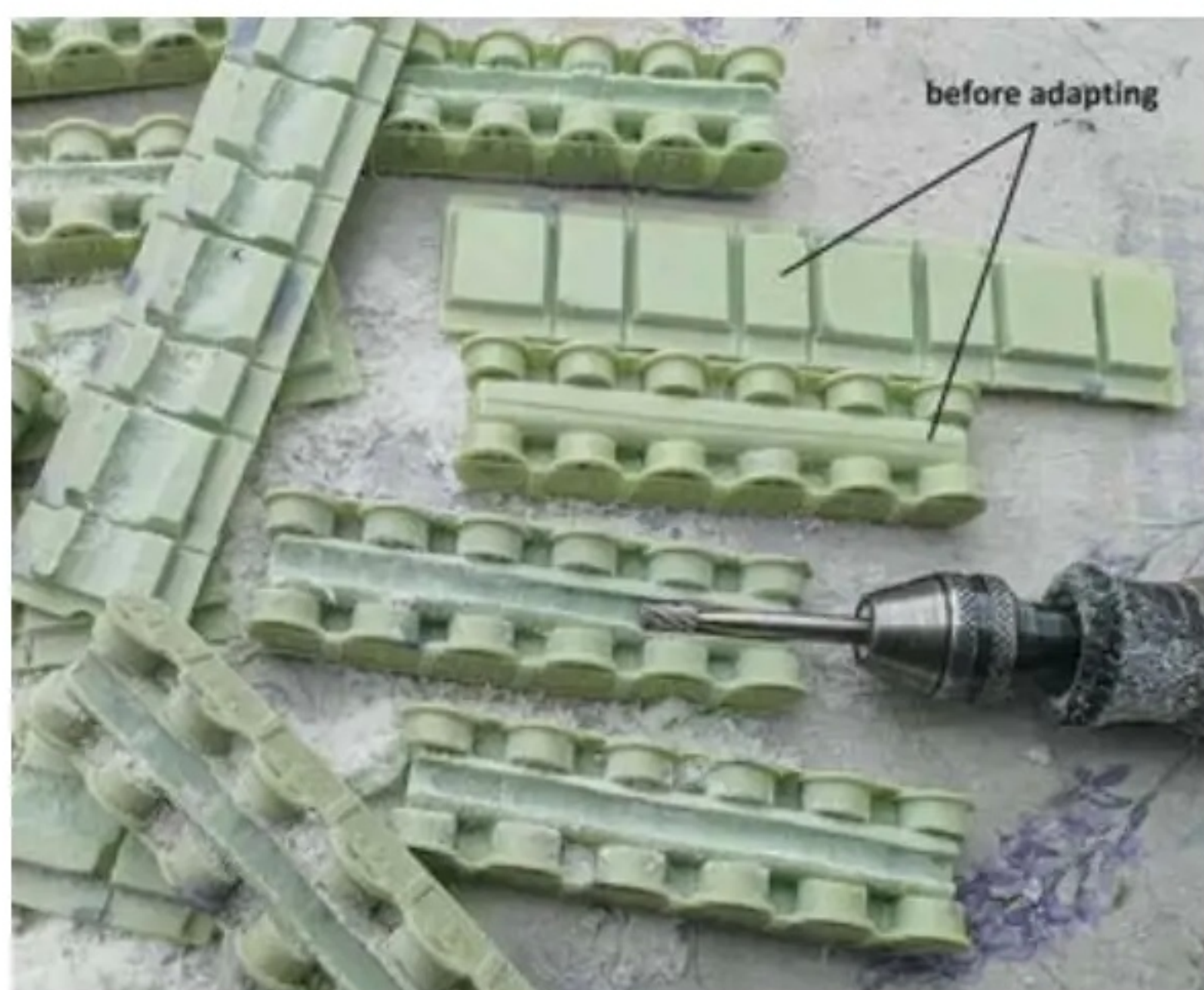
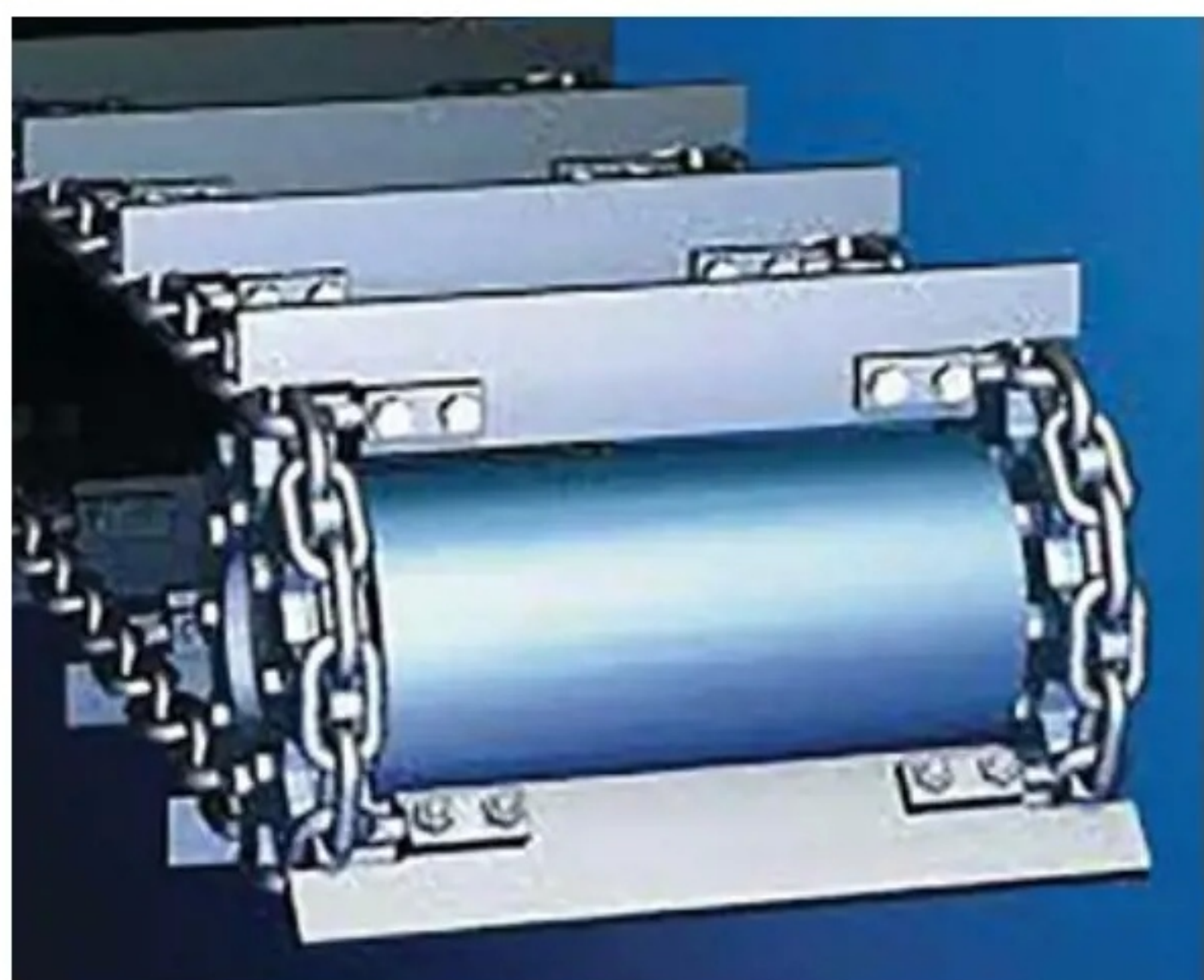
There is only one photo of two K-wagen pieces being assembled in the factory and that was taken from above and not all the parts are visible (during construction), additionally from the first sight very simple Kora resin kit with many parts of poor quality forced me to fully deploy my inventiveness and concentration during the build

Casting collars, sags, sink marks and holes I had to repair with a file, scribe, drill and Tamiya putty. Even the manufacturer Kora did not know an answer to my question about a purpose of some "parts or what the hell are" on the underside of the hull so I sanded all down and replaced them with more meaningful rows of rivets. Thirty percent of the rivets I found in scrap condition, so it was necessary to replace them with new ones pushed out of lead sheet with reverse side of 0,8mm drill bit. I doubled the number of observation peepholes on the hull and deepened all, including those on the little round turret and sponsons. Side-mounted MG sponsons including the front one, I reinforced with a riveted frame.

I fixed up ventilation vents removing the ugly depicted meshes. The cut holes I covered with real metal ones from inner side. Meshes were attaching with super glue and Tamiya putty as well. Double securing for later unwanted eventual release when wouldn't be chance to get inside. Attention then turned to the tracks. First I cut off resin leftovers with JLC saw. Note the damaged track link from the manufacturer. Then I slimmed down the width of the too wide block on each link of the track to fit between the guide wheels.

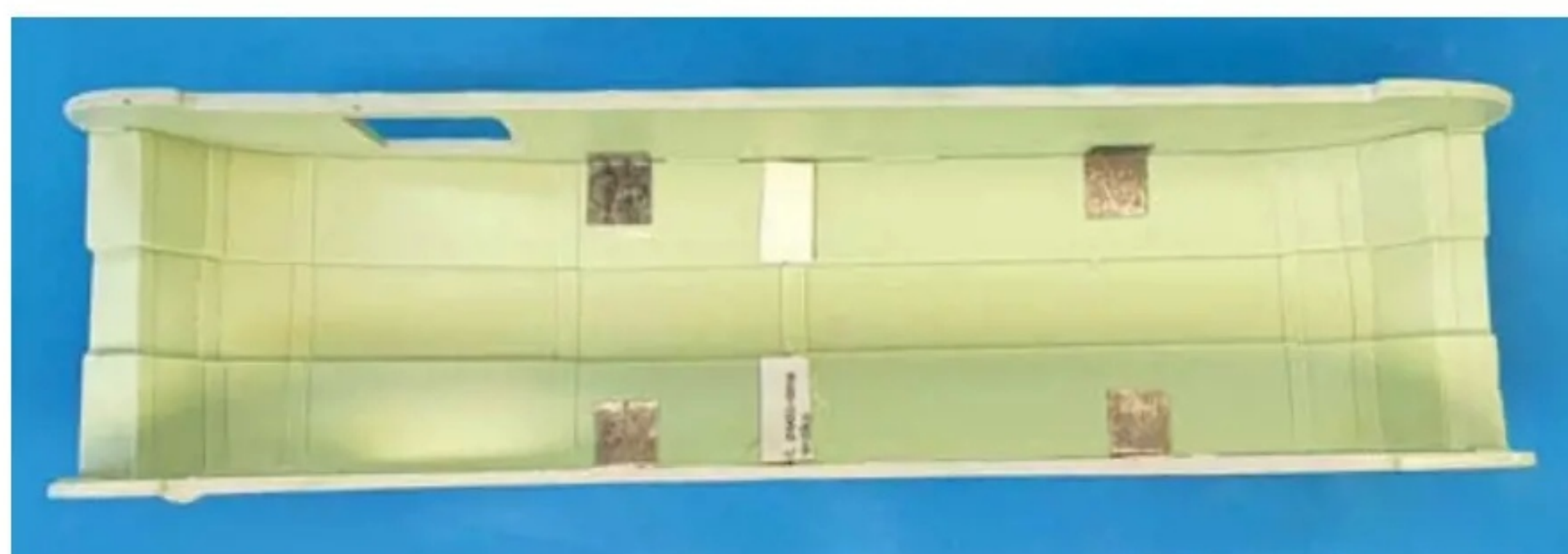
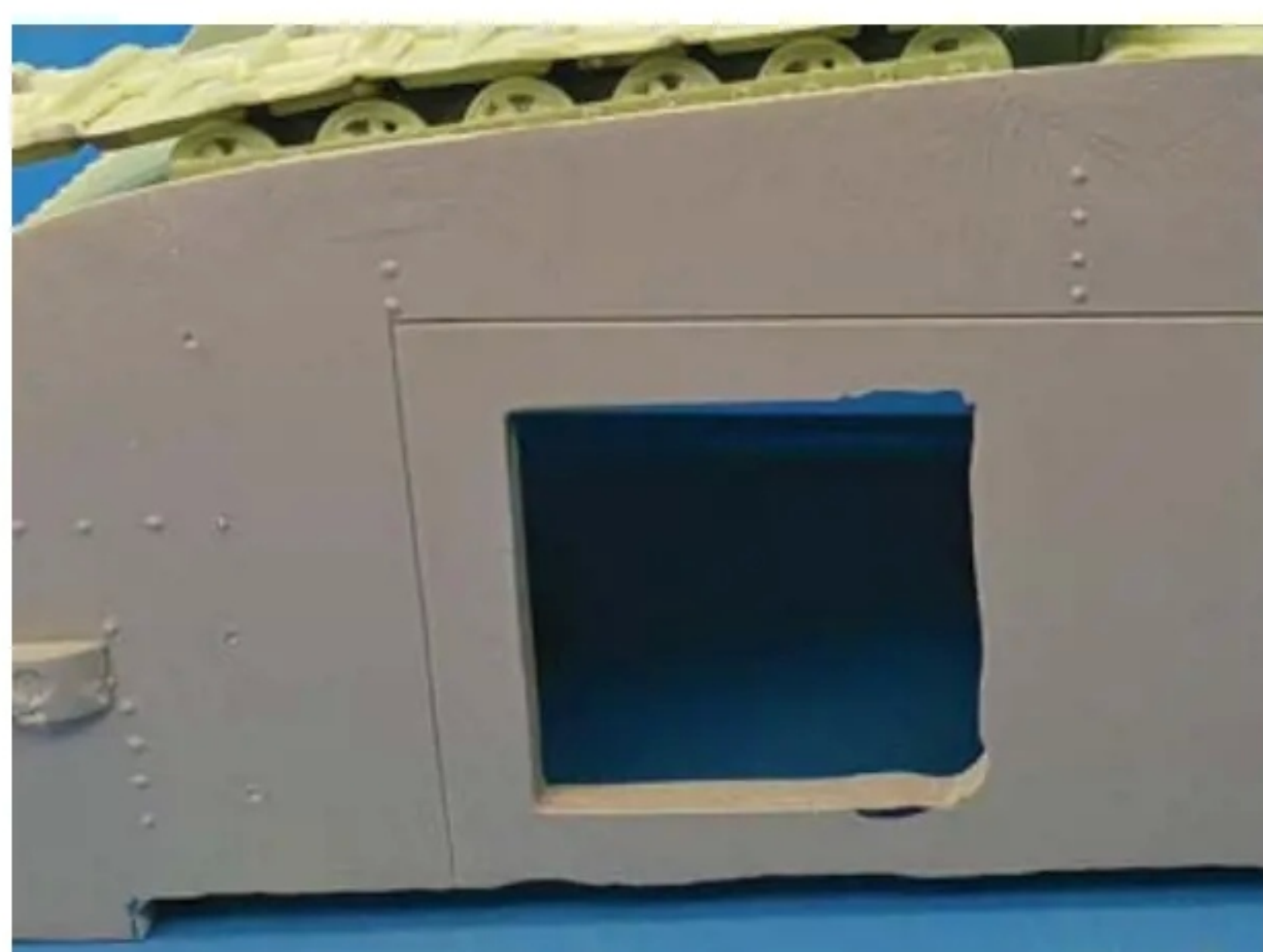
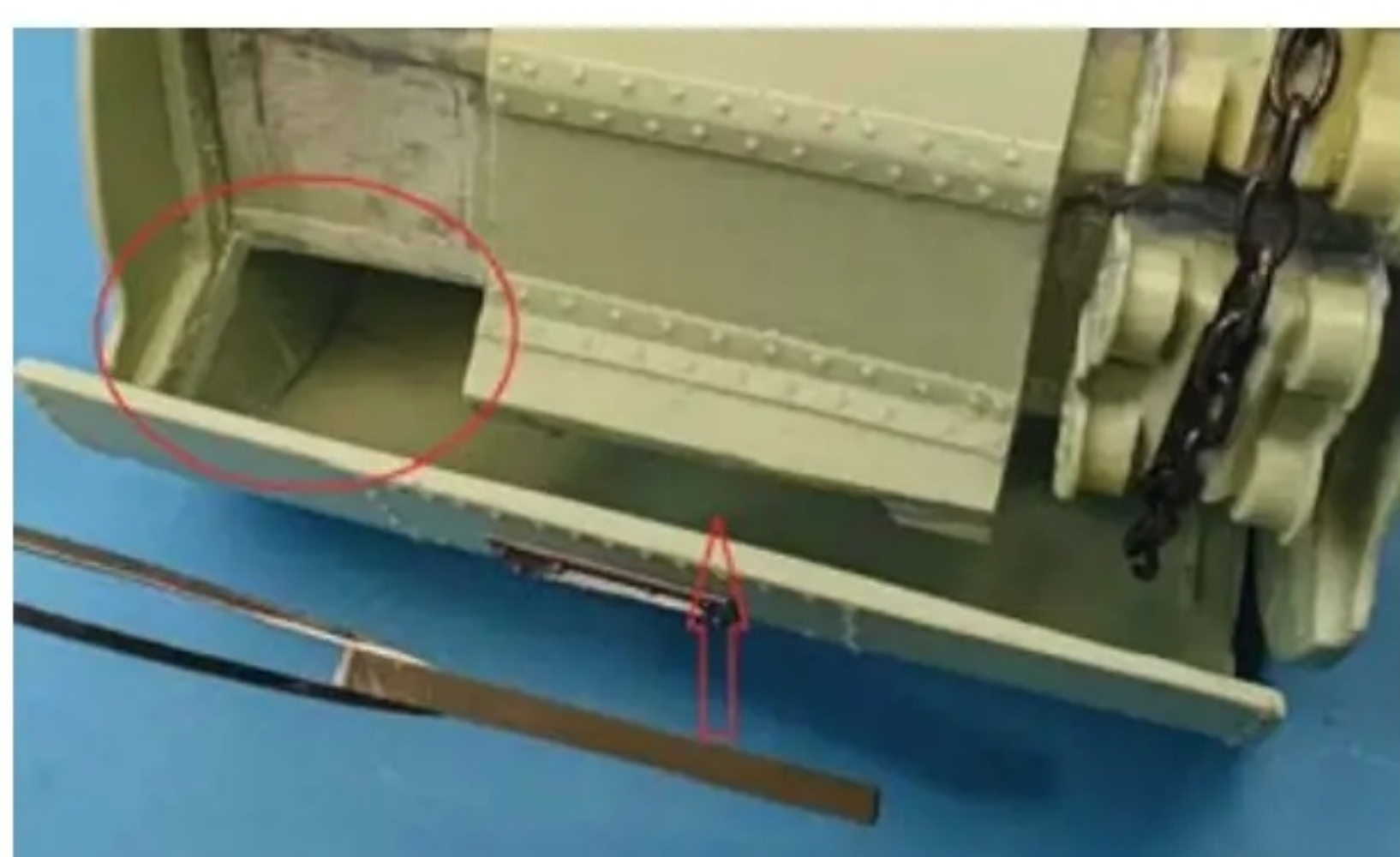
Turning to the most mysterious problem in which Kora skipped a major technical detail. No idler and sprocket in the box just the strange looking track links raised a question how was track movement achieved? To glue the tracks at the rollers via the track's block would be too simple and would make no sense. So first of all I had contacted Kora Models and received the response '.... towable track and towable wheels'. Confusing answer especially as to the wheels forced me to send my second email to most erudite institution DPM (Deutsches Panzermuseum Munster). Alas, they wrote '...we don't know...'



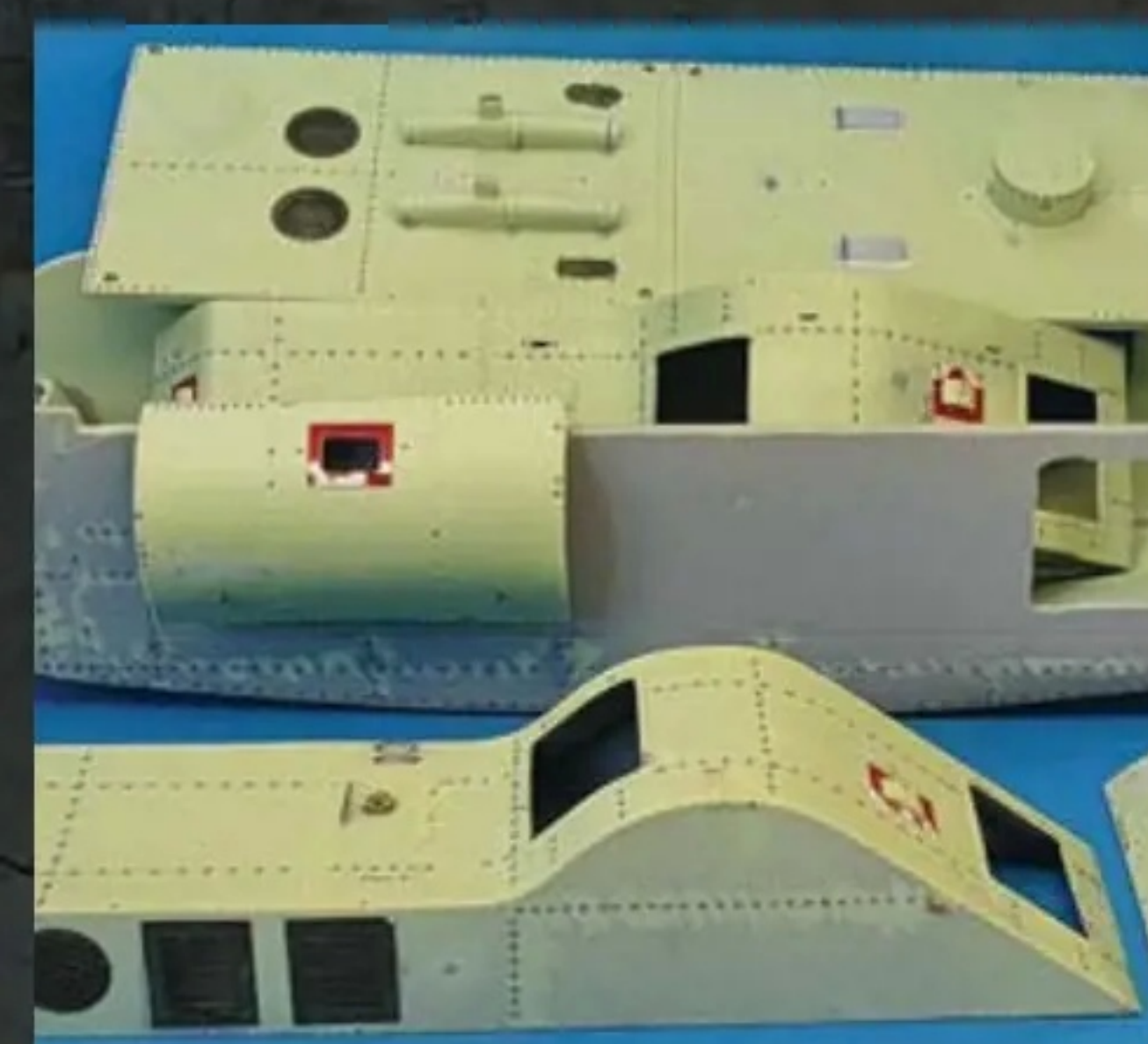
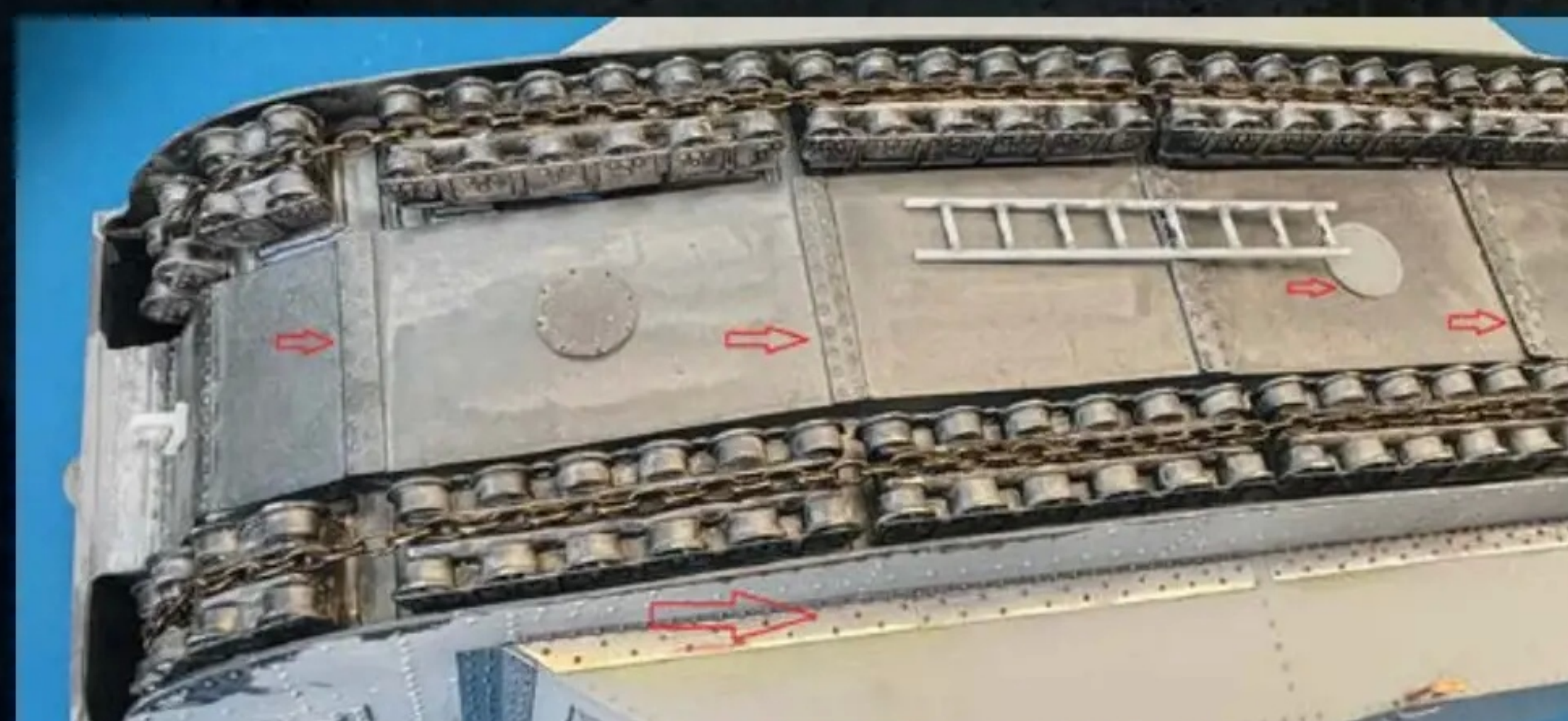
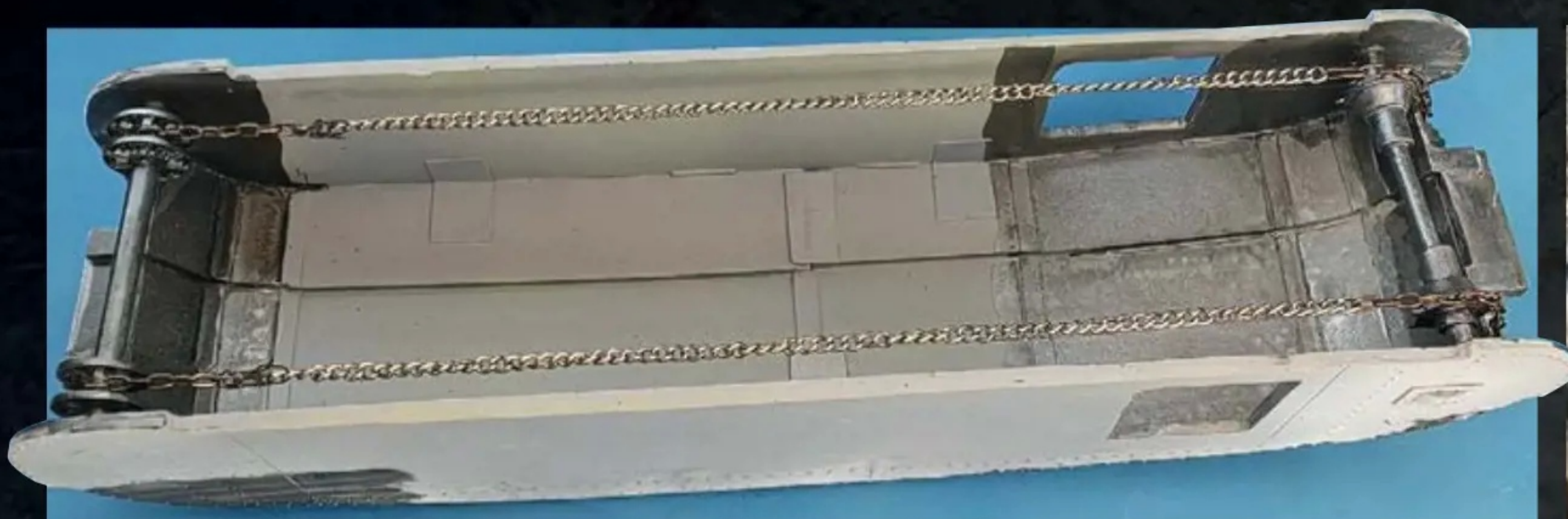


I continued in my personal search and my eventual opinion is, the propulsion was based on the same principle as a slat chain conveyor, similar to those removing slag from under coal-fired boilers in power plants, see above – just for illustration. It means at the slat chain was attached each track link and the complete driven by a sprocket. Rotating guiding wheels were not towable as per as Kora opinion but firmly attached at the hull. Maybe someone will find a better explanation. Well, I focused my attention only on the visible part of the track, where I milled a

longitudinal groove for the chain into the each track link's block and marked the heads of the fixing spigot pins on the block sides. The same groove was milled into the block between the guide wheels. The way for towed chain was completed. Following step led at the hull completion, for now without the top plate but taking into account its length with inserted reinforcement elements. Interestingly the hull is so large that is can swallow a Panzer II. I had to modify/enlarge the entrance holes for the tracks and fill the gap between the hull's lower and upper non-touching



The holes in the hull sides into which the gun sponsons go during rotation had to be enlarged for proper sponson function. Shafts with idlers and sprockets were scratchbuilt of leftovers from already built kits. Then were stretched the chains on and on the visible for eyes areas around the sprocket and idler devices applied a steel colour.



On the front and back hull's faces I attached towing hooks as one of the prominent details. I continued in detailing adding to the lower part of the hull second hatch under the engines compartment and then reinforcing profiles between the floor plates. For better access at the roof I added ladder and taking into account the height of the raised leg a stepping footrest was installed under armoured entrance door. I mean, the two steps above the one I added are really high for a raised leg. I revised rivets on all surfaces, replaced the damaged ones and added a large number of others. Next I added two rectangular hatches to the upper surface. I had to fill a gap with strip of the Evergreen plastic between the hood and a little shorter roof. At the same time I installed the eyes necessary for hoisting roof panels

The triangles with the holes that should imitate bearing houses and intend to hold each sponson at the inner wall of side compartment are too short as I found so I replaced them with a nail and a set screw. I drilled holes in the sponson shafts, put a wide-headed nail in the top and screwed the set screw downside.

This arrangement allows the sponson to rotate. The front part of the Kora kit model lacks any weapons, which is contrary to the original design, so I decided to improve it and also strengthen the firepower of this giant with two essential details compared to the plan. First, I added a homemade front weapon mount, dominated by a short-barreled cannon for destroying machine gun nests and enemy tanks. Then I placed twin MG-08 anti-aircraft machine guns on the roof. The MG-08 comes from the Zebrano ZA35243 resin kit. The author's artistic license, but looks like be plausible.

Machine guns in lateral sponsons I had to improve adding new muzzle boosters of Cooper State Models A35-014 origin.





Back to the tracks. I wanted at least two spare track links as the another distinctive detail but didn't know how many Kora track links would remain for that purpose after assembling. That's why I decided to make some more. Milliput, Instant Mold and one of the links like a pattern were basic components. First I pressed the pattern into the hot Instant Mold. After couple of minutes the pattern was removed and the cavity filled with Milliput and then allowed to harden. Clips intended for attaching spare track links, tools and the ladder up on the hull were made to my own design.

The roof platform above the tank's door seemed to me most vulnerable from the defence aspect hence good chance for the last detail. I decorated both sides above the doors with barbed wire fixed on steel rods as the protection against climbing intruders.

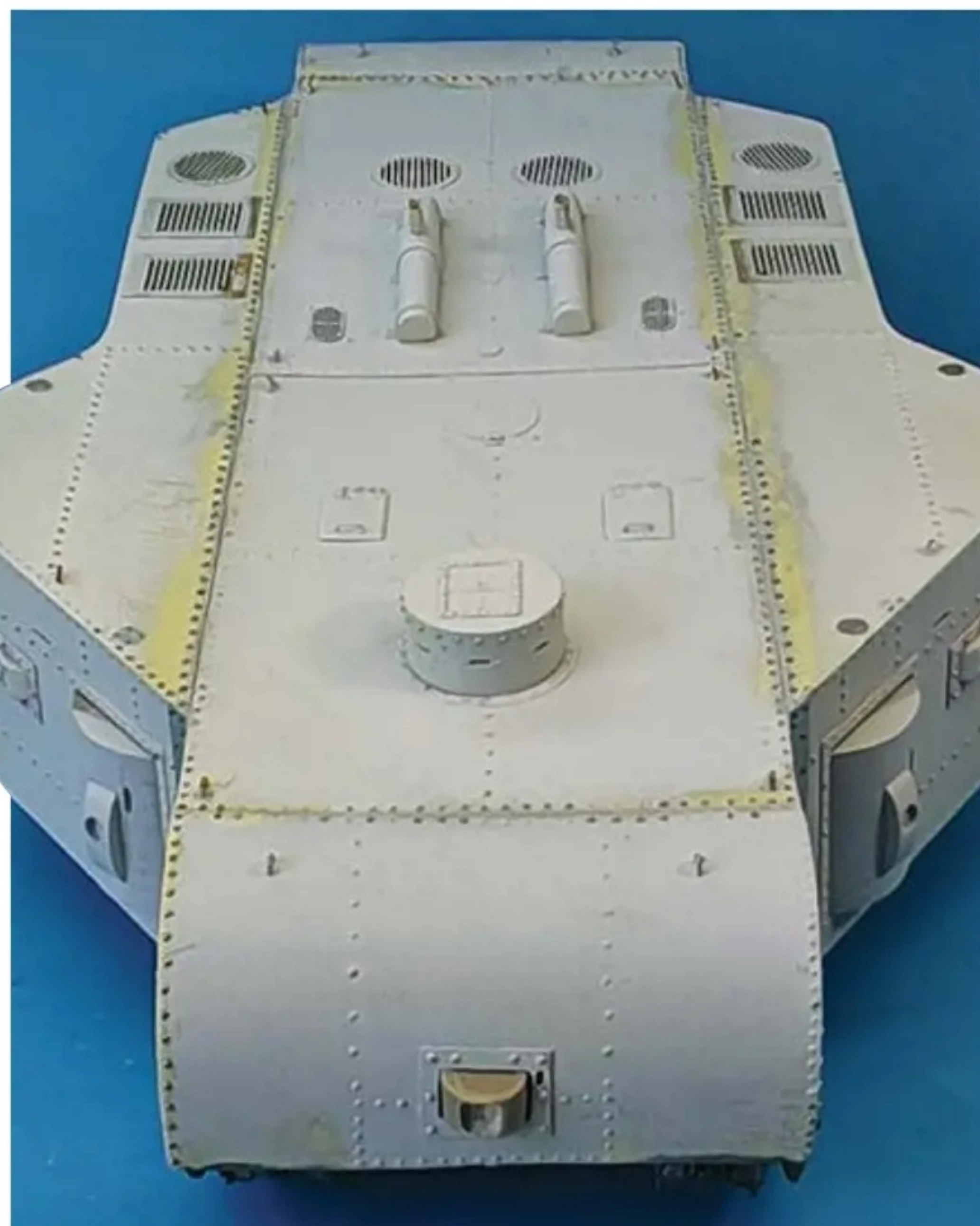


Painting and weathering the beast

After completing the build, painting started, as ever with a good coat of primer. I washed all the parts in water with drop of anti-grease detergent, let it dry and then primed with a nice automotive grey primer Dupli-Color. The riveted lines of the kit were pre-shaded by spraying lines using Tamiya's well-thinned XF-84 Dark Iron. The subsequent spraying session continued to utilize mix of XF-84, XF-56 and X-10 as a steel base. But just slight layer not to cover previous pre-shaded effect. Afterwards I carefully water-moistened lower parts of the hull before grinding coarse sea salt was poured over.

I note once again, just slight moist where the small grains of salt does not dissolve but just stuck. The salted surface was dried with a hairdryer to speed up the process. Then a mix of Panzer Aces 70.303 Yellowish Rust and 70.301 Light Rust was airbrushed and when dried the salt was brushed off. Oh yes, not to forget I used a horseradish leaf perforated by insects as an additional mask when spraying to accentuate the resulting effect. For the worn effect I used chemicals of AK range. Namely AK Crusted Rust Deposits, Rust Streaks, filter for NATO tanks, Streaking Grime for Ships and Dark Streaking Grime.

The aim here was achieved a richer and varied surface, specifically on lower vertical areas to break up a colour monotony and adding a natural looking worn appearance with subtle tonal variations. I started by applying multicolor dots and streaks. Then using a flat brush moistened in enamel thinner AK 011 wiped the paint down in vertical strokes, cleaning the brush between passes. Always brush downwards, just as rainwater would run down the sides. Next intervention in the colour variety before spraying the camouflage I focused on the horizontal areas. First, I masked tracks and rivet lines with Tamiya masking tape. Then the upper deck of hull and bottom were alternately covered with red sulphur (XF-7 Flat Red+XF64 Red Brown mix) and black (XF-85+XF69 mix) colours. Applied through a wire mesh and in conjunction with the familiar hairspray method giving a result better diversity. Time for camo. I began with a grey colour made from XF63 German Grey mixed with a small amount of XF-17 Sea Blue. Some highlights on panel centers were picked up by mixing some white into this colour.





The second colour was made from a mix of XF-4 Yellow Green and XF-79 Deck Brown. In relation with this step I made lead masks of irregular shape. Just pour molten lead on a thin layer of water and then flatten the resulting irregular shape with a hammer tapping.

The advantage of such a mask is the resist to be blowing off, it does not stick like Tamiya tape and eventual colour blows under the mask is rather an advantage because it creates a smooth transition between colours. Both exhaust fittings, ventilation vents and sponsons I masked classically with Tamiya tape. When was model demasked I turned my attention at the decals.



I varnished the areas, where the decals were going to be placed, with Tamiya X-22 Clear varnish and once dry added the decals using Mr. Mark Softer and Setter setting solutions. I didn't want to over garishness the model with too many crosses so only three German Iron Crosses and smiling Skull were used of Kora's decal sheet. The others came from my older decals deposit such as appropriate label Löwe. The number 2 in the yellow circle indicates the second piece produced in sequence. Photoetched Eduard 53257 German Imperial Flags were fastened with a super glue. Details such as hatches on upper of hull were highlighted with slightly different colour having a greenish shade. Followed couple of weathering treatments such as filters, wash, graphite nuzzling and pigments.

I applied several Abt502 oil filters namely yellow 010, cream brown 240, dark brick red 220, blue 235 and Umton's ochre gold. The lighter ones being used more for the centre of the panels. AK453 Old Bronze filter accentuated sponsons. The whole model was given layer of Mr.Super Clear Gloss and let to dry two days. Now time for wash. I didn't want the wash to coat the entire model, it was controlled just where I wanted it. Any excess wash was removed or blended into the surrounding surface once dry. The formula for my preferred wash is approx 75% Umton's Iron Oxide Black+20% Abt160 Engine Grease+5% Abt220 Dark Brick Red. Some of the exposed rivets, pioneer tools, edges and locations coming in contact with wear were delicately weathered with graphite stick, anothers with lighter silver pencil Faber-Castell Silver 8200-251 and darker pencil Koh-I-Noor 3680/39.

The hull underside strongly scuffed up to the underlying colours I emphasized with pigments AK Truck Rust 085, Black 039 and Burnt Jet Engine 041 applied with a cotton bud dampened with Revell Verdünner Diulant.

After drying I made some corrections and The result fixed with Mig Pigment Fixer. It's a slightly messy process but is quick, effective and worth of following cleaning. Tracks, ladder and MG stand were coloured with mixture of Vallejo Metal Color 77.720 Gunmetal Grey, 77.716 Semi-Matt Aluminium and 77.712 Steel. Following wash with mix of oils Umton's Permanent Green and Abt220 Dark Brick Red. The last touch in this project performed Winsor&Newton Matt Varnish spraying on the model as the unifying and protective layer





Conclusion

This has been a project very different to my previous models, real battle for me on a daily basis for about four months especially when it comes to inventing of building procedures and sequences of individual steps. Also I had to shape some parts such as floor in hot water before gluing the hull. Honestly, it is not for beginners!

In addition, I advise always dry-fit runs before gluing individual parts together. Overall, it was a joy to watch the ugly parts transform into one of the most impressive tanks, which, incidentally, is the heaviest in my AFV collection, weighing in at 1.75 kg.



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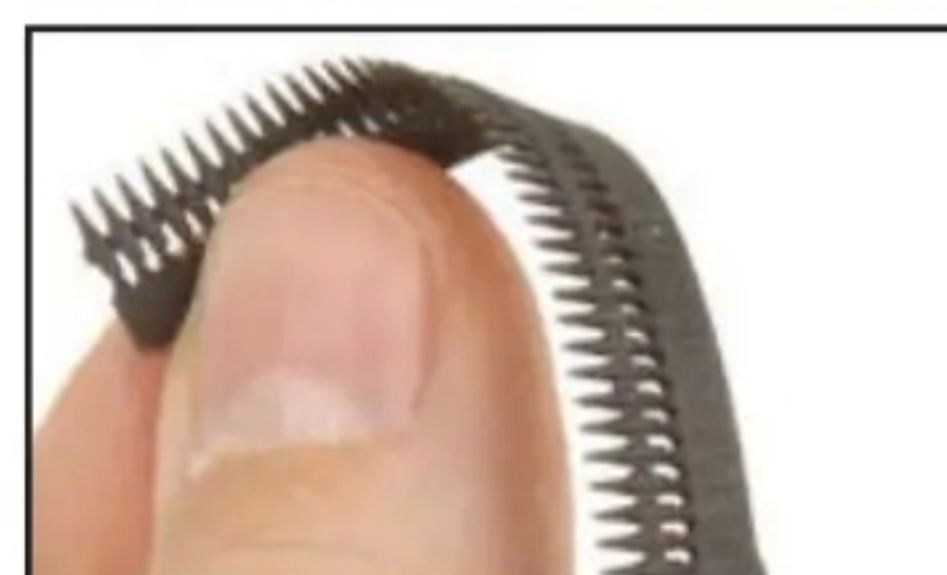
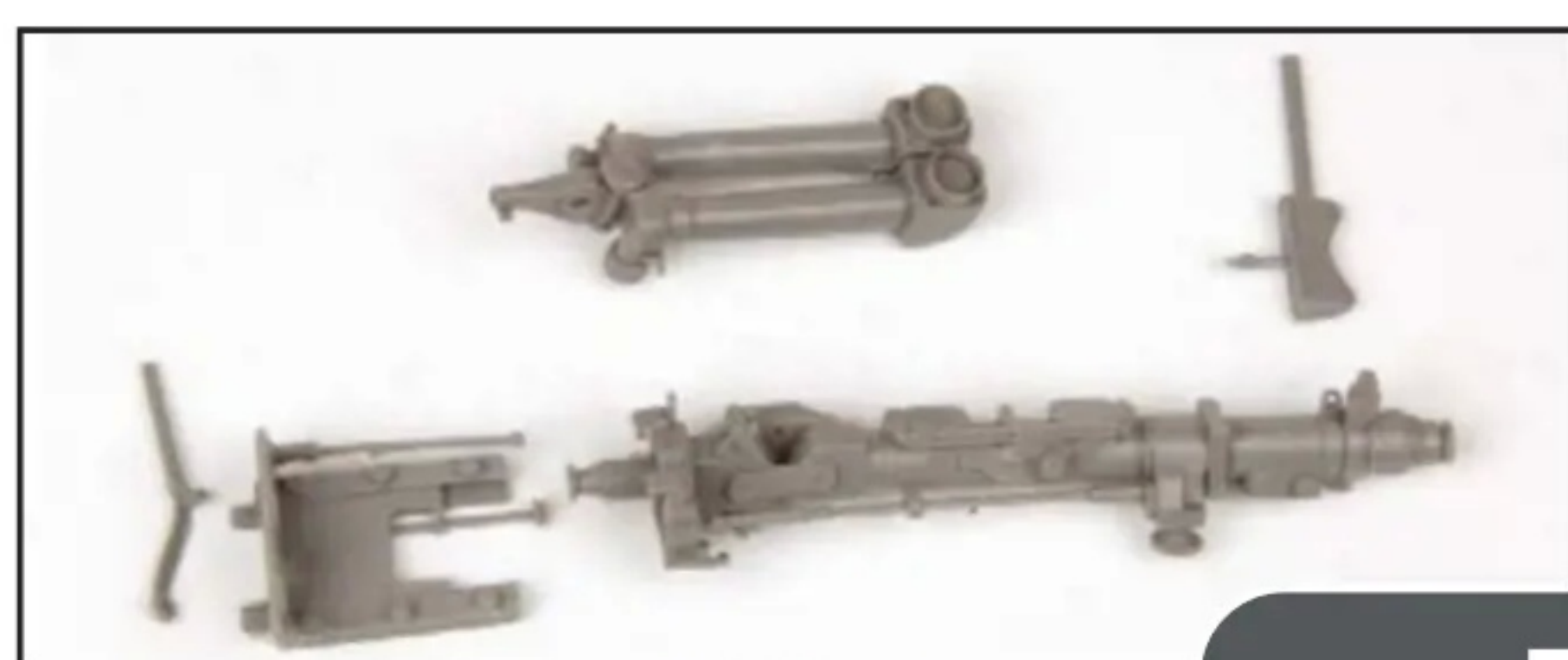
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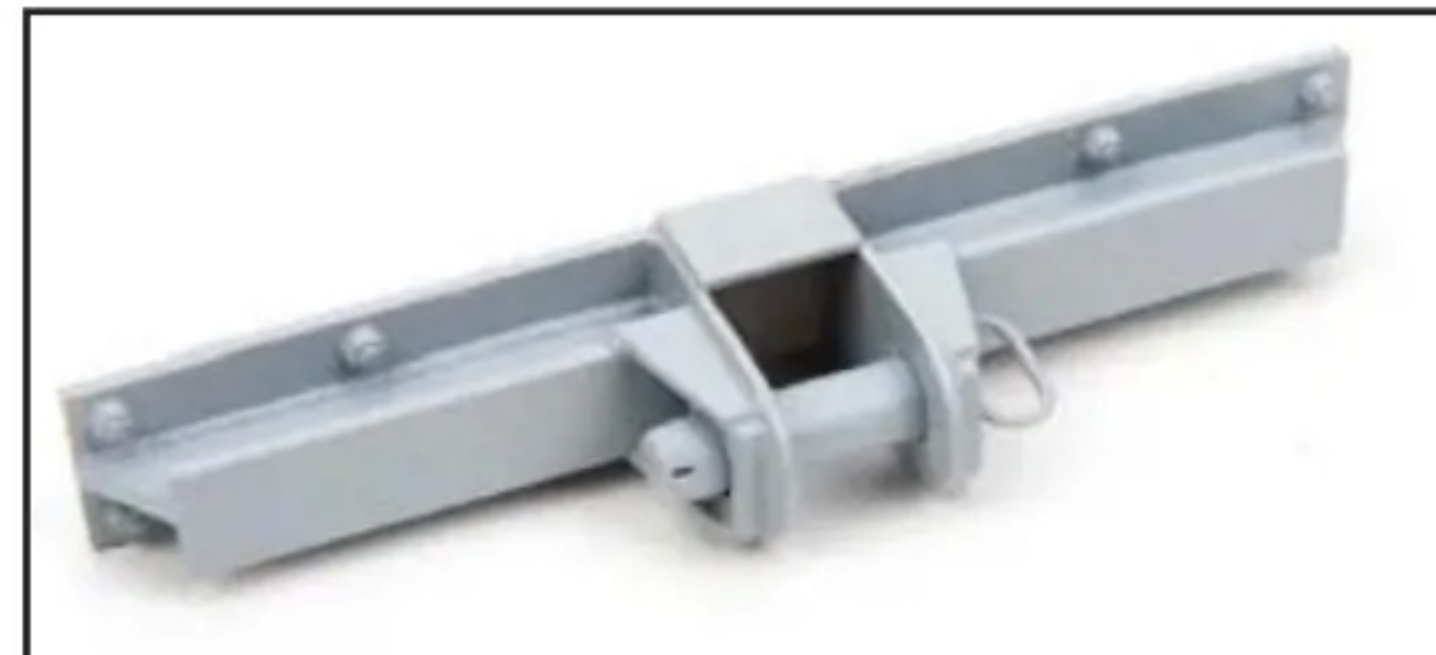
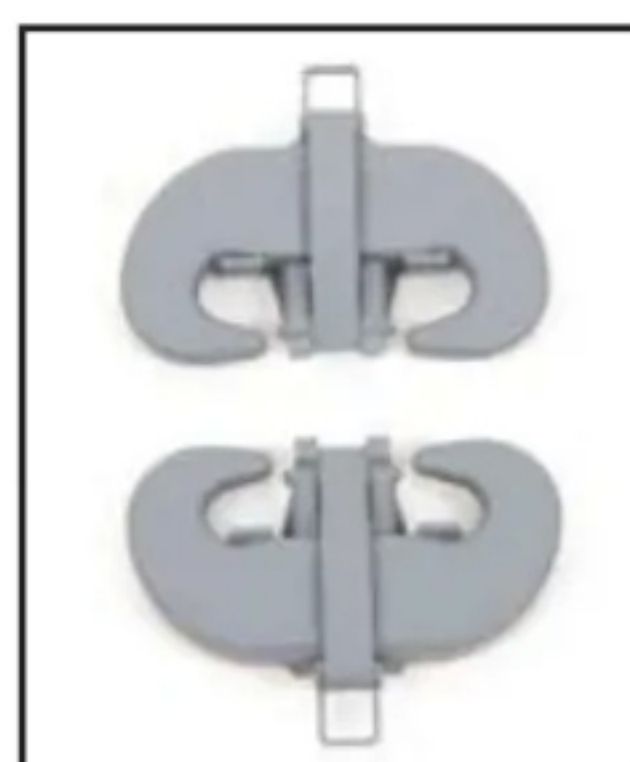
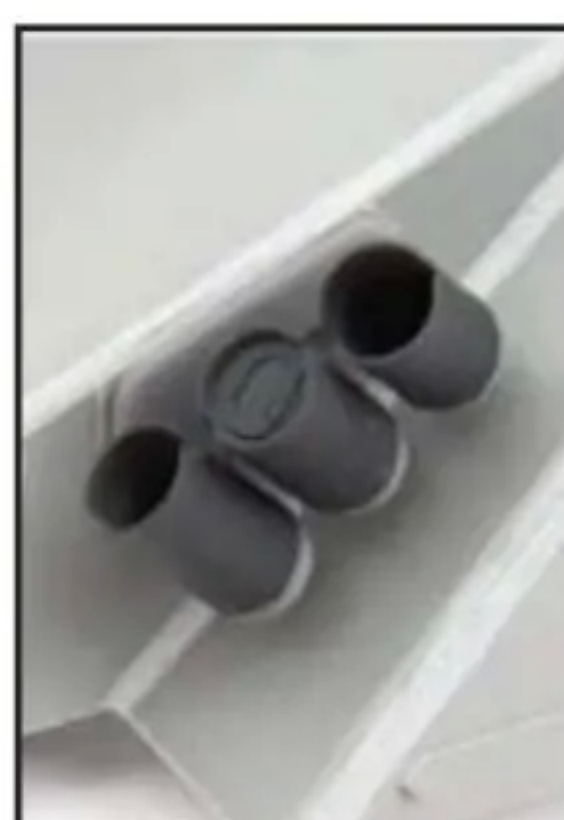
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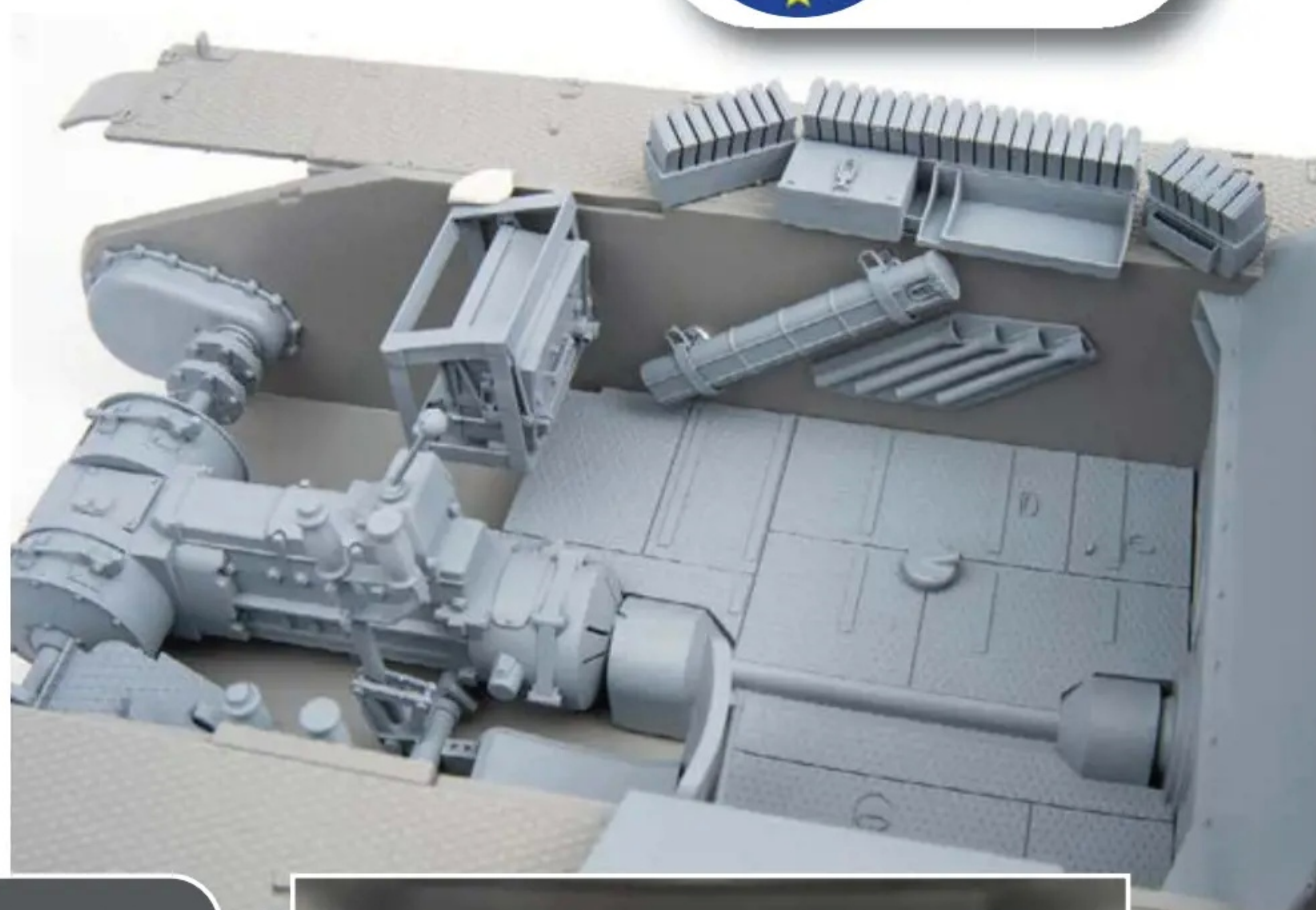
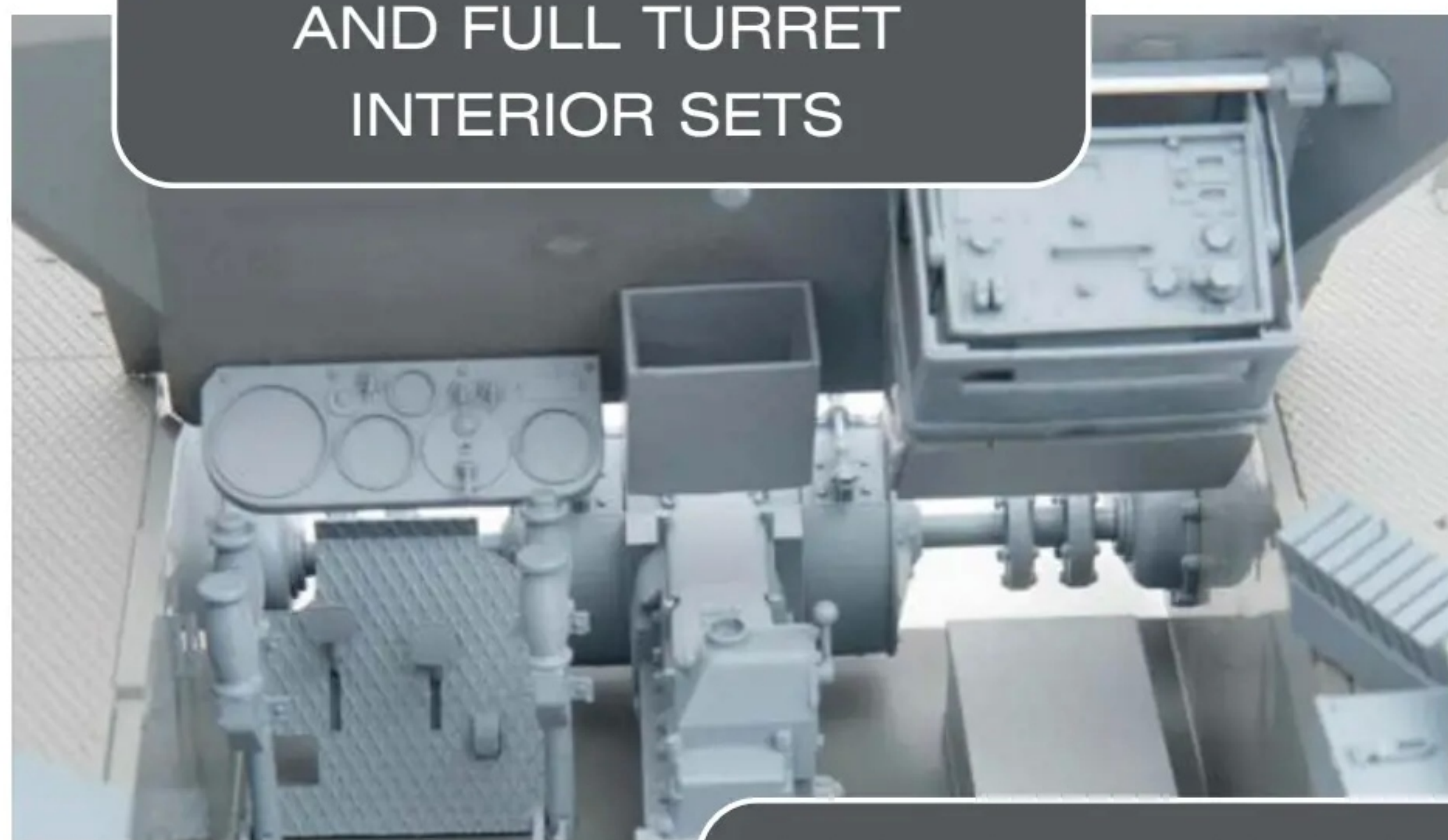
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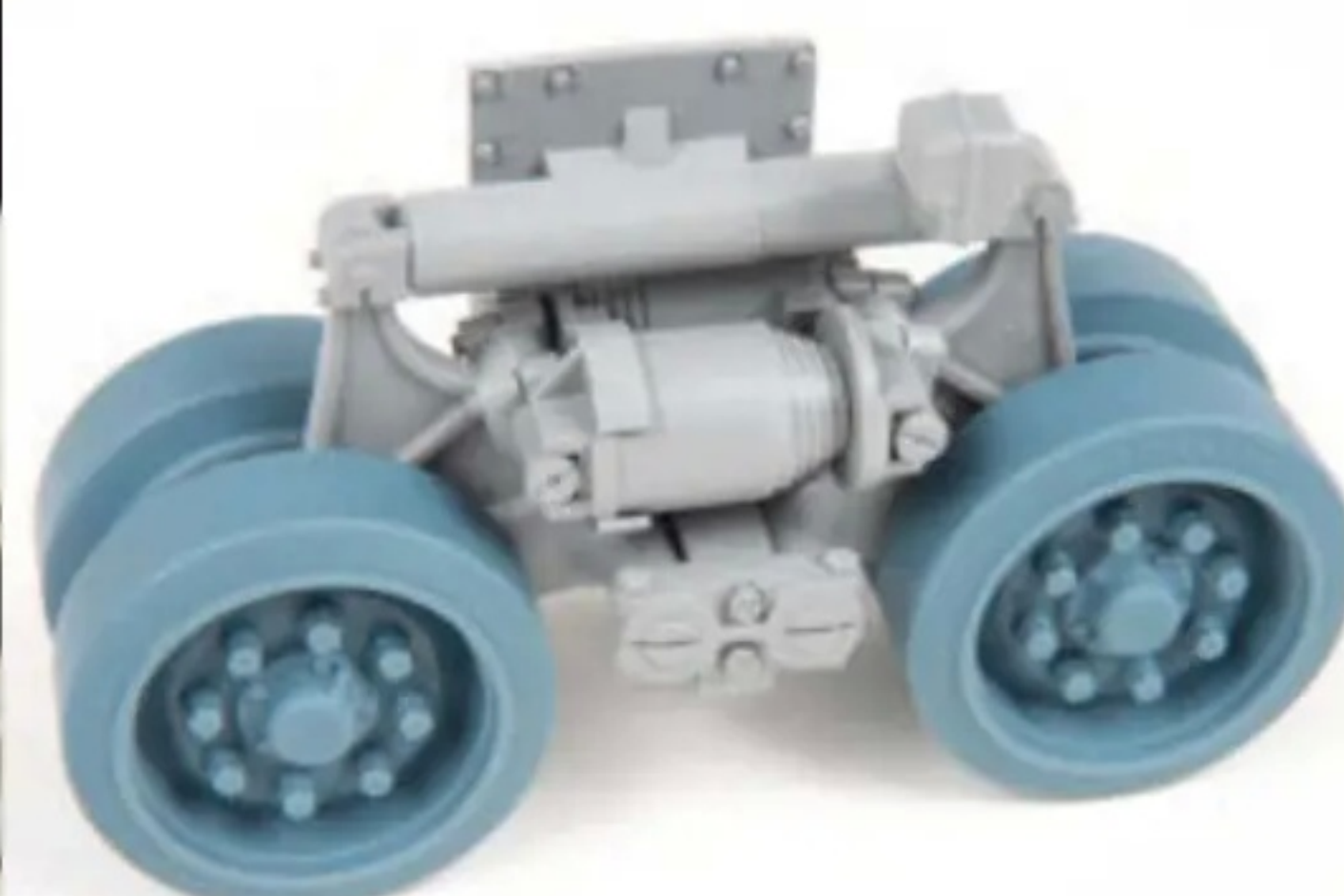
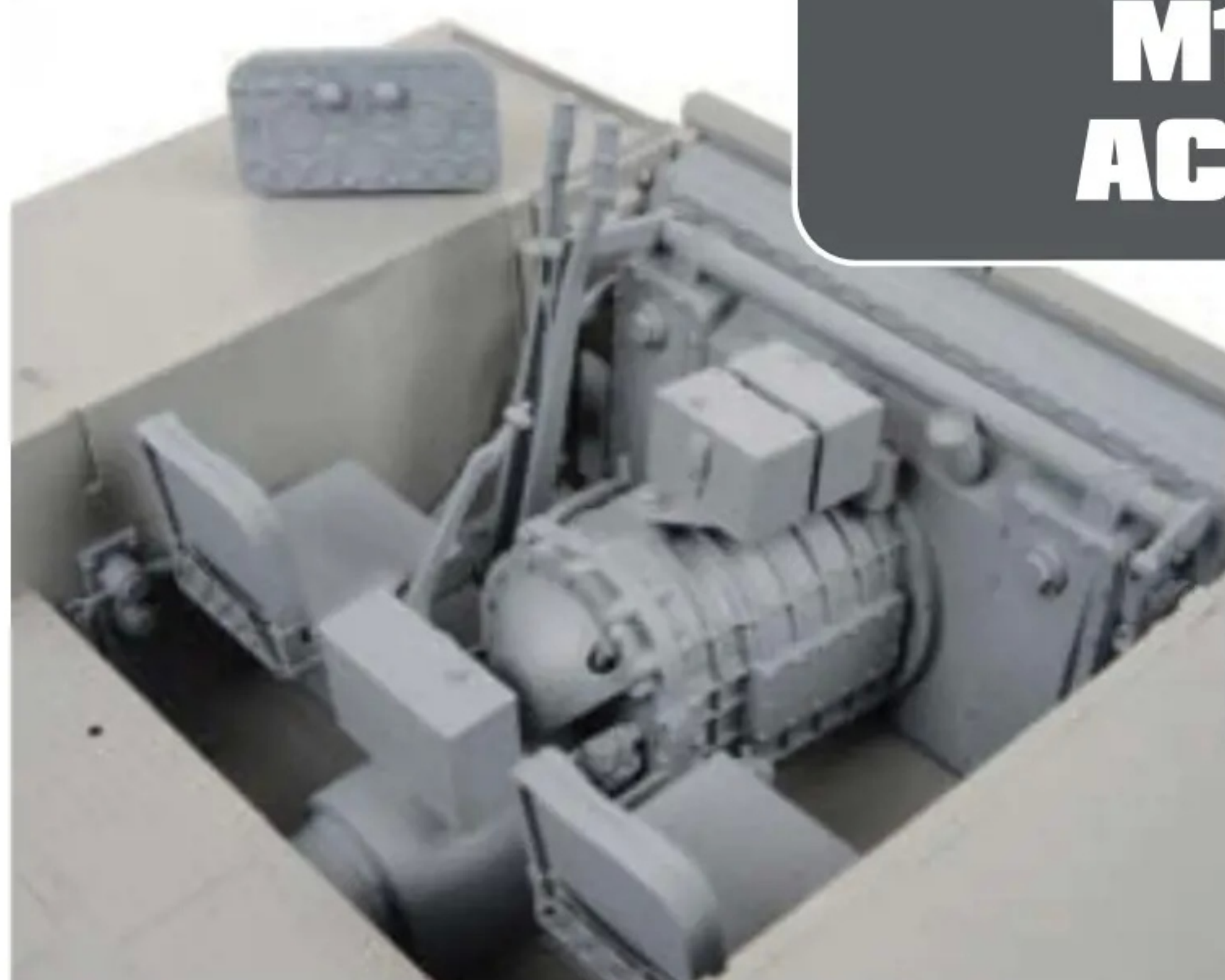


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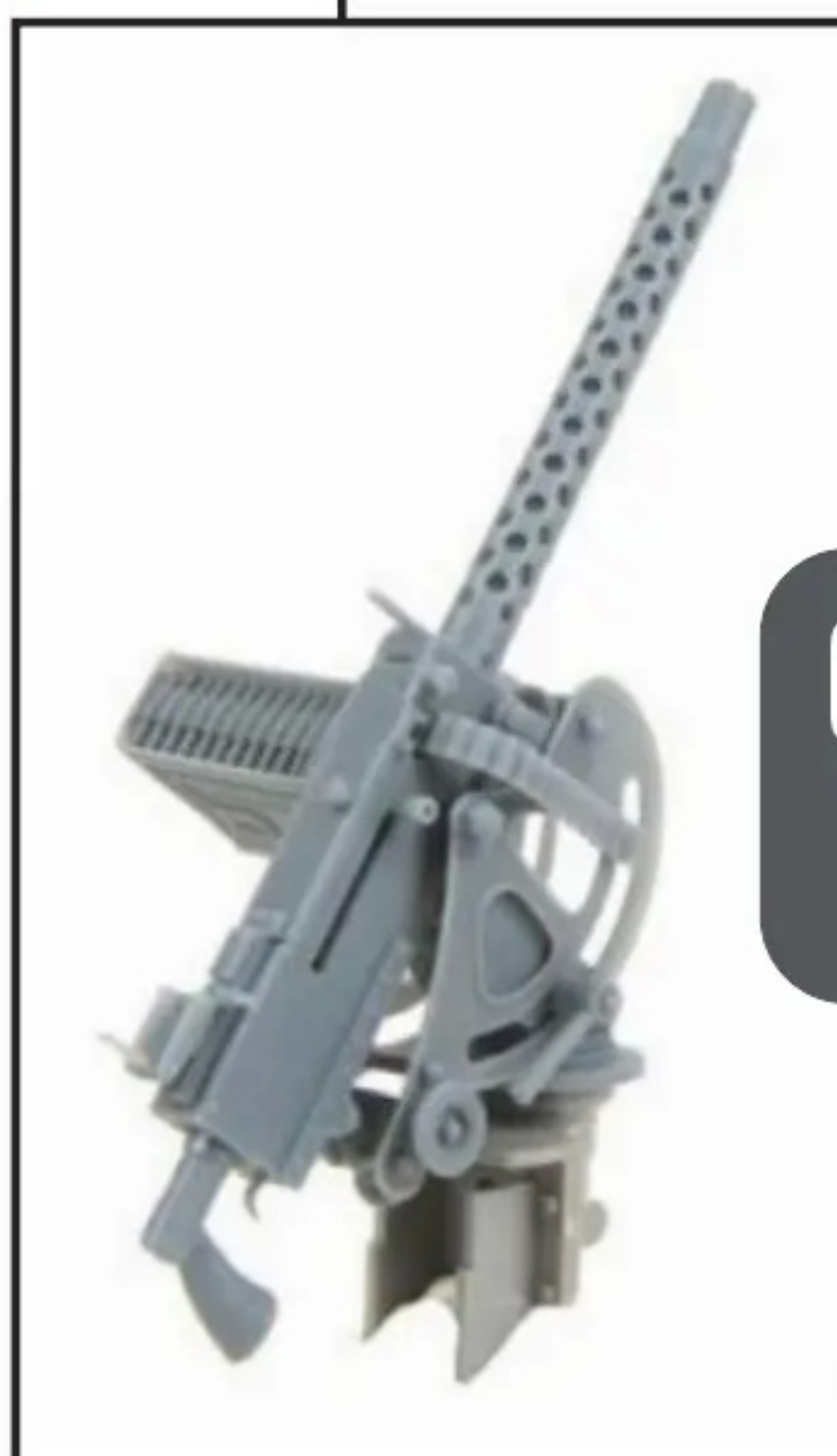
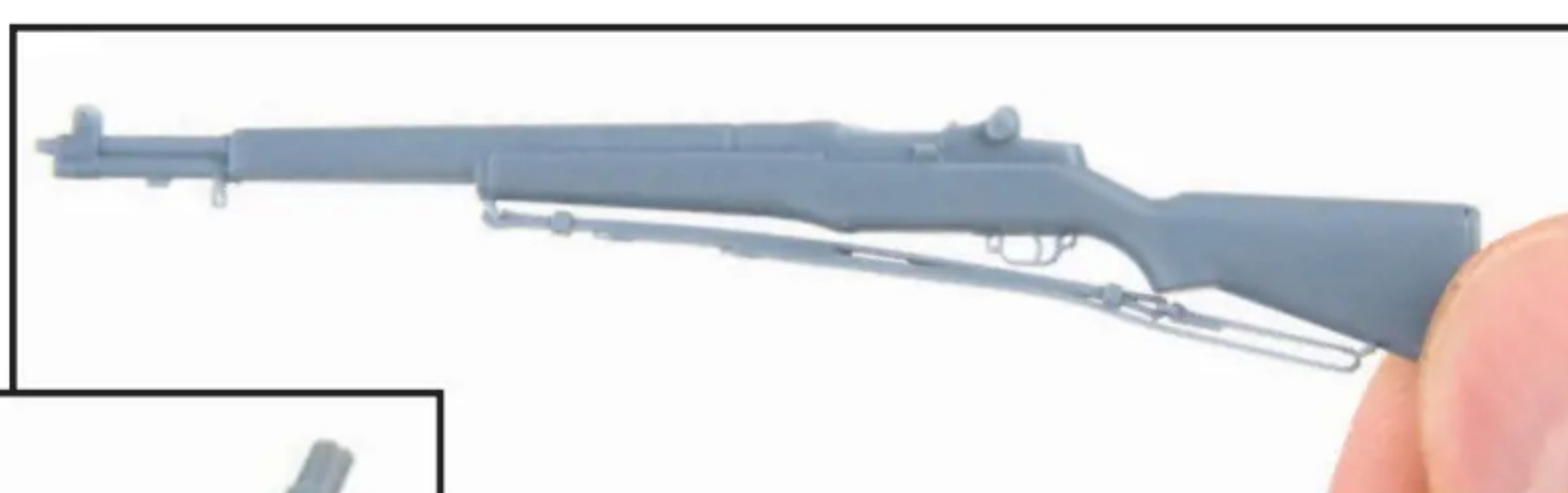
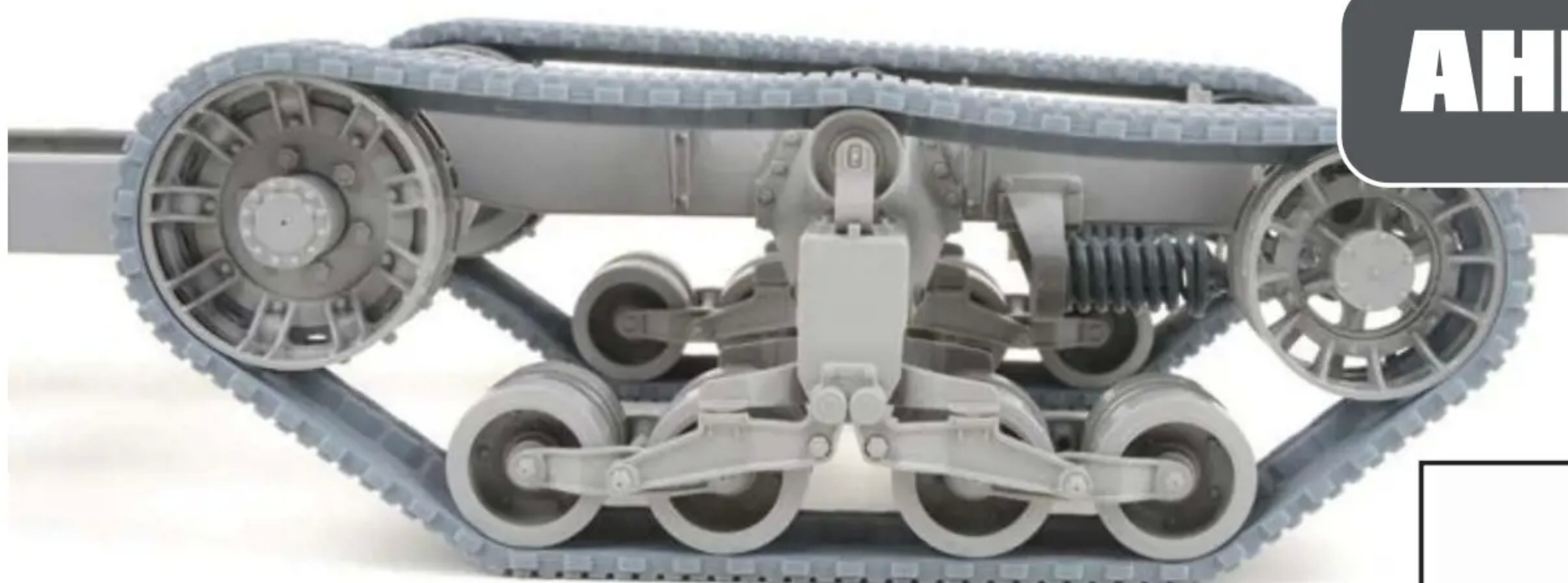
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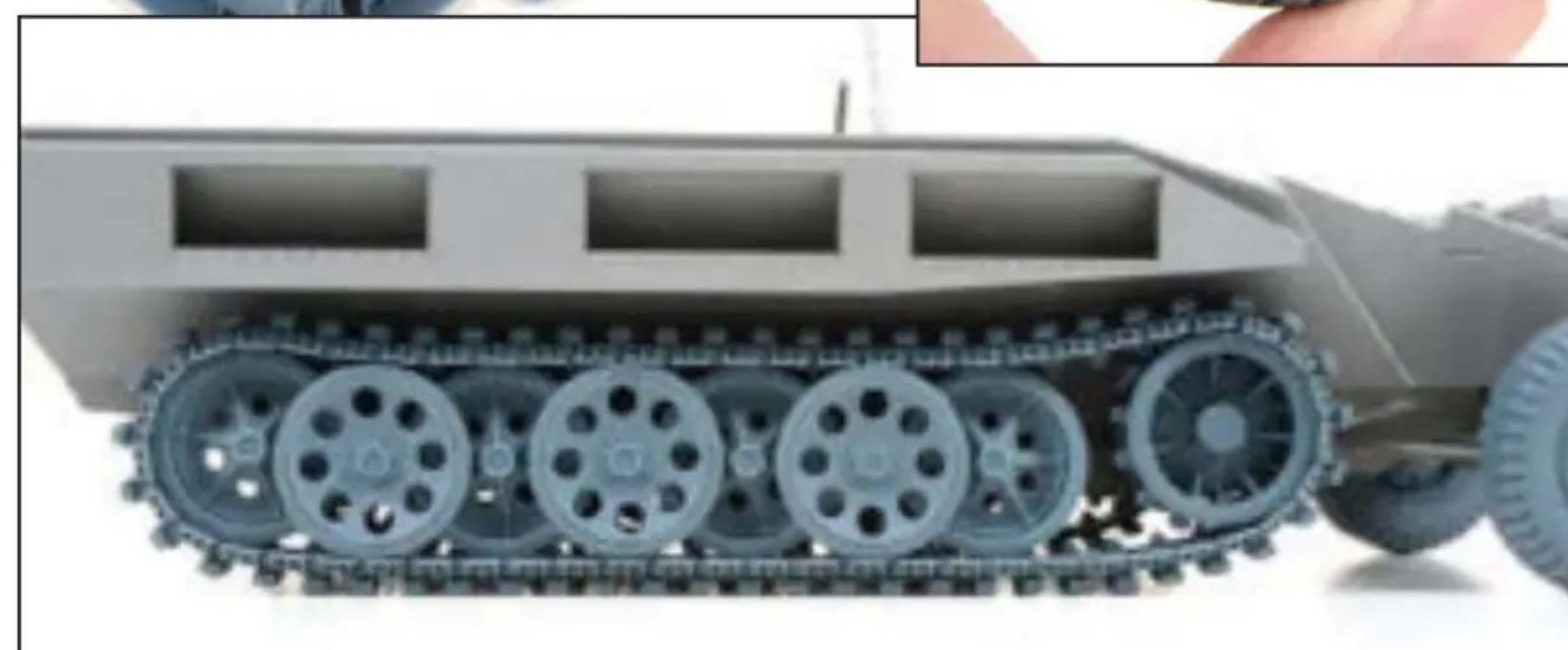
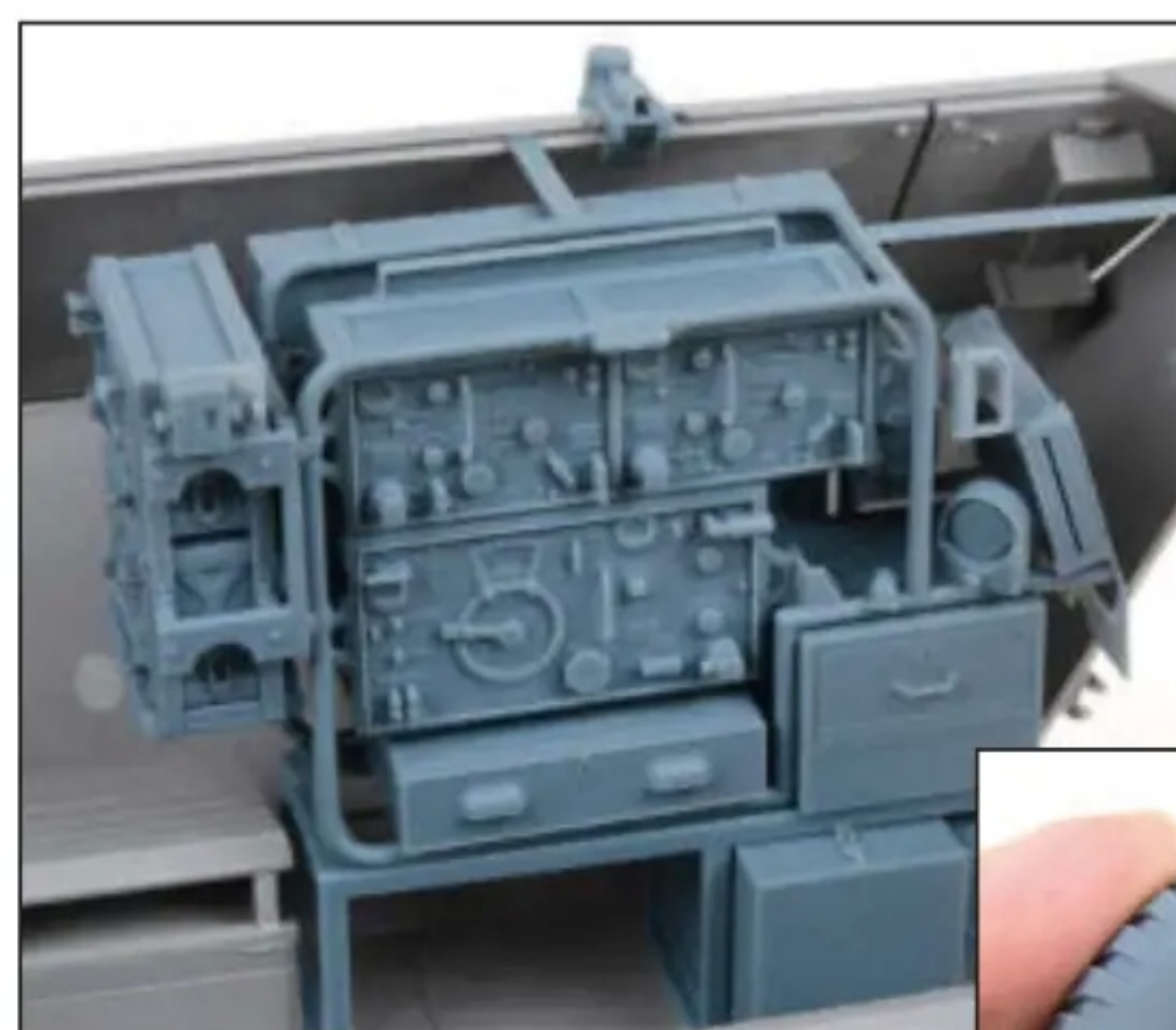
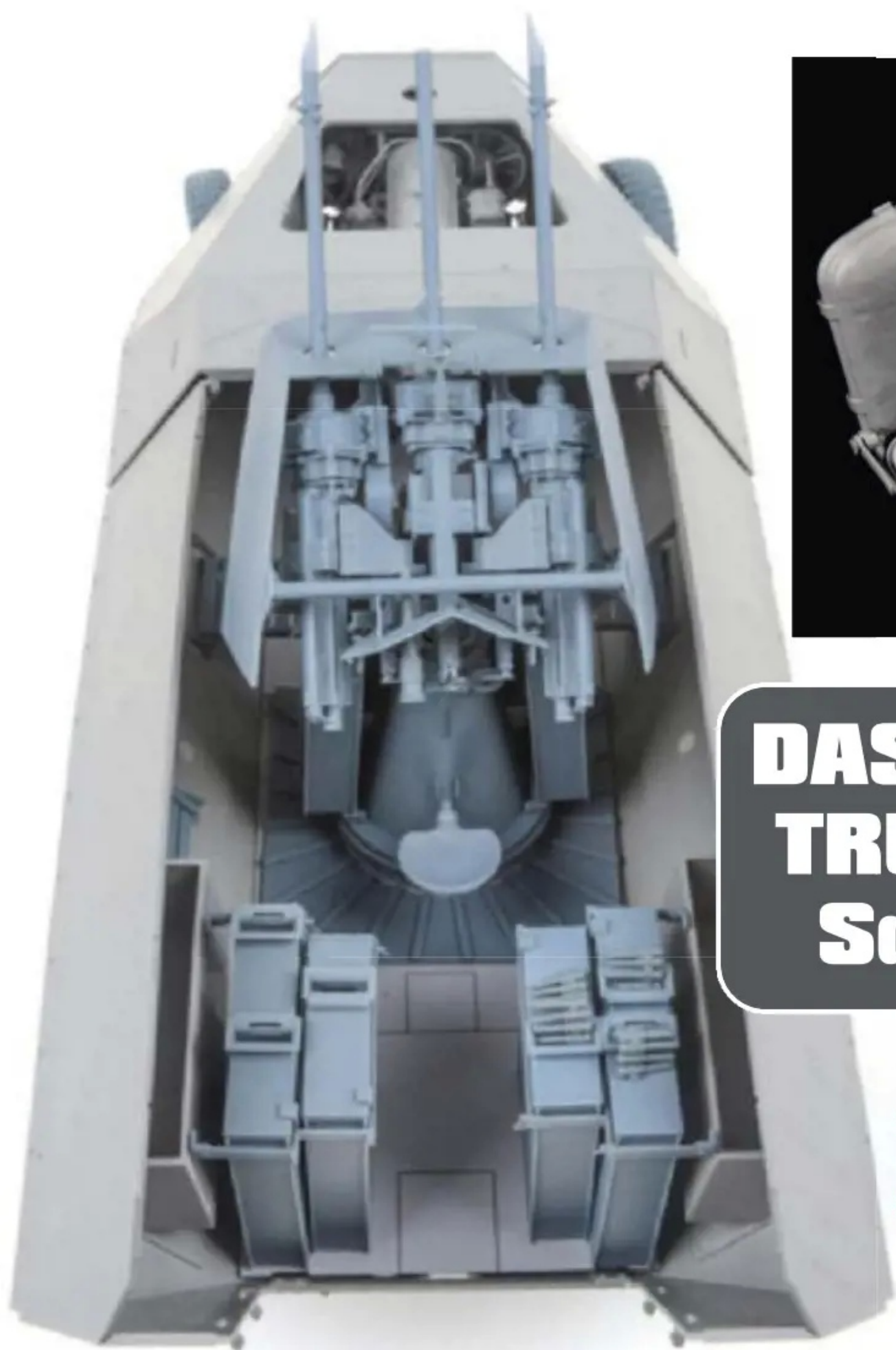


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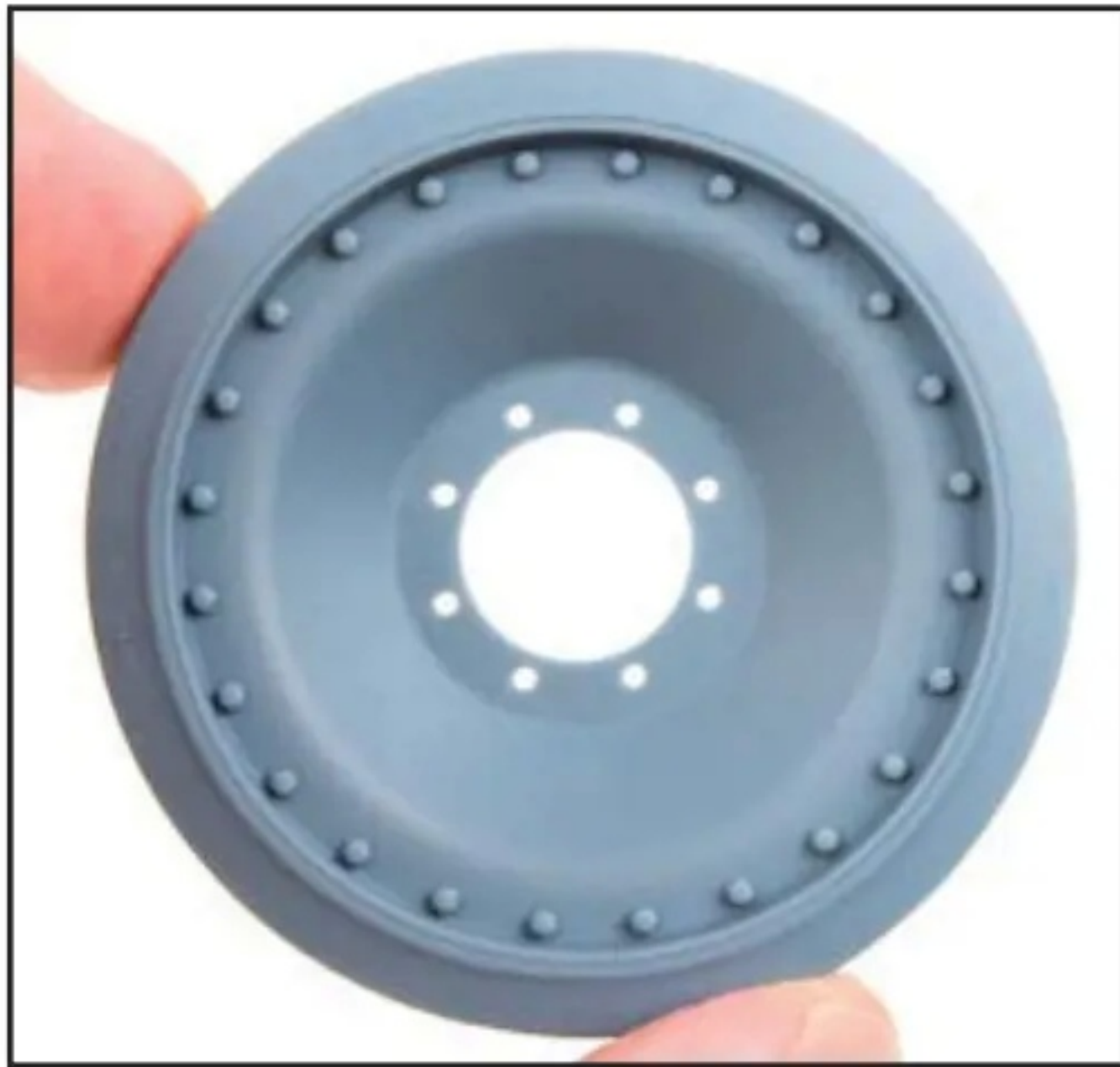
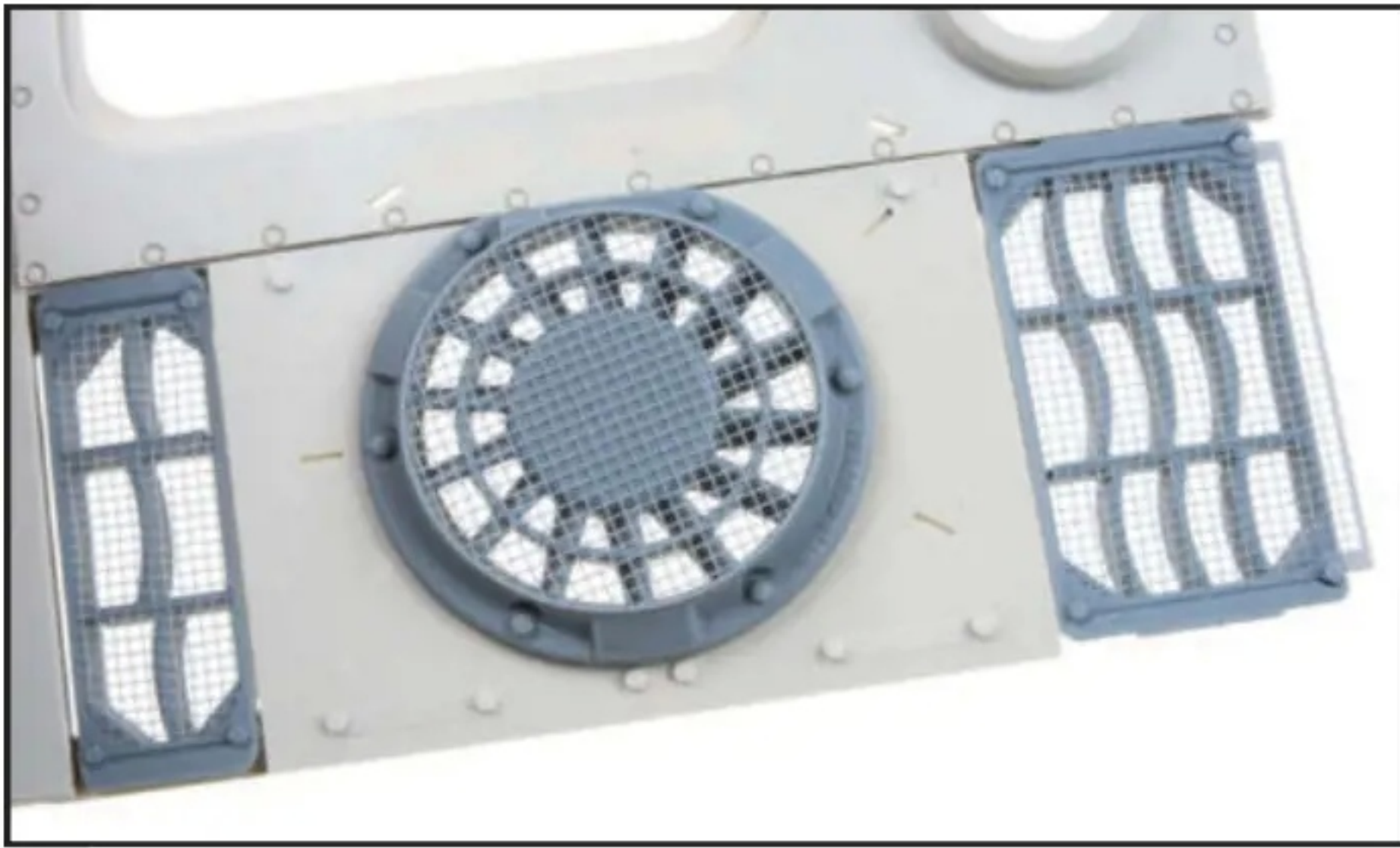
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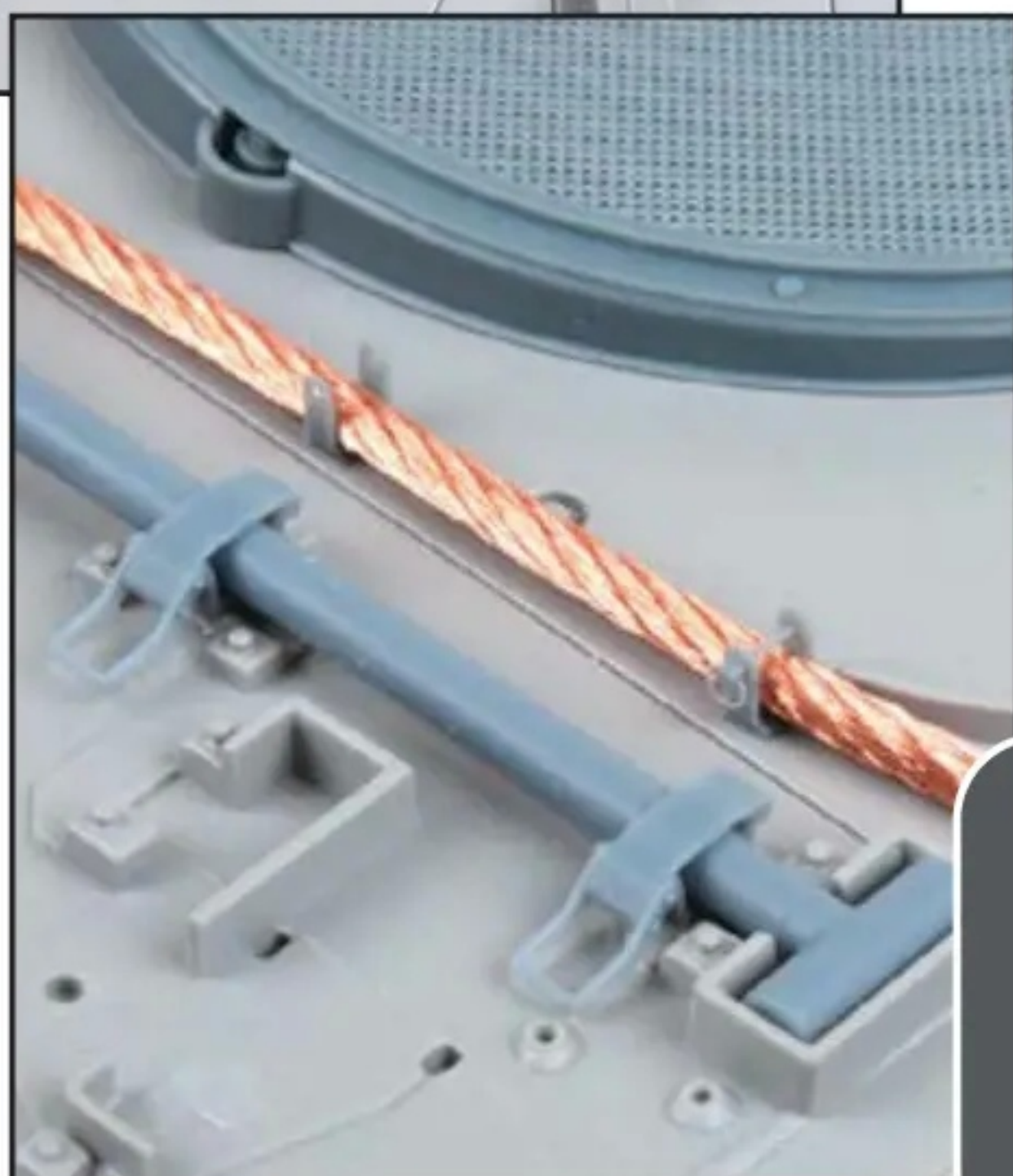
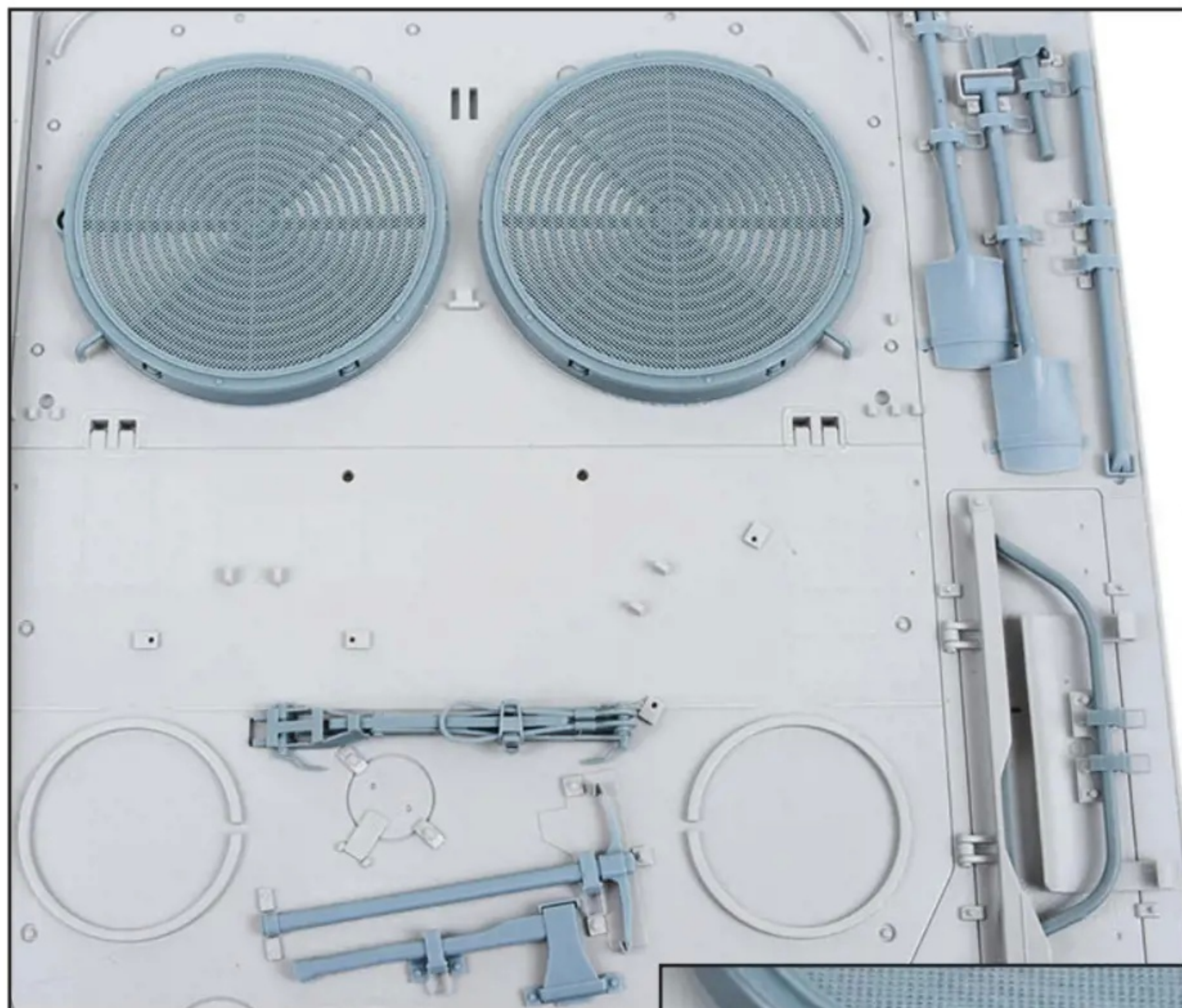
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1:35



STALIN'S MONSTER

JS2

Zvezda has released a completely new tooled kit of the Josef Stalin-2, replacing their own 1999 kit. However, it seems that the now well established Slide Mould technology has not yet been incorporated into their new kits. Whether it can compete with, or even surpass, Tamiya's still excellent 2007 kit remains to be seen. Furthermore, RFM has also announced a new JS-2 (as of January 2026) giving more choice to modellers uncomfortable with Russian brands.

Let's get to work!

The build begins, unusually, with the turret. It already has a slight cast texture, but I found it a bit too faint. Therefore, I used Mr. Hobby's "Dissolved Putty" and a bristle brush to apply a more pronounced texture. It goes without saying that all the handles on the turret were replaced with wire. The one-piece gun barrel from the Zvezda kit is commendable. However, the muzzle brake is unfortunately split lengthwise. Since I had an aluminum barrel from ABER on hand, I used it after a quick comparison of the two barrels.

Unfortunately, Zvezda has also adopted a questionable practice: the lower hull has to be glued together from several individual parts. Even the swing arms consist of two pieces. This is completely unnecessary, as it doesn't increase the level of detail. It only increases the number of parts and the amount of work involved. Older kits prove that it can be done differently. Apart from that, the rest of the build went quite smoothly. It's a shame that the manufacturer doesn't even include etched engine grilles in the kit. At this price, and in the year 2026, that should be standard. Luckily, the photo-etched detail set from ABER included them.

Since the tank was to be depicted in rather poor condition, a photo-etched set from Voyager was also used for the fenders. These were to be soldered, as they would fall apart if only glued when bent or dented.

According to the instructions, both drive sprockets are to be glued permanently to the hull. However, this would make further painting and weathering more difficult. Therefore, the parts were mounted on an axle made of thick wire, making them movable and removable.

Periscopes made of clear material enhance any kit. The mirror surfaces only need to be masked and are then ready for painting.

At the rear, the plastic cables from the kit were replaced with copper ones from Karaya.

The quite usable segmented tracks from the kit were not used. Instead, the author fitted workable metal tracks from Friul. These simply look significantly more realistic up close. With permanently glued tracks, the contours of the individual links become more blurred after weathering. This does not happen with workable tracks. Later, the kit's drive wheels were also replaced with those from Friul. These fit the metal track a bit better. Thus, the basic construction is complete.



A cast structure is already present on the tower, however, according to original images, it is insufficient.



Unfortunately, Zvezda has once again included a longitudinally split muzzle brake in the new kit. The one from ABER is significantly better.



The plastic engine grilles from the kit are unusable. Purchasing photo-etched grilles is unavoidable.



All parts that are depicted as bent should be made from photo-etched parts and then soldered.



Fine copper wire should be a staple on every workbench. It makes it quite easy to create attractive upgrades.



The spare track links from the kit are okay. However, it looks better to make them from individual links.



Zvezda missed an opportunity here as well. Drive sprockets that have to be glued permanently to the hull are not ideal.



Periscopes made of clear material are always an improvement. The glass surfaces simply look more realistic than painted ones.



When it comes to rope, there's nothing better than the copper cables from Karaya. The difference compared to plastic or textile ropes is significant.



The segmented tracks from the kit make a good impression. However, they don't quite match the appearance of a metal track.

JS2



The naked monster ready for a coat of primer!

Paint for the monster

To ensure good adhesion of the paint to the metal parts, priming is essential. This was done using Titans Hobby Surface Primer spray can. For the subsequent base coat, the modeler chose Tamiya XF-67 "Nato Green." However, this was made more interesting with irregular highlights. For this, the XF-67 was mixed with approximately 20% XF-57 "Buff" and approximately 30% X-15 "Light Green" and heavily thinned. After a coat of hairspray, the author sprayed white spots onto the model using Tamiya XF-2. These spots were then lightly chipped here and there with water and a bristle brush. The turret numbers, by the way, were painted freehand with a brush. On Russian tanks, these were usually not applied so accurately.

Now is also a good time for light chipping with a lightened base coat, especially on the usual edges and corners. Smaller chips are then dabbed with Vallejo's "German Cam. Black Brown" #70822 into these chips. This is intended to simulate paint removal down to the metal.

To make the winter camouflage even more realistic, a few effects were created using AK751 washable paint from AK Interactive. This paint is applied similarly to oil paint and then washed off. Once the whitewash is satisfactory, we begin with the oil paints. For this, I use two colours: "Buff" from 502 Abteilung and "Van Dyk Brown" from Lukas. These are thinned with AK White Spirit. The

two colours are mixed depending on the application. Lighter tones are used on the flat surfaces, and darker tones as pinwash in recesses and raised areas. For this, I used the "Henschel" model holder from Stoffels Panzer Keller for the first time. Anyone who has used such a tool will never want to be without it again. Various attachments are available to securely hold virtually any model and turret. Adapter attachments are even available for ships.

It's impossible to avoid the mess.

Next, we'll work on weathering the fenders and engine deck. Fine garden soil and pigments are added to the oil paints as desired. To represent thick mud, I use a mixture of Wilder's "Textured Earth" and static grass. The color of this mixture doesn't matter initially, as everything will be top-coated with Buff later. After it dries, the thicker mud deposits are moistened with "Wet Ground" from Ammo of MiG's Splashes range. This is intended to simulate damp mud. Once everything is dry, you can apply a light coat of dark brown paint to the thickest areas. This creates a nice effect of damp mud. The same procedure is used for the lower areas and the road wheels. Finally, dirt splashes are added to the model. These are applied more heavily on the lower sections and more subtly on the upper sections. Thinned oil paint and/or the Splashes range are suitable for this. The paint is squirted from the brush onto the desired areas using a toothpick. With a little practice, good results can be achieved.

Especially when using metal components like aluminum barrel and photo-etched parts, a good primer is essential. Otherwise, chipped paint is inevitable.

The base color XF-67 NATO Green is further lightened with a little X-15 Light Green and XF-57 Buff to create a mottled effect.

The white winter camouflage was sprayed onto a layer of hairspray with Tamiya XF-2 and then lightly chipped.

To create an even more washed-out look, AK's "Washable White" was applied to the tank.



When applying a pin wash with the oil paint "Van Dyk Brown," the goal is to create shadows and highlight details.



Oil paints and pigments can be used to create quite attractive dust and dirt deposits.



For thicker mud, however, you need something with more volume. Vallejo's "Thick Mud" or Wilder's "Textured Earth" are suitable here.



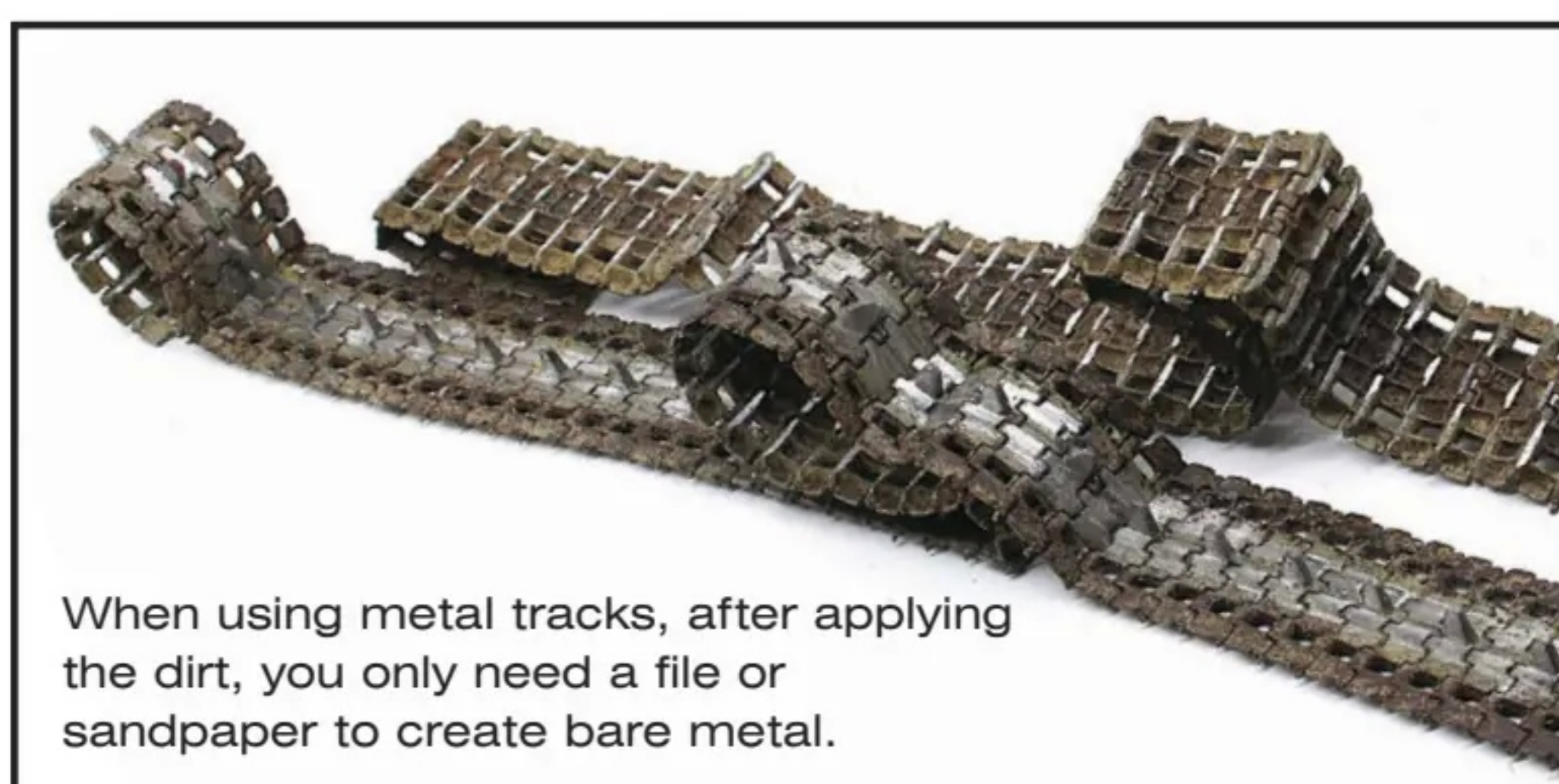
A useful tool for such work is the holder from Stoffel's Panzer Keller. There's no longer any risk of accidentally touching the paint.



After drying, the mud is color-matched using an airbrush and brush. Damp dirt should be darker than dry dirt.



The dirt on the running gear must be applied in the same way. Here you can really let your creativity run wild.



When using metal tracks, after applying the dirt, you only need a file or sandpaper to create bare metal.



Since the road wheels are made of plastic and don't have rubber on it, they must be treated with a graphite pencil.



Because the 12.7cm machine gun in the kit is quite nicely done, the author opted not to use an aftermarket set.

Russian tanks often have oil stains and a lot of soot on the exhaust. This should also be implemented here on the model.



Tracks and final assembly

Now all that's missing are the tracks. After the grey primer from the spray can, the Friul's tracks were lightly chipped with brown and buff. They then received a strong wash using the same oil paints and splashes as the tank itself, with the center of the tracks being darker than the edges. Nice dirt effects can be achieved by sprinkling earth-toned pigments into the wet paint. After drying, all contact points on the metal tracks are simply sanded with a file and sanding stick. Unfortunately, this isn't possible with the plastic road wheels. I had to use a graphite pencil to simulate bare metal. A small diorama is planned for the model later; the tracks will probably need some further color adjustments for that.

After final assembly, the rather nicely detailed 12.7cm DShK machine gun will be mounted on the turret. Zvezda has done a good job here.

On Russian tanks, an oily, sooty appearance is often observed on the exhaust. This can be easily simulated with soot pigments and glossy clear varnish. A few streaks along the sides are also essential. These are painted on with oil paints and a fine brush. After a short drying time, the paint is wiped off slightly from bottom to top with a flat brush lightly moistened with white spirit.

To create wet, damp, or oily streaks, the oil paint can be mixed with a little glossy enamel-based clear varnish. Revell's Airbrush Enamel Colour colorless, glossy #31701 is well-suited for this purpose.

Since I wasn't entirely satisfied with the winter camouflage in the end, a few white streaks were added using "Washable White." This makes it look even more like washed-out whitewash.

Normally, some accessories would now be added to the model. However, I am saving that for the planned diorama. Only a figure from MiG Productions was placed in a hatch.

Conclusion

The review of this "New Tooled" kit is mixed. On the positive side, the one-piece barrel (excluding the muzzle brake) and the sometimes quite fine detailing are definite plusses. The fit is also excellent. However, a kit from 2025 should at least include the most important photo-etched parts, such as the engine grilles. The multi-part lower hull and the unnecessarily split components are also drawbacks. So, the old Tamiya kit isn't quite obsolete yet. Furthermore, another JS-2 kit from RFM is on the horizon. We can certainly look forward to that.





JS2



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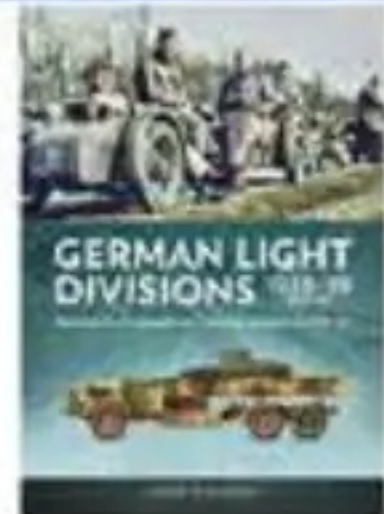
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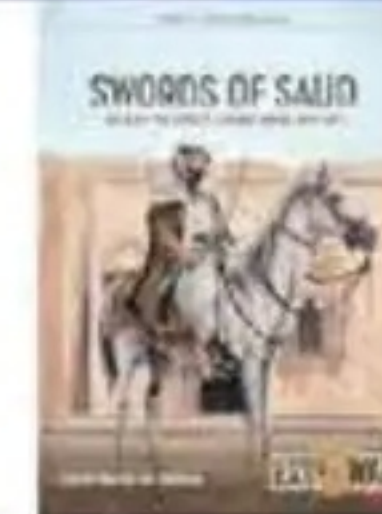
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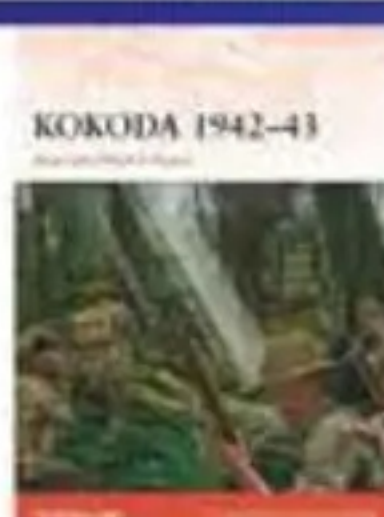
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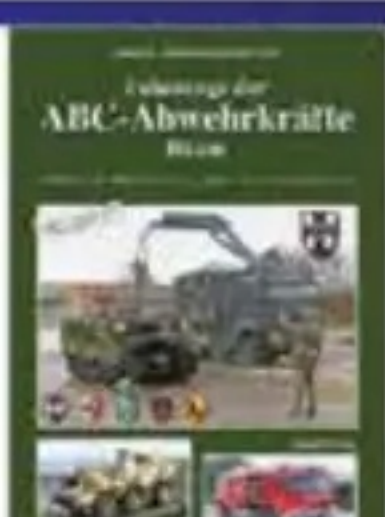
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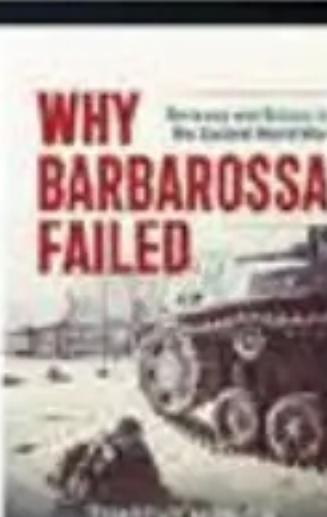
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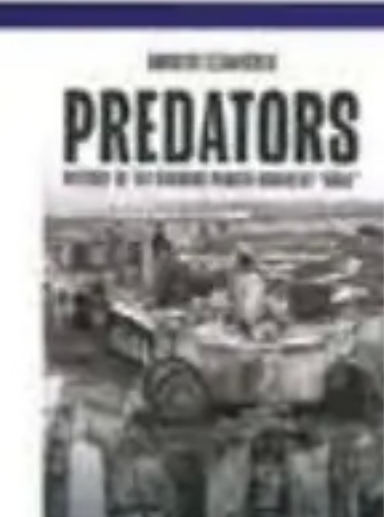
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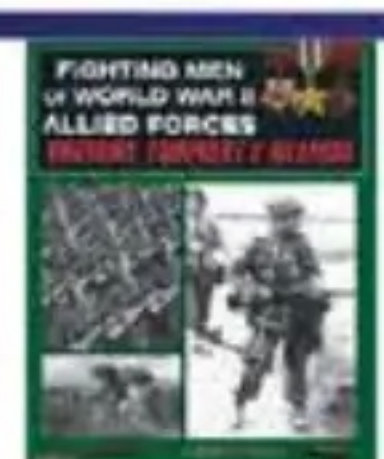
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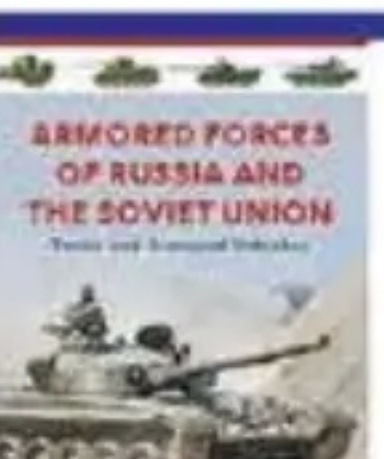
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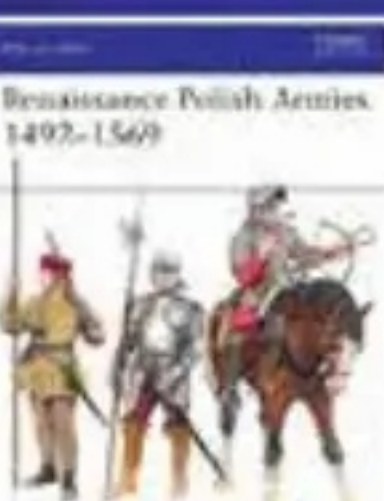
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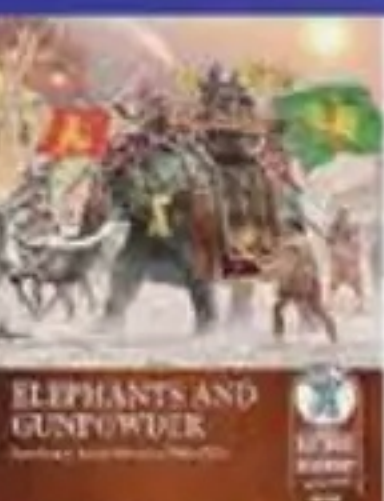
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