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▶▶ This kit features pre-colored parts and a fast snap-fit design. It includes the **hangar** and **elevator structures**.



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▶▶ The island has excellent details. The **CXAM-1 radar** on *Enterprise* is eye-catching.



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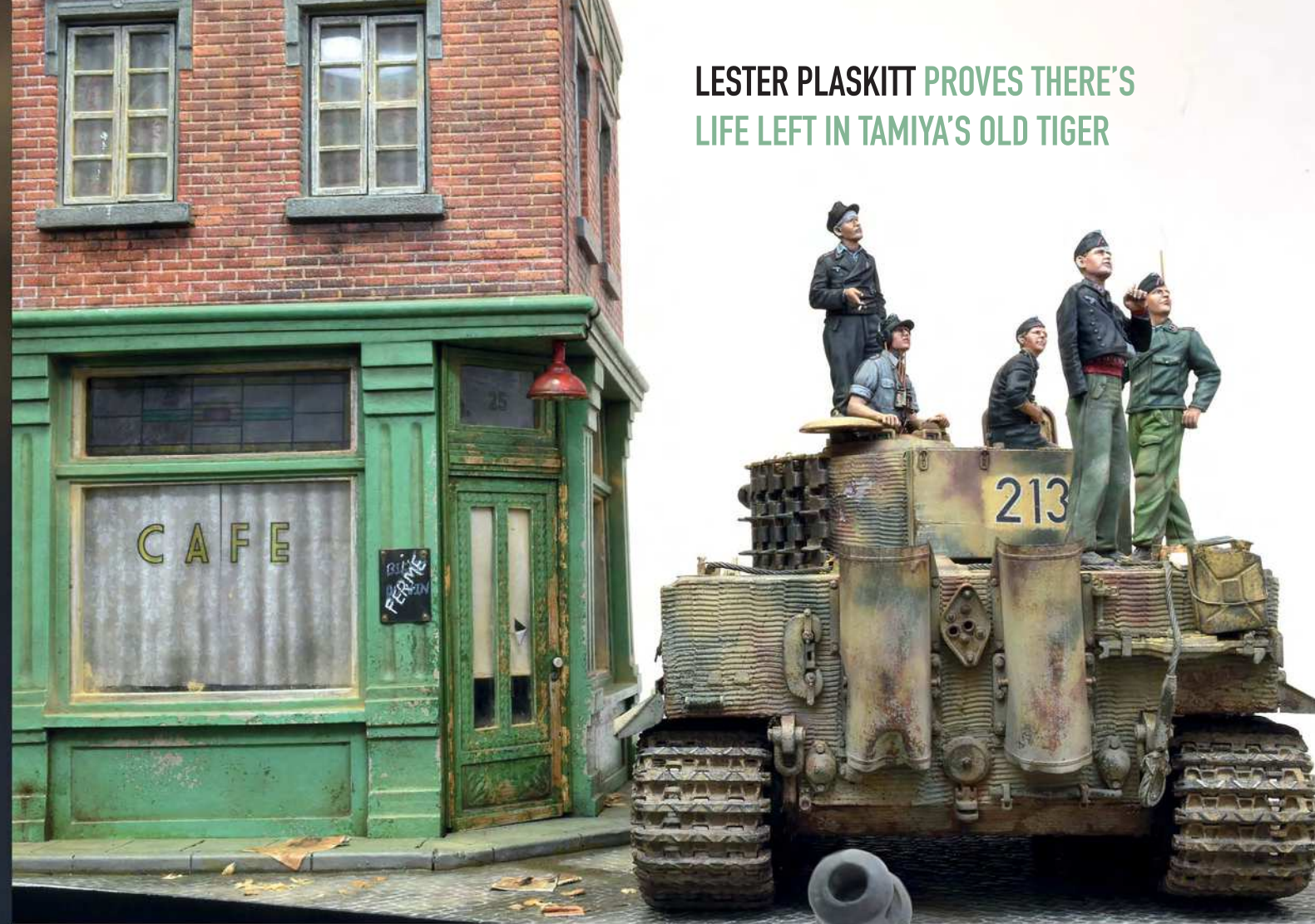
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FLUGZEUGE?

Tiger 1 sPz Abt 503, The retreat from Normandy August 1944

LESTER PLASKITT PROVES THERE'S
LIFE LEFT IN TAMIYA'S OLD TIGER





The main building components are assembled using slow drying epoxy cement to ensure correct alignment of each wall segment. Following a coat of grey primer the brick areas are undercoated using various red and yellow acrylic tones representing the colours found in aged brickwork. Once dry the mortar in-between the bricks is recreated with an off white and beige oil paint mix applied to the brickwork which after 15 minutes is removed from the brick surfaces with a wide brush moistened with white spirit. This technique leaves a subtle effect of worn mortar between the bricks, which once dry can be further enhanced with random dark washes to add more interest and further enhance the worn brickwork effects.

The German retreat from Normandy to the Seine River in 1944 has always been an area of interest to me from both a historical and modelling perspective. The many publications and photographs on this subject provide a wealth of modelling inspiration with the one powerful German forces in Normandy in a desperate flight to escape the advancing Allied forces. One photograph in the After the Battle book "Die Ruckmarsh" caught my attention showing a Tiger 1 from sPz Abt 503 in a Normandy town during the retreat with an exhausted crew finding some respite from the constant allied threat. As one of the threats most feared by the Germans were the deadly allied fighter bombers or "Jabos" I decided to model the Tiger shown in the photograph but for a more dramatic effect show the crew's short rest being disturbed by the ominous noise of an approaching Aircraft engine in the distance. Having decided on the vehicle and crew for the vignette my attention turned to a suitable building to act as a backdrop.

The building chosen was French or Dutch café corner from the Dutch manufacturer Dio Dump, the building comes as a complete kit cast in resin that also includes curtains, stencilled window panels and even a small bag of grit to



A common feature seen on period French buildings was the painting of lower level brick work which was prone to flake and peel off after a relatively short time. To represent this AK chipping fluid was first applied to this area followed by 2 thin coats of acrylic white applied with an airbrush. Once dry the white was chipped away using a stiff brush and warm water.





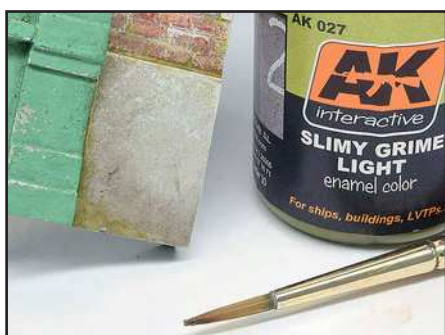
Next in the painting process came the preparation of the plaster rendered window and door areas, I wanted to show damaged and peeling paint work in these areas showing the exposed plaster. First brown and grey enamel washes were applied to the base grey primer to represent aged plaster and as I wanted to show some heavier damaged and peeling paint, rather than use chipping fluid for this effect I chose to use a masking fluid which was applied with a sponge to areas most likely to show signs of peeling and damaged paint. Also at this point I had replaced the kit window frames with modified plastic units from the Mini art range as they gave a better representation of the windows used in the Normandy region.

For the peeling paint effect to look realistic a thicker base colour layer is required, with this in mind the first green tone from Vallejo was brush painted on in two quite heavy coats. Once this had dried more masking fluid is applied via a sponge but in more selective areas. The Vallejo green was then lightened with white and a final heavy top coat applied again by brush.



Here you can see the results of the chipping fluid technique.

Once the paint has fully dried the masking fluid is removed by rubbing a latex glove over painted area, the latex glove effectively lifts off the masking fluid leaving a realistic chipped / peeling paint effect. As I had applied a lightened top coat, I now have the effect of both the older darker green paint showing through the newer lighter green paint and heavier peeling and chipping which has exposed the underlying plaster. It is vital to make sure all of the dried chipping fluid has been removed as any residue can cause a reaction with latter oil and enamel washes.



AK 027 slimy grime light enamel is used to add damp effects to the lower plaster areas.



The same masking fluid effects are added to the roof capping stones followed by the upper story window sills being painted in a light grey tone and weathered using a sponge chipping effect. The window frames are undercoated using an off white acrylic tone.



A dark grey oil wash is now added to the window frames to give a worn exposed wood grain effect.

The highly detailed door is supplied in the kit as a one piece resin casting and is weathered again using the masking fluid method and the previous green tones with wood tone acrylics acting as the base colour. An oil wash of Abt 502 Burnt Umber oil paint brings the paintwork effects to life.

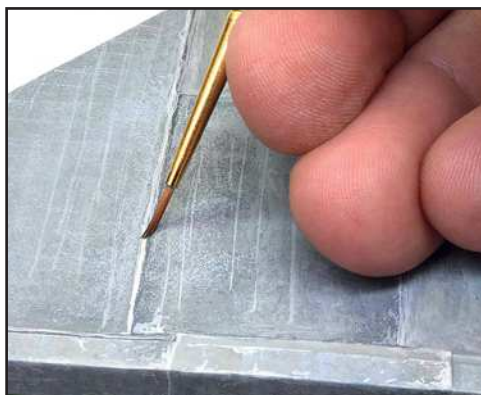




The shadow effects were further enhanced using MIG productions dark wash applied via airbrush to areas of the building where the brickwork and plaster would become naturally stained such as under window sills and architectural features.



With the walls weathered my attention turned to the roof, the roof section comes with some excellent moulded detail representing the lead sheets that were used in real life to make the roof water proof. Work on the lead sheet began with a undercoat of acrylic medium grey followed by oil washes to make each lead sheet appear slightly different. Once the oil washes were dry various grey tones were applied over each panel using a sponge to build up a random pattern of grey flecks seen in aged lead sheeting.



To give more definition the edges of each individual panel are highlighted in light grey along with some addition marks in the panels all which add interest to this section of the building.



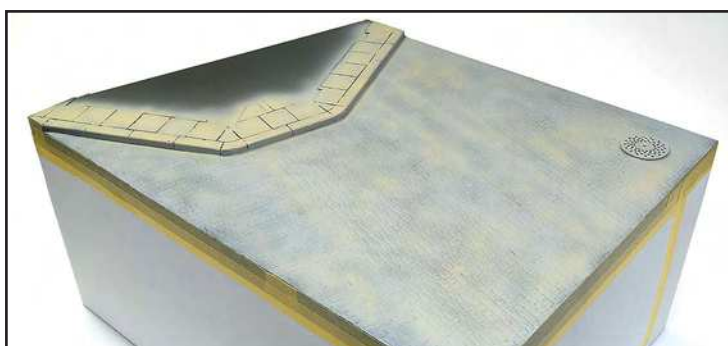
As the highlighted edges turned out to look a little stark a second oil wash of Abt 502 dark mud was applied to reduce the contrast.



It is common for flat roofs to have patches of moss and algae growing on them, this was replicated using AK Moss deposits and Green pigments. Note the moss was placed in logical areas where the roof would stay damp longest as this is where the moss would naturally form.



Along with some wet effects in the corner and along the gutter lines some dead leaves and weeds are added to further enhance the natural look of the roof section.



Work on the street base was also being carried out alongside the building. The base is a plastic card plinth with the footpath being made up from plastic card and the cobbles coming from some embossed wall paper which has a realistic scale cobble texture. At this point the base is being blocked in with base colours over a black undercoat.



The paving slab texture has been highlighted using the MIG productions wash applied with a sponge, with the individual slabs being highlighted with a pin wash in-between each slab.



The cobble texture and definition was achieved using pigments. First the pigments were applied dry then fixed with acrylic thinner; once the thinner had dried the excess was removed with a sponge leaving the pigment in the recesses between the cobbles.



To add some colour and help focus the viewers' attention a street lamp from mini art was painted in a bright gloss red then weathered down using acrylic chipping and oil washes to give a more aged and worn appearance.



The glazing comes on a pre-printed clear sheet once each window was cut out the clear sheet was fixed in place using white wood glue to prevent any fogging of the clear sheet. To blend the glass in with the rest of the building MIG European dust pigments were liberally dusted into the corner of each window.

To link the building to the vehicle in the vignette and add a secondary back story I decided to have a French civilian cautiously peering out from behind the upper story curtains at the German Tiger parked below. This figure was made up of a Hornet head with his arms and body coming from the scrap box.



The curtains are again supplied in the kit as printed paper with an embossed pleat pattern to show the folds in the material. Two different patterns are supplied which is a very nice touch by the manufacturer. To add a little more wear and life to the curtains some deeper shadows were added again using the MIG productions dark wash applied via my airbrush. Once dry the curtains were fixed in place and the interior of the building painted in matt black before plastic card again painted matt black was used to blank off the rear of the building.

After making a suitable weathered door frame the door was fixed in place and some final details added.





Although there are numerous manufacturers nowadays that produce excellent models of the late Tiger 1 variant, the model used for the vignette is the older Tamiya late production version. This model was used as it had been built and painted earlier but I was never happy with the how the paintwork had turned out so this gave the perfect opportunity to repaint the model. The model had been built with aftermarket additions to make a more accurate representation of a late production Tiger 1, such as an etch brass set from Aber and Zimmerit from Attack.

At this point the base dark yellow looked a little cold and the camouflage pattern a bit too stark. To bring some warmth back into the paintwork a well diluted filter of Tamiya X24 clear yellow was applied being careful not to let this colour pool around any details on the model.

After re priming the model the AK real colours German army 1943-45 paint set was used to apply a soft edge 3 tone camouflage pattern using my reference pictures as a guide for the pattern. As I always like to work from a light base colour RC 018 pale sand was used to lighten the dark yellow base colour slightly.



Again following my reference pictures the subject vehicle appeared to have had a replacement barrel that had not been repainted to match the camouflage pattern but left in the factory supplied heat resistant dark grey paint. To match this, the barrel was masked off and a dark grey tone was added again using AK real colours.

Here we can see the colours 'from the jar' prior to the yellow filter.



Once the clear yellow filter had dried my attention turned to the vehicle markings. An interesting feature of the vehicle the model is based on was the appearance that the original tactical number had been painted out and a new number applied.

This may have been a result of vehicles being transferred from the third company (which was to be equipped with the new King Tiger) to the second company to replace its losses. As the pictures clearly show the old numbers still slightly visible I decided that it would be required to reproduce this on the model. Firstly Archer dry transfers are used to add the still visible number from the 3rd company. These markings were then lightly scratched with a scalpel to show signs of age and



To give the impression of newer paint a lighted colour of the base dark yellow was mix and brush painted over the third company numbers following the pattern in my reference pictures. This effect was applied in 3 light coats as this enabled me to cover the numbers but still have them still visible under the yellow mix.



Now the new second company numbers again from Archer are added followed by some further subtle scratches.



Once the German Balken crosses had been added to the hull the decals and paintwork are sealed with an acrylic varnish, satin for the metal areas and matt for the Zimmerit areas.



the paintwork was further weathered with a filter of AK enamel Dark brown wash.



Here we see the model following the wash and awaiting further fading of the base colours.



The oil dot technique was used to add the required further fading. Here we can see the colours used from the Abt 502 oils range. Note that before the oils are applied they have been left on cardboard pallet to allow the linseed oil to seep out which will help prevent the oils drying with an unwanted sheen.



The oils are now carefully blended into the base paintwork using a flat brush moistened with thinner.



The Tiger is now completed with my usual methods of pin washes, sponge technique scratches and acrylic dust washes. The tracks are from Frui models painted in acrylic red brown and grey tones and weathered using acrylic dust washes. Now all that is needed is the crew.



The crew figures were always going to be the most important part of this vignette as their poses would be vital to convey the atmosphere of the whole vignette, I did not want to have the crew posed in dynamic styles as if an aircraft was overhead, I had more in mind of the nervous crew taking a breaking and then hearing what may be an approaching aircraft in the distance. The crew figures are made up from the Alpine range and one figure from Dragon, with areas of conversion required to find the correct stance and ensure the figures interacted by all looking in the same direction as the possible oncoming threat.

A lot of test fitting and adjustment was required to get positions I was happy with. Once satisfied, the figures where undercoated in white primer to check for any imperfections. Note that two of the figures are wounded these were added deliberately to reflect the high casualty rate suffered but the German forces during the retreat. At this point we can see the face painting has been completed using the AK flesh acrylic paint set, the uniforms will



The figures uniforms have now been completed again using acrylic paint, the uniforms were painted in a wide variety in uniform styles and colours as this reflected the diverse styles worn by German tank crews (even civilian jumpers) and also helped to make the figures more interesting and appealing to the eye. Subtle weathering with dry brushing and dust coloured pigments were also added to the uniforms to give the impression of dust and dirt which further tells the story of a tired and retreating force after hard fighting.







FLUGZEUGE?



SCHNELL MARSCHES





Sam Dwyer
gets on the right track
with his ingenious
Tiger transporter
diorama

CHOP SHOP

For as long as I can remember I have wanted to create a scene with a German heavy tank on a rail car. The Wehrmacht used a number of flat car rail carriages, the SSys being the 4 axle car designed for medium armour, and the SSyms being the 6 axle car designed for the German heavies. The SSyms 6 axle heavy rail car is somewhat iconic, the German Army was dependant on rail travel to move their armour around from battlefield to battlefield, theatre to theatre. As much as I wanted to create a scene showing rail movement, a Tiger or King Tiger plonked in the middle of a single rail car, this concept seemed very static and one dimensional to me. There had to be a better solution.

Meng released their King Tiger in 2017, and it's a fantastic model. Easily the most accurate Tiger II available, it was also released in conjunction with a full interior kit, so people could either build a Tiger II exterior only, or go bananas and build one with all the interior detailing possible. I was unable to resist building the kit and adding the full interior, it was a huge build with an enormous number of finely detailed parts, and it all fit together perfectly. Typically for me, I got distracted by other

projects and the Tiger II was parked, with its interior built and painted, waiting for the exterior to be painted and weathered. An idea began to form, rather than place one tank in the centre of a rail car, why not shake the concept up and make it two tanks and two rail cars? If I was able to cut a tank and rail car carefully, I would be able to show the rear of one tank, the front of another, and introduce some dynamism to the scene. Out with the razor saw!

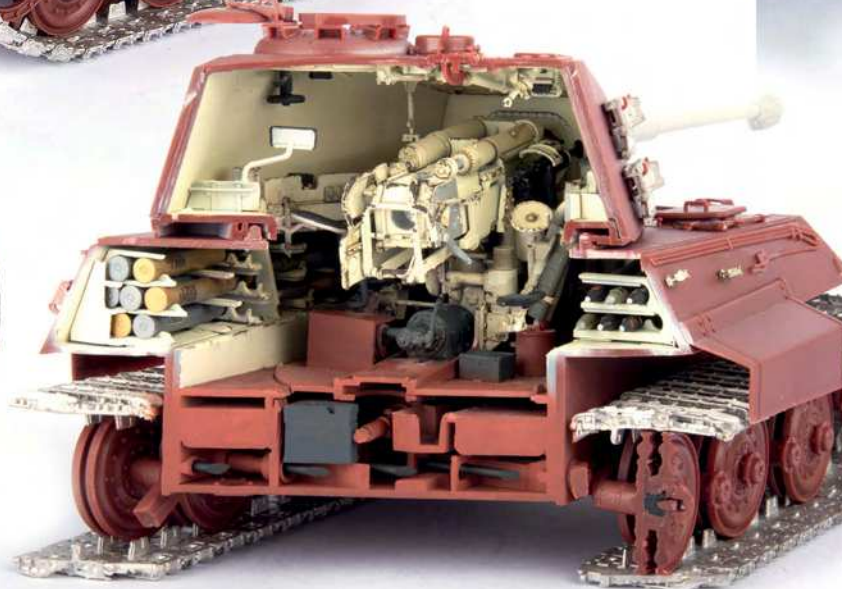
Before doing anything irreversible, I built the Sabre Models SSyms flat car. Sabre is a relatively new player on the scene and their SSyms flat car is a gem. Included in their kit is the full rail car itself, a set of amazingly thin woodgrain decals for the flat bed, and a bunch of laser cut wooden accessories. The Sabre kit is made up of some interesting ABS style plastic, which needs some patience to assemble, but is worth the effort. I reinforced some of the joins hidden underneath the flat bed, because I knew the cutting process would put a lot of pressure on the plastic joins. Once built, I set about working out how best to position the tank on the flat car in order to make the cuts

I used a pencil to mark out where the cuts needed to be made on both the tank and the flat car. Ensuring the angles on the tank matched the angles on the flat car, it was time to cut.



Using the largest razor saw I could find, I carefully cut the Tiger II first. This might sound daunting, but it ended up being super easy.

I placed the turret onto the hull, and started the cut. I kept the cuts slow and deliberate, making my way down through the turret and hull in one sitting. The only stumbling block was the depth of the razor saw wasn't enough to make it all the way through the tank, so I removed the thin blade from the handle to complete the cut.



Cutting the rail car was easy compared to the tank. Making these cuts exposed the open end of the rail car and the tank - more work to fix! Luckily Meng's Tiger II interior is very comprehensive, nothing is missing or out of place. It helps that AFV Modellers' own David Parker helped Meng with their research. Using Tamiya quick type epoxy putty I filled in the exposed open ends of the Tiger II's under floor fuel tanks and battery boxes. I felt these would look out of place if left open, I wasn't about to replicate fuel or battery acid sloshing about in these. As the interior was already painted and weathered, I only needed to touch up the exposed cut surfaces. I filled any gaps in the armour plates with Tamiya grey putty, and once cleaned up painted these edges with Mission Models Red Oxide primer colour (MMP-013).

Moving to the outside of the tanks, I wanted to portray these as two very different vehicles. I didn't want to leave any doubt in the mind of the viewer that they were looking at two tanks being rushed to the front for the coming battle. Schwere Panzer Battalion 506 (s.Pz.Abt 506) were moved from the eastern front to staging areas in the west in time for Operation Wacht am Rhein some time before December 1944, this unit seemed a perfect candidate to depict. They received new and replacement Tiger II's during this time. Whilst very few if any images exist of this, by examining images of knocked out 506 Tiger II's in the Ardennes we can see older tanks, built before September 1944, with zimmerit as well as tanks built after then, with no zimmerit and standard factory applied hard edged camouflage. To set these tanks apart, I applied zimmerit to the front tank (the rear portion). This was done using Tamiya smooth type epoxy putty, spread very thinly and textured using Lion Roar metal zimmerit rollers. The rear tank (the front portion) didn't receive zimmerit, as it's a post-September 1944 build. Friul single link Tiger II track was added to

this model, with regular double link Tiger II track added to the older tank with zimmerit.

Both tanks were painted with Mission Models paint after carefully masking off the interiors. Both received a base coat of MMP-019 late war dark yellow. The older tank then received a soft mottled camouflage pattern with MMP-018 Resedagrun and MMP-015 Rotbraun RAL8012. The newer tank with the hard edge pattern received a more boldly applied pattern using MMP-009 Olivgrun and MMP-013 Rotbraun RAL8017. Using the King Tiger 'Wildsau' article in AFVM issue 94 as a guide, I airbrushed the camouflage in a very tightly sprayed pattern, then brush painted the edges to get the hard edge look. Ambush dots of dark yellow and olive green were added using a length of Evergreen 30 thou plastic rod and dotting the paint on the model. Not very scientific but it works. To really push the angle that these were two different tanks, I set about weathering both tanks quite differently, making sure I finished the weathering on one tank completely before moving onto the next. I didn't want one process or colour to carry over between vehicles. This was vital to get them looking quite different. The tank with zimmerit was an older tank that had seen a lot of combat with the unit, and was weathered accordingly using mostly acrylic washes. Using a range of colours from Mission Models, Life Colour and Vallejo I faded and distressed the paint. Weathering zimmerit is great fun, it has a texture that weathers very easily and before long I was onto the newer tank. This tank had only been collected from the factory and used in troop work up training, so weathering had to be kept to a minimum. This was done again with acrylic washes. Vallejo German Camo Beige is your friend. I find myself using this colour a lot - it has the perfect sandy grey tone that suitable for dust and dried mud and grime.



PAINT YOUR WAGONS

The rail cars were painted next. I primed both sections of flat car and both bogies with Citadel Miniatures Chaos Black in a rattle can. I wasn't sure about most paints adhering to the odd plastic in the Sabre Models kit. This formed a very hardy base to apply the standard Reichbahn colour dark grey, in this case Mission Models MMP-014 Panzer Grey. I applied several cloud coats of this over the primer, then added some white and applied some more faded coats. Over this went a solid coat of clear gloss, in order to take the extensive decals. One of the things I had really been looking forward to was applying the very distinctive markings to the rail cars. Sabres decals are super thin and went on perfectly, and look great. The inclusion of woodgrain decals for the flat deck of the rail cars is a great touch. These looked daunting but went on amazingly well. These did make the model look like a find piece of furniture, so some work would be needed to make the wood look like it had seen a hard life. After a couple of coats of flat varnish, I set about weathering the wooden panels, again with acrylics. Various browns, greys and greens were mixed and applied to the rail cars, concentrating on the flat top wooden section. Weathering these was pure joy. I was able to go nuts, making them look used and cruddy. The last thing to add before gluing the tanks down was to apply a layer of mud



and dirt. As part of the loading process tanks would be driven along the flat cars until they reached the car they would travel on, so it makes sense that there would be a fair amount of filth evident. Using Vallejo crushed grass this was added to the rail cars.

I had a good friend build me a wooden base to the exact measurements I needed, I wanted the scene to be a cut cross section, almost like a snapshot. I carefully measured out the exact width and length I needed and in a few days I had a solid base to start texturing. Styrofoam was used to build up the rail bed and raised sections of the base. I glued these to the base with PVA glue. The rail car and tanks are very heavy, before gluing the tracks and sleepers to the base I threaded some brass wire under the sleepers and tracks, once the groundwork was completed this wire would be used to lash the bogies and therefore the rail cars to the base very securely. Air dry modelling clay was used to add groundwork to the base, I liberally applied PVA glue to the base and over the styrofoam first then clay was added to the base, pushed into corners and around the sleepers and under the rails.



I used some 80 thou Evergreen styrene to create a clean edge to the groundwork, this was glued to the base with two part epoxy glue. After being set aside a week for the groundwork to dry and cure, the whole base was primed in Chaos Black. AK Terrains texture paint was used to impart a grubby dirty look to the base, I wanted this to look like a railway siding.



SCRUFFY SIDINGS

These areas are rarely looked after, so this presented another opportunity to push my weathering skills. Ballast in and around the railway sleepers and tracks was added using Woodland Scenics ballast, and glued to the base with watered down PVA glue applied with a pipette. Capillary action spreads the thinned glue down into the rocks and once dry these were weathered with lots of black and brown acrylic washes.

I found some resin tree stumps in my spares box, these were added and painted up to look old and neglected. Moss was applied to the north face of these stumps, or what I assumed was the north face. Slimy muddy water was added to the low points of the diorama base using several thick applications of Vallejo Wet Effects, this is a gooey acrylic wash that dries with a slight glossy green tinge and is perfect for standing fetid water. Perfect for a railway siding.

Miniart of late has been releasing some fantastically interesting kits that serve diorama builders well. I used their water tower, German sign set and railway tool set, with careful painting these sets add some real life to the diorama. I also couldn't resist adding some pigeons from their newly released pigeon set to the top of the water tower. And pigeon Pooh. This was great fun to paint on - I used Vallejo off white and a fine brush to apply it all over the upper sections of the water tower.





FIGURES

These can make or break any model, more so when building a diorama. I sourced the figures from Evolution Miniatures, Stalingrad, Tank and one old Verlinden figure. I had to chop and change some poses to ensure they sat well or interacted with each other. There is nothing worse than a group of figures who whilst positioned closely, don't look like they're interacting with each other, It looks like they're posing in a menswear catalogue! After getting the poses right I painted all the figures with acrylics, after painting all faces and bare hands with oil paints. Try as I might I can't get faces right with acrylics just yet. The figures were pinned and glued to the tanks and rail cars, brass pins through the feet and into the models.



END OF THE LINE

Checking images of German tanks being transported, it's easy to see that these rail movements had the rail cars looking like gypsy caravans, with stores and crew gear thrown everywhere. I used Eureka Models resin 88mm L/71 ammo boxes and tubes for the ammo stowage, and Tamiya jerry cans for the fuel cans. These were detailed by adding a seam join with 5 thou Evergreen plastic sheet. This is missing on Tamiya's jerries, adding this takes a few mins but is worth the effort. All the ammo and jerry can stowage was base coated with Tamiya acrylics and individually weathered with Vallejo acrylics. Crew stowage came from Vallejo, painted along the lines of everything else and weathered with more acrylic washes.

That about wraps it up - I think I have been able to capture a snapshot view of a railcar scene of German armour being rushed to the forming up point for Operation Wacht am Rhein.





Regrettably WH Smiths have announced that they are introducing a further charge to magazine publishers for every WH Smiths store in which their titles are stocked. These charges mean that for many of their stores, the costs of being on the shelf will exceed any profits made from selling the magazine. WH Smith's decision means that we have been left with no choice but to withdraw from the news stands in those stores. AFV Modeller may no longer be on display in your local branch but you can still order, reserve and collect your copy from WH Smith, just ask in-store.

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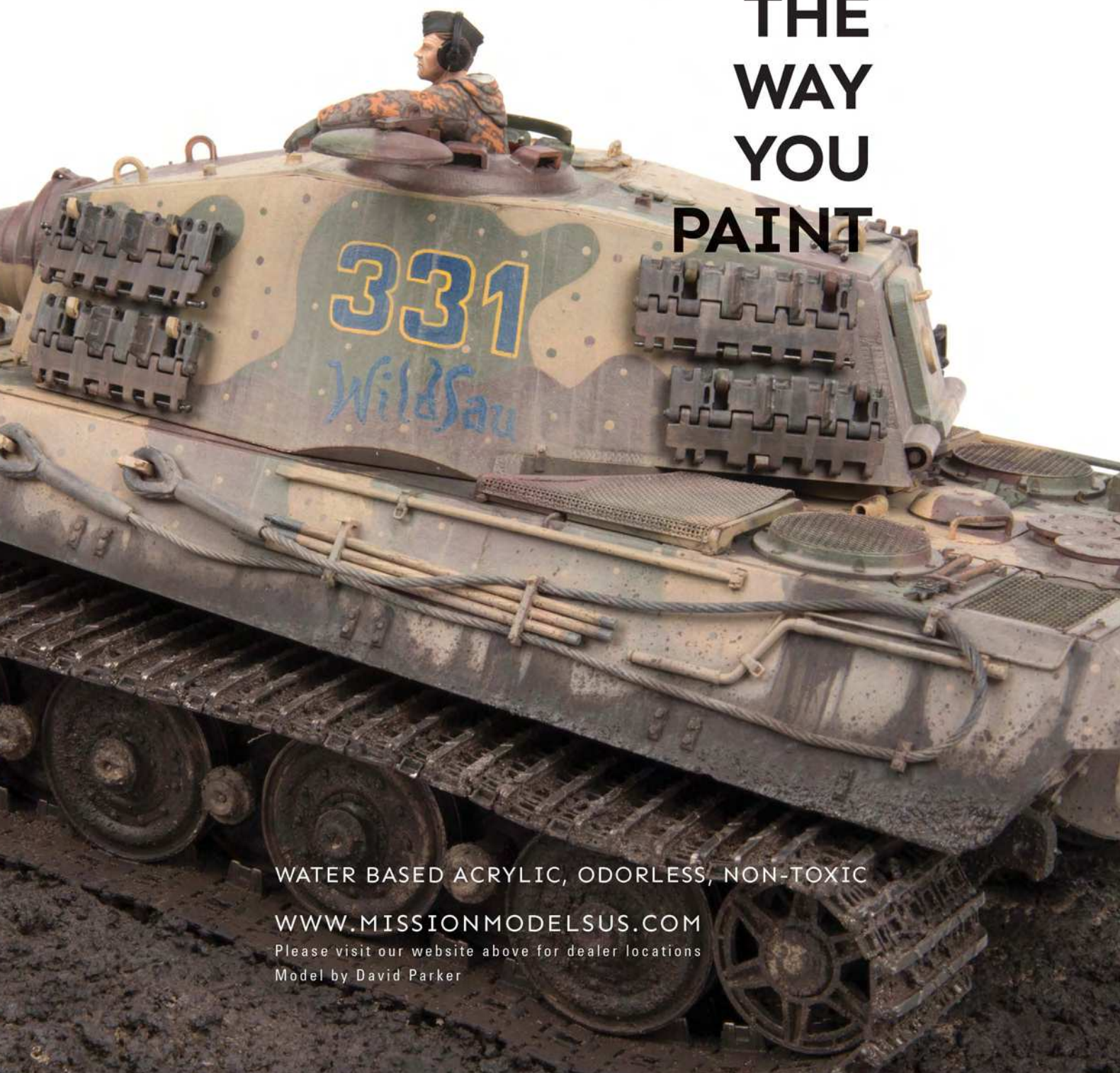
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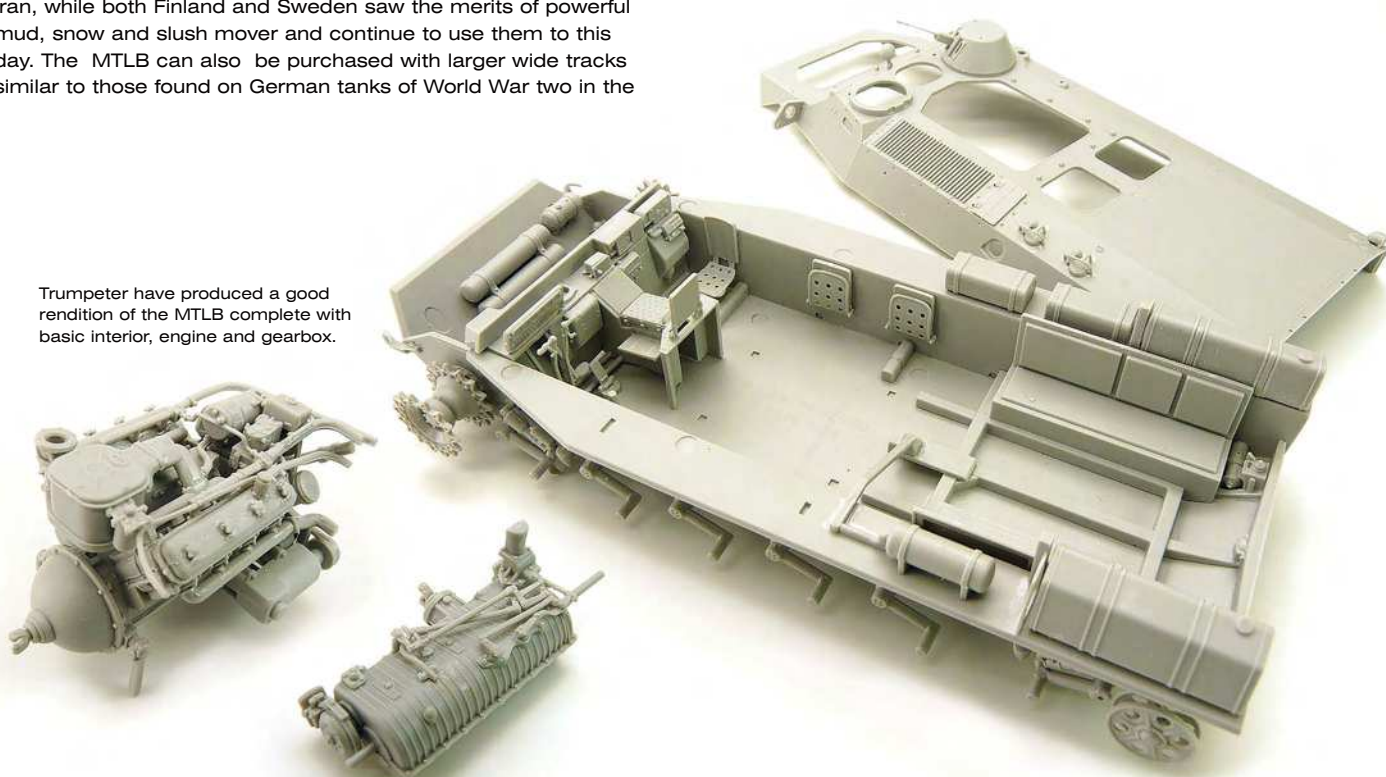


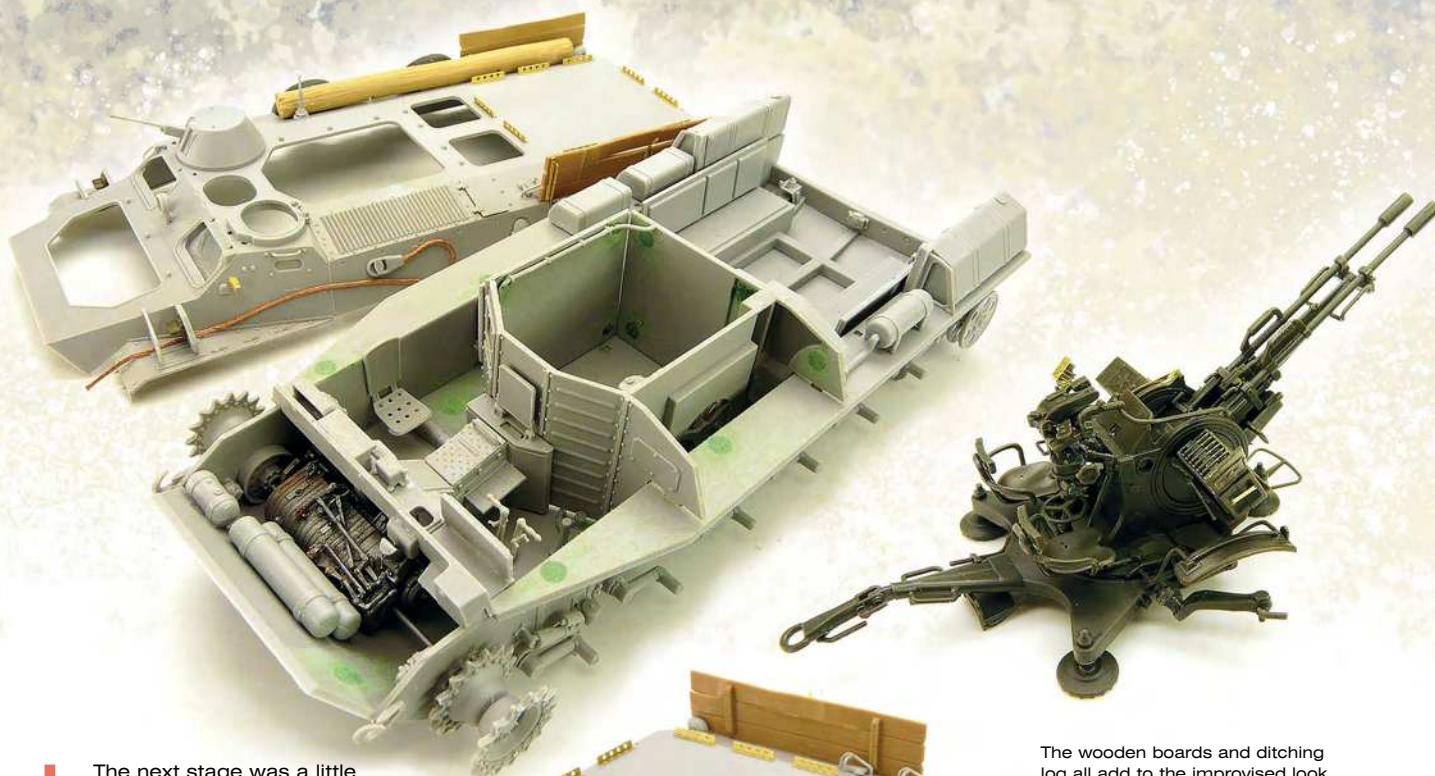
Through out the Great Patriotic War the Soviets deployed numerous artillery tractors based on American designs. The US supplied the only true APCs in the form of M3 halftracks and Whites Scout Cars. In the 1950s Red Army designers came up with designs such as the tracked BTR 50 that could pull artillery and carry troops into battle. Utilising half of a V12 diesel engine found in the T55 and the same layout as the PT 76 scouting tank the BTR 50 proved a successful vehicle throughout North Africa, Eastern block and Vietnam. At the same time the Soviet Central Auto and Tractor Directorate began working on the design of a new armoured tractor unit, the MTLB entered production in the 1970s a low silhouette design based around the YaMZ 238 V8 or Kraz truck engine .The MTLB could carry 11 infantry men or a cargo load of 2000kg , it was specifically designed with towing the new D30 122mm howitzer, while its roof had tie down cleats which were spaced out for tying down a number of 122mm ammunition boxes but it could tow a range of heavy artillery pieces through mud, snow and desert sand. To the fore of the vehicle is the driver's hatch to the left and a small PKT machine turret to the right. This cheap, powerful and reliable tractor come APC was to prove highly successful in Soviet and Warsaw Pact service, also being produced in Poland and Bulgaria under licence. In terms of export sales the MTLB would see service with the Iraqi army in large numbers in the desert sands of Kuwait and Iran, while both Finland and Sweden saw the merits of powerful mud, snow and slush mover and continue to use them to this day. The MTLB can also be purchased with larger wide tracks similar to those found on German tanks of World War two in the

East. The basic MTLB chassis has also been used for a range of radar vehicles, SAM units, SPGs, and even engineering vehicles. Being a relatively recent vehicle compared to the BTR 50 the MTLB has seen action in Iraq, Chechnya, Georgia, Nigeria , former Soviet state conflicts and on both side in the current Ukrainian conflict. Ukrainian forces, DNR and Russian forces have added all types of extra armour and weapons to their MTLBs in an attempt to improve the survivability in this very modern of battlefields, but more on that later.

Until recently the only option available for the modeller who wanted to build an MTLB was the rather straight forward Skif kit , it's rubber tracks and badly shaped wheels badly needing replacement. This could be cheaply achieved by purchasing SP Designs very reasonable resin tracks and wheel set, but that left you with a closed down vehicle with no transmission or engine details. Happily Trumpeter has responded with a highly impressive offering complete with transmission, interior and YaMZ engine and it really is major improvement on the Skif offering but also a big step up in terms of quality and detail from Trumpeter itself.

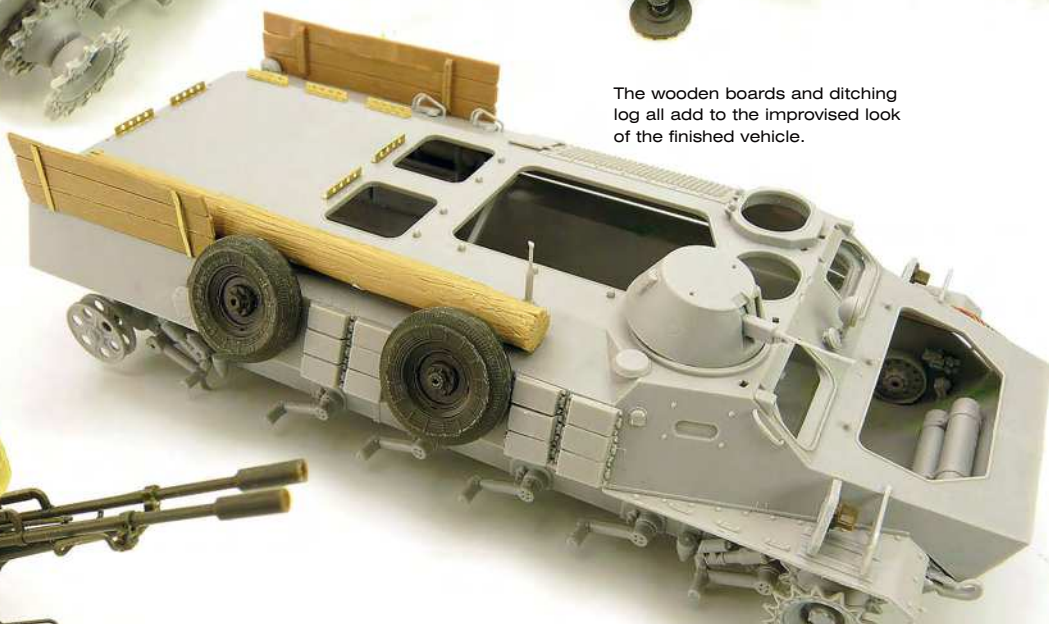
Trumpeter have produced a good rendition of the MTLB complete with basic interior, engine and gearbox.





The next stage was a little model in itself having decided on the ZSU variant I picked up Meng AA gun set which gives you four in one box , including a ZSU 23MM. I built mine with scratch built gun shields which seem to be all the rage not only in Ukraine but Syria and Iraq.

The wooden boards and ditching log all add to the improvised look of the finished vehicle.



I knocked mine up from two etched Maz 537 interior door covers , it seemed a much better use for them then painted ,weathered and washed the AA gun till I was happy with it and topped it off with two Skif Ukrainian details.At this point I added two wooden side sections , some spare T64 reactive armour tiles and the pair of ZSU 23mm trolley wheels to the side of rear hull.

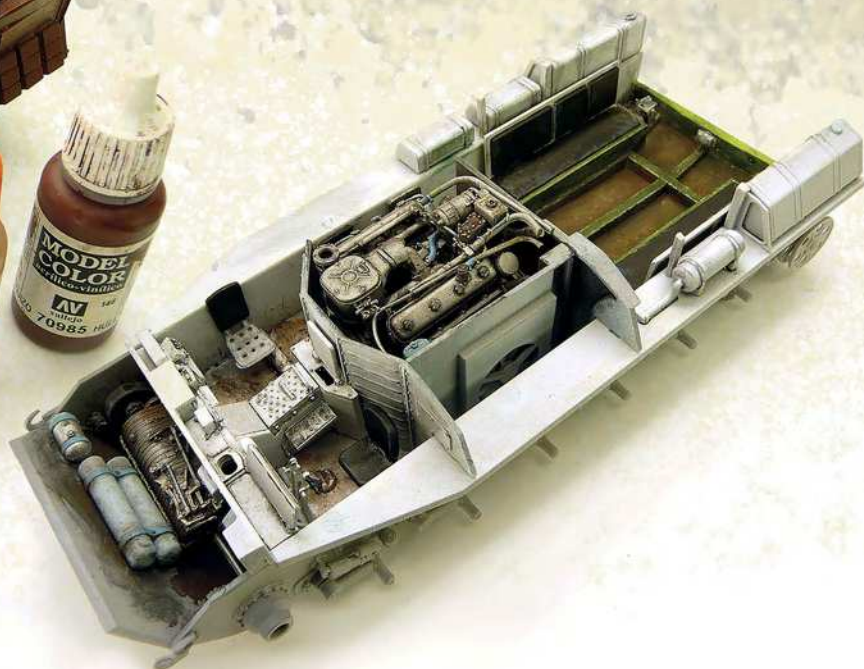
Wilder Weathering Oils have a much quicker drying time than artists oil colours but still offer the benefit of blending.



Lamp Black oil washes lift the detail of the ZSU and help with the weathered appearance.

Wilder 'Black Smoke Wash' works well on the silver finish of the engine and gearbox.



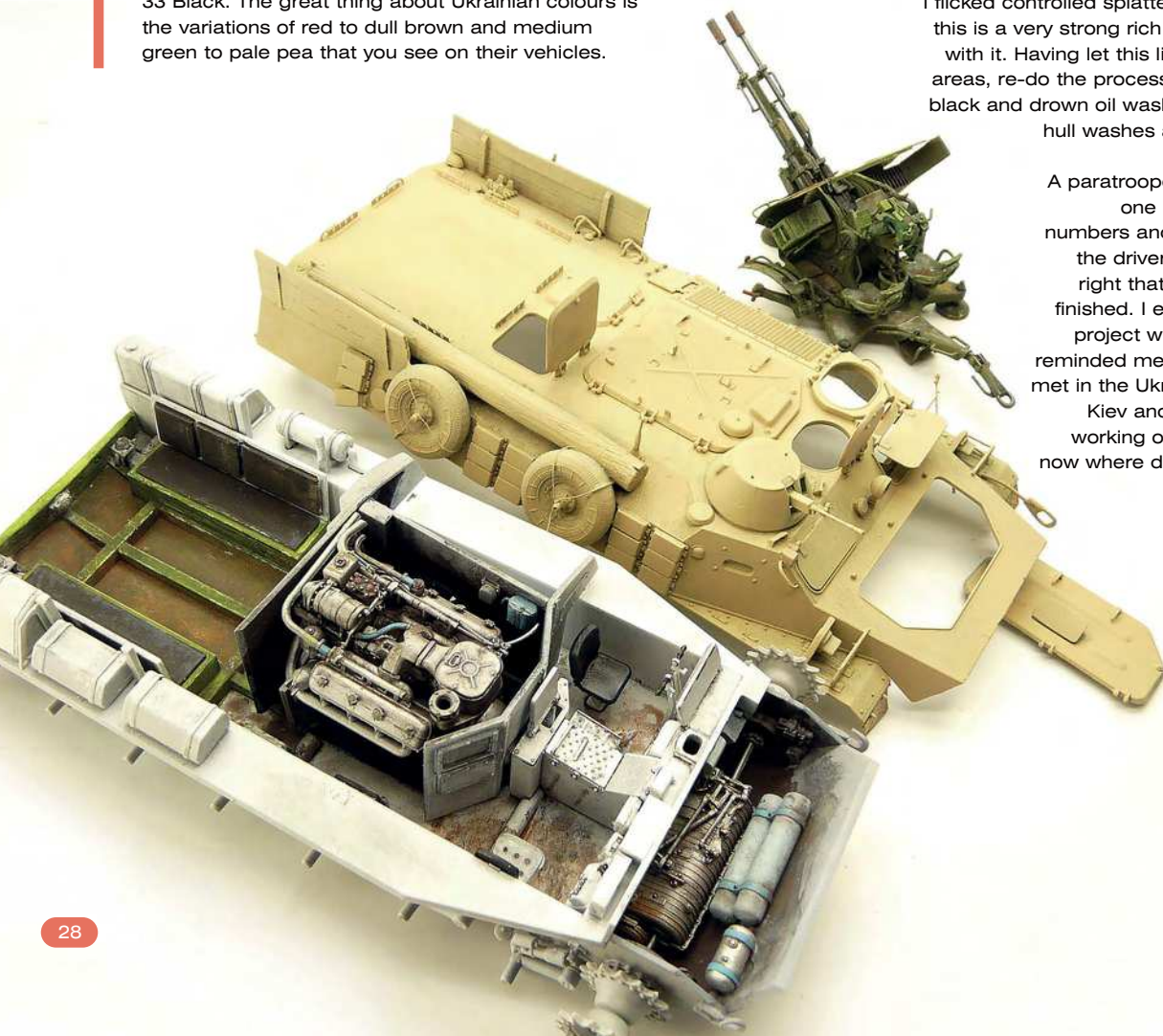


At this point my friend Arturas Skyrius popped around. He had served in the Red Army between 1987 and 1989 the MTLB being one of his favourite vehicles. Arturas had served in a D30 artillery unit so became very familiar with the MTLB as he served in Ukraine, Latvia and Kaliningrad or formally East Prussia at one point being based in a former German Army tank barracks. It had been a hard hungry existence and he tells great stories of the frugal existence he and mates lived back in those times. We settled down to painting the upper hull of the MTLB and choose a very colourful mid Green , Red and black outlined camo very particular and fairly common on Ukrainian tanks , APCs and trucks.

These colours were variations of Humbrol enamels Scarlet 60 and Leather 62 mixed to what seemed correct consistency, 101 Mid Green and a lightened 33 Black. The great thing about Ukrainian colours is the variations of red to dull brown and medium green to pale pea that you see on their vehicles.

Eastern Ukraine wear and tear... Now was time for a bit of fun, the weathering of this particular beast was going to be tricky, as I wanted to really muddy it up as seen in footage and photos from the Ukrainian conflict in the ATO or Anti Terrorist Operation area, but not going completely overboard. At first I applied a series of brown muddy colours over the lower wheels and tracks while picking out details on the wheels such as the black tires, metal rims these were then over washed with a series MIG productions pigment from years back. Over this I flicked controlled splatters of Wilder Dark Mud this is a very strong rich pigment so be careful with it. Having let this little lot dry I'd rub back areas, re-do the process and give some areas black and brown oil washes, followed by upper hull washes and 6B pencil rubbing.

A paratrooper decal as spotted on one MTLB and some white numbers and a pale blue tarp over the driver's hatch and I decided right that's that time to call that finished. I enjoyed working on this project with Arturas a lot, it also reminded me of the fine Tank men I met in the Ukraine during my visit to Kiev and Lviv. I look forward to working on a Ukrainian T64 next now where did I put that Trumpeter kit???



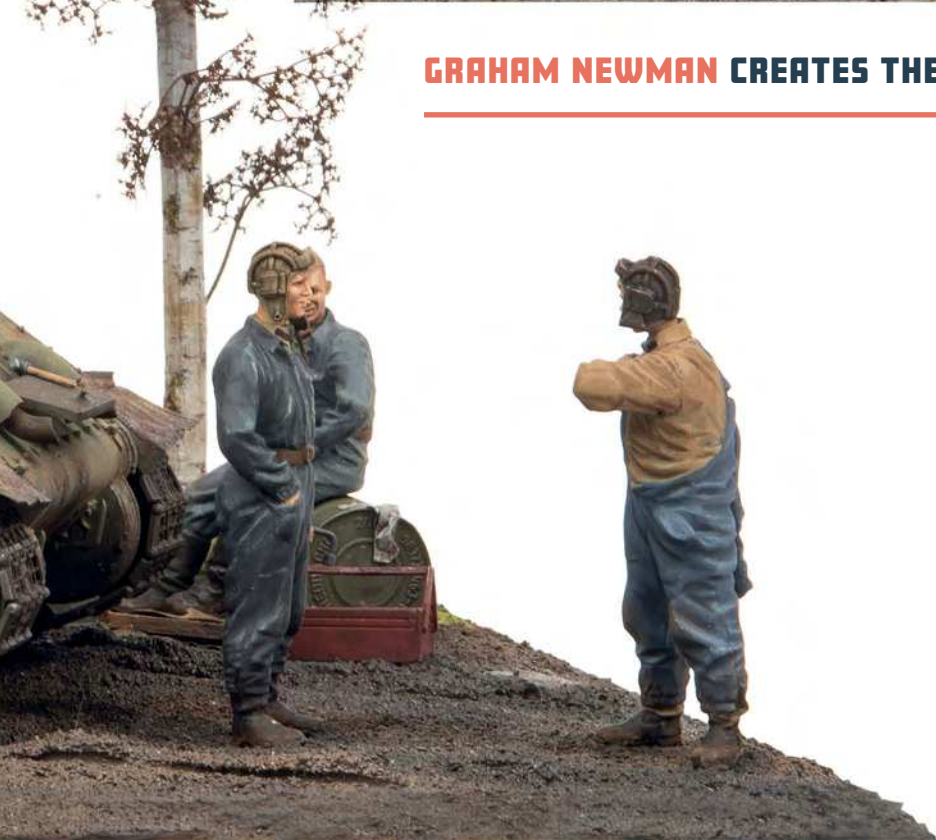


LUKIN'S RAID ON KALININ





GRAHAM NEWMAN CREATES THE LEGENDARY 'WHITE TWENTY' T-34



The German attack on the Soviet Union in June 1941 conjures images and accounts of the mass destruction of Soviet armoured and mechanised units. Whilst this is undeniably the case a closer look at the facts reveals some uncomfortable portents that were to become increasingly apparent as the campaign and war progressed. The initial German intelligence heavily underestimated the number of vehicles in the Soviet inventory 10000 as opposed to 22000, whilst this is disturbing in its margin of error quantitatively it also revealed a complete intelligence failure in the qualitative area (ie. the failure to recognise the existence of the T34 and KV1 series of tanks). These two vehicles were superior to anything the Germans had in armament and armour protection as well as incorporating groundbreaking design features such as the T34's sloped armour. It came as a devastating shock to the Germans that the Soviets could be a generation ahead in armour design, it was these two vehicles that stimulated the arms race on the Eastern front.



LUKIN'S STEED

Lukin's vehicle was a transitional model T34 manufactured at Kharkov locomotive works Zavod 183 just before it was dismantled and evacuated beyond the Urals to Nizhiny Tagil in September 1941. This was a simple conversion the most difficult part was identifying features from the limited photos available. I will simplify things by listing key identifying features and where the parts were sourced from.

Kit Dragon 6418 T34/76 1941 Cast turret, this provides many of the features required. Cast turret, correct hatch, turret rear. Single PT-4-7 periscope, early style ventilator

Chassis Correct rear engine hatch, front machine gun mount unarmoured, engine grills with horizontal vents, rounded nose with rivets joining the upper and lower chassis.



During the build weld seams were emphasised with Sylmasta Green putty and areas of cast texture were added to using Mr Surfacer stippling in a random fashion as it begins to go off. I have to say this was a fairly limited affair as Dragon did a pretty good job in this area. The open rear hatch was thinned to scale as were the flanges on the opening. I had an old Verlinden engine/transmission insert so that went into the opening, Miniart have recently released a fantastic engine drivetrain for the T34!

There are many spares in the kit like hull hatches and ventilator grills. Some key features of the vehicle were not present in the kit so I trawled through the numerous dragon T34 kits which again have loads of spares. In kit 6479 T34/76 Zavod 112 1942 I sourced a spare later drivers hatch but had to take the armoured periscope covers from an old tamiya kit as well as a tool box that sits on the left fender.

Tracks the photos show early V patterns, unfortunately there are two V patterns a slightly earlier type with no waffle as in our subject and a type with waffle. At the time of building no one produced the early so I had to compromise and used the later Model Kasten SK35 1941 V tracks.

Fenders I removed the original kits fenders as I like the finesse of etched brass an area where this medium is truly excellent. ABER replacements were used carving off the track retaining bolts on the original and adding to the brass. The large grill at the rear of the engine deck is an ABER item.

Returning to the opening phases of Barbarossa it begs the question why was the performance of the Soviet armoured forces so ineffective? In it's simplest form the answer is training and logistics compounded by the destruction of the STAVKA command and control by the German blitzkrieg. Stalin had recently ordered the creation of a new armoured structure and these forces were deployed close to the frontier with a bias of strength in the south protecting the resources of the Ukraine and the Donbas beyond. Most of the troops had been newly assigned without training and familiarisation with their new vehicles, workshop units were not fully deployed and were woefully equipped and trained. The logistics network was lacking enough trucks so it was a total shambles at the time of the German attack, in some units fuel and ammo was at twenty percent of required levels. It was fortunate that the Germans met the Soviet forces in this state of what can only be described as "chaotic unpreparedness".

Once the Soviets began to recover from the shock they were able to assemble better trained personnel so by the autumn they were able to launch small but significant attacks that disturbed the Germans not only operationally but psychologically. The action at Mtsenk by Katukov's 4th Tank Brigade blunting the 4th Panzer division's spearhead is one example, another which the model relates to is Lukin's raid on Kalinin in mid Oct 1941. The Soviets assembled a cadre of experienced tankers under the command of

Gun 57mm "Istrebitel" sourced from Panzer Art this is simply the Aluminium gun with mantlet and distinctive circular collar.

Tow shackles these are a hooked design that was around for about a year until the slightly larger familiar hooked shackles were introduced, luckily they were an option in the above kit.

Aerial Lukin's vehicle was equipped with a radio, the aerial mount comes from Panzer art.



Major Lukin to lead the attack. The force consisted of 30 T-34s about ten of which were experimentally armed "Istrebitel" (fighter) T-34s. These were armed with the Zis 4 57mm gun, this had a high velocity and excellent penetrating power, it was in use until late in the war as an anti tank gun and could penetrate the armour of heavier German tanks. It had some limitations however such as poor HE capability and series production for T-34 was never implemented as the 75mm gave more than adequate penetrating power whilst simplifying logistical supply of ammunition. Lukin's tank "white twenty" was one of the ten 57mm armed T-34s it was one of the few with a radio. Unfortunately the vehicle was damaged early in the attack and slid off the road. Major Lukin was killed escaping from his vehicle. The raid carried on under the command of Captain Agibalov who met a similar fate after shooting up an airfield and several aircraft. The unit went on to cause considerable damage to supply convoys, critically destroying key fuel tankers as well as many armoured vehicles.

The raid ended with several T-34 entering Kalinin before the attack was ended by German all arms support. There are several famous photos of the results of the raid across several publications, especially "white twenty" and normally armed "white four" which show the result of ramming a StuG III; several frames show the crew being dragged from the T-34 and the aftermath.



GREEN PIECE

I always paint the same way, the main body of the vehicle adding mud texture on the lower chassis, wheels separately then finally paint and fit the tracks afterwards. Onto colour 4BO green; well, the arguments about colour of all nations vehicles has certainly intensified over recent years with several manufacturers producing definitive sets of paint. Personally I feel there is a "little" leeway with shades as witnessed in colour photos however Soviet vehicles were never painted 'Apple' green as has become increasingly popular, it is up to the individual how they wish to paint their vehicles, it's a free and subjective hobby but making pretty colours so they stand out is not my personal taste. I used Xtracolour Russian green for the basis of the vehicle simply adding black for darker areas of shadow, whilst adding yellows, ochre and white for highlights. At this point the numbers were added by hand muting the white with a tint of grey referencing the photos. The mud is a combination of Acrylic gel, flour and pastels I never worry about the shade

as I mate the groundwork colours up onto the vehicle then darken or lighten to show dried or lightened mud, observation is key here, go into the countryside and take photos of agricultural vehicles if in doubt. I didn't go too far with the mud as the vehicles were newly issued. Recently manufacturers such as AK interactive and Vallejo have produced an increasing range of groundwork pastes dried mud, wet mud etc these are excellent and I increasingly use these more and more. Once the wheels and tracks are fitted to the vehicle a pinwash is applied to bring out detail, various oil paint filters are streaked subtly as well as mud build up in areas that become filthy, this lightens vehicles and always gives them a lifelike appearance, subtle highlights can be dry brushed or airbrushed at this point. Again, there are increasing products on the market that do pretty much the same thing, some are very useful whilst others not so. On more recent models I have tried several and can only say experiment and find what suits your style.





If you are at a model show (remember those?!) it's worth checking out weathering demos by fellow modellers such as Lester Plaskitt and Chema Cabrero; you will always find a new technique or product to try. Raw metal areas are added with graphite pencils, scratches and subtle chipping are added again with pencils and using a fine brush, usually I use acrylic paint as it gives more control and less diffusion.

The groundwork starts with a firm base such as foam board; any terrain features can be built up using the same material, there is little elevation in this scene so the next step was a broad covering of Polyfilla. It's important to allow the vehicle to sit 'in' the ground not float on top of it especially on softer ground, so before the plaster dries I sprinkle fine sand over the area then press the

vehicle into the ground, the sand inhibits plaster sticking to the vehicle and keeps any ruts in place whilst hardening. The sand brushes off both the vehicle and base when it is dry leaving an impression where the vehicle will sit, I usually add more ruts close to the vehicle, like most things returning and building up interest in the groundwork is as important as spending time on the vehicle and figures. Several layers of fine scatters and grasses were applied then coloured to preference. The earth was treated to several layers of satin varnish which dries to give a damp effect which is what I was after, if I was doing the same today I would have used one of the commercial mixtures described but still add colour of my choice, some autumnal leaves in the form of birch seeds were scattered.





The silver birch which is synonymous with central Russia is simply a selected twig with sea foam branches added and painted to references.



The figures are from MiniArt, assembled in natural and sympathetic poses, some of the arms have been changed using wire armatures and Magic Sculp putty. Changing the heads and hands with resin Hornet items added to the finesse, the uniforms are painted in Lifecolor acrylic as these dry matt exactly what is required for cloth, the flesh and leather items are oils.

The scene is simple and shows Lukin's "White twenty" being readied for combat, last minute maintenance and refuelling taking place, don't be alarmed at the smoker having his Mahorka fix, its diesel in that drum!



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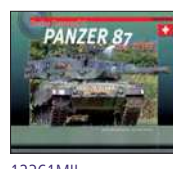
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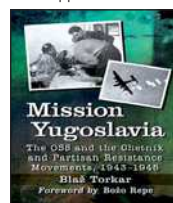
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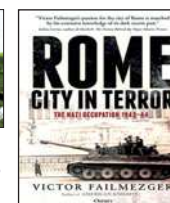
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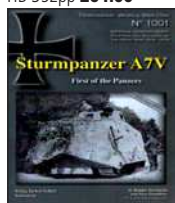
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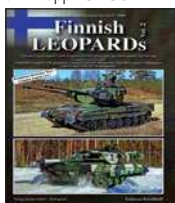
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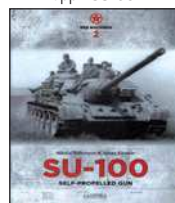
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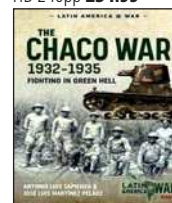
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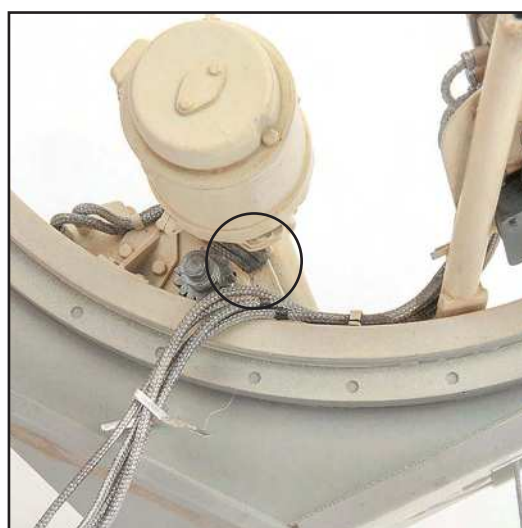
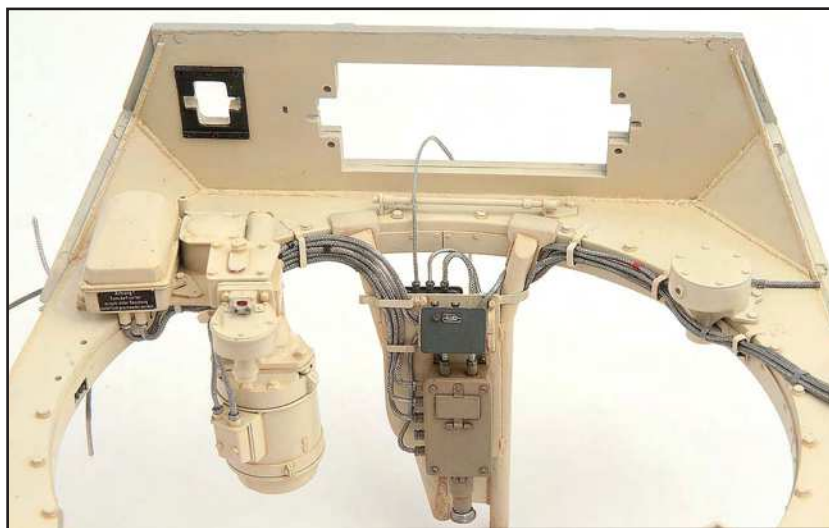
Panzerkampfwagen

David Parker builds Trumpeter's 1:16 kit

Part Thirty Three

The complex assembly of the turret interior continues in this installment where the overarching theme continues to be planning ahead. So many parts will cause huge problems with access or completely prevent the fitting of other parts if installed in the wrong sequence. Similarly I had to consider the need to apply weathering to parts whilst they were accessible yet maintaining a unified look when they were all brought together. Finishing the electrical connections for the turret allowed me to finally install the turret basket floor and also to move ahead with fitting main gun.

The gun itself still had much to be done before it could be fitted including the completion of the co-axial MG, painting and weathering the shell catcher bag and weathering the gun itself. The turned aluminium gun barrel adds quite a bit of weight to the gun and I had to also consider the best way to fix the gun so that the mount would be strong enough to withstand the forces the barrel would exert on it. I also had a small moment of panic when I feared that I was unable to get the final gun assembly into the turret. Happily it did just pass through from inside with some careful manoeuvring.



The turret motor is glued into position with the bundled cables tucked under the turret ring during this procedure. Looking at the underside the motor cables can be seen glued and trimmed on the underside of the shelf.



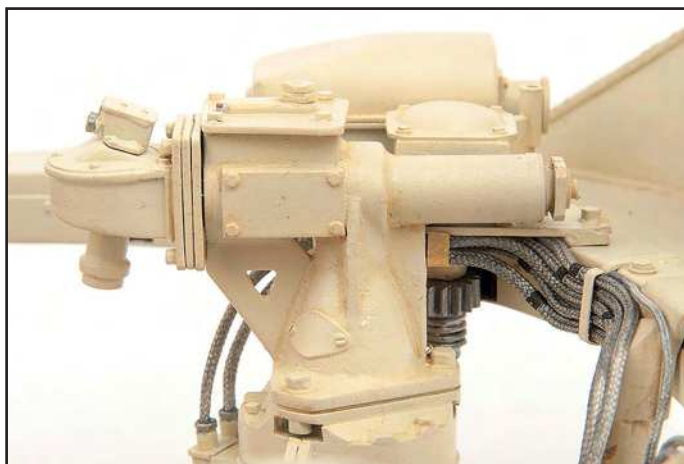
One at a time the turret ring cables are trimmed to fit against the motor cables and glued into place against them.



I worked gluing the uppermost cables into place first (seen here upside down) and taped the other cables aside until they were required.



Once all the cables were in position I was able to cover the joint imperfections with a cable clamp made from scrap photoetch brass strip.



Viewed from the side the clamp hides any messy bits perfectly. Although this area will only be visible when the turret is turned over it is still important to attend details like these.

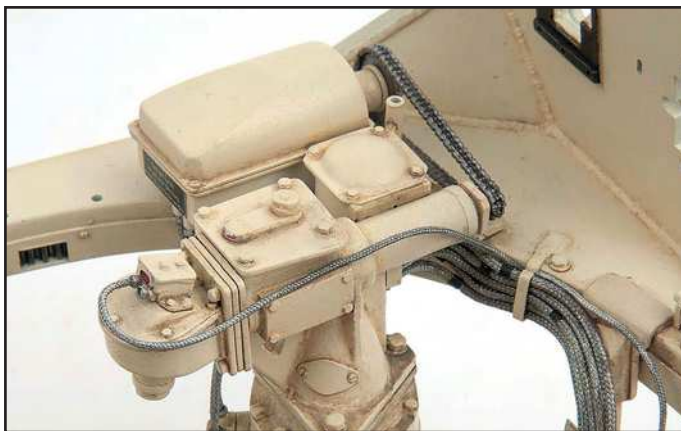


With the cables in I made the protective cover for the motor gear from a strip of brass shaped to fit around the gears.





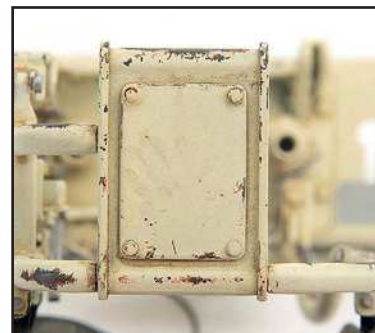
The completed cover for the gears and the cabling running under the traverse assembly.



I added one of the pair of cables **6** for the gunners safety lamp using 0.5mm ANYZ cable. The other cable will have to be added later as it runs across parts that have yet to be fitted. The chain drive has also been fitted to the motor.

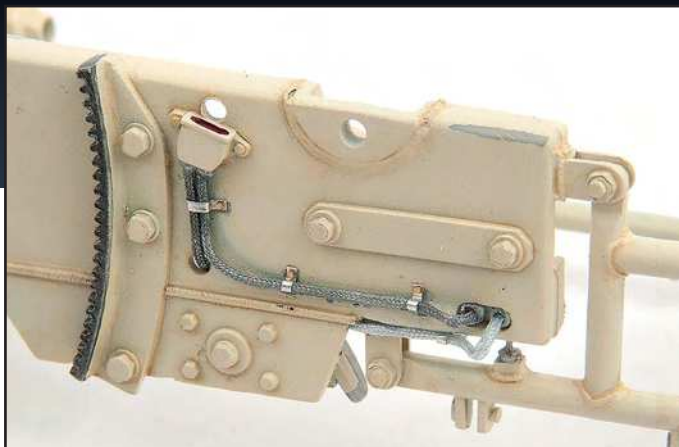


Using the same techniques as before I added some areas of wear to the turret ring below the turret side hatches where the crew would enter the turret. Similarly the Commander's seat was treated in the same way and his seat cushion was given a suitably grubby appearance with an acrylic wash.

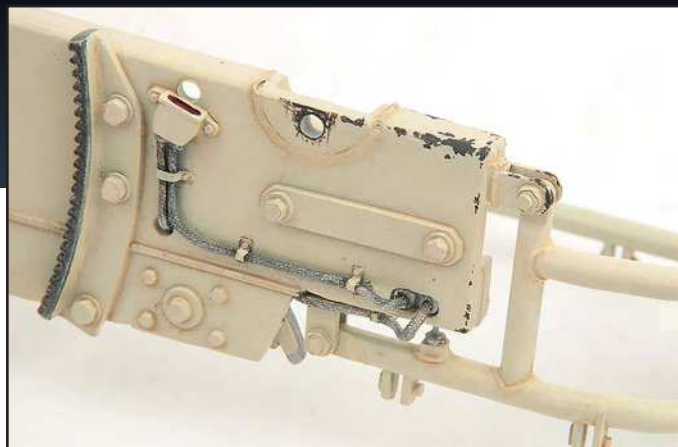


Dirty fingerprints on the pale coloured interior are inevitable especially where the crew are exiting the vehicle or around their positions. I wanted to capture the subtle smear of an oily hand rather than anything too obvious. Oil paint is the perfect choice of medium for this and I mixed 502 Abteilung 'Bitume' ABT004 which is quite transparent with some 'Light Mud' ABT125. I painted oval dots for each fingertip (often you just see three tip marks rather than the full four), these could then be dragged back to create a smear. The beauty of the oils is that thinners will allow you to work the effects, lift out or add in more colour until you are happy with the effect.





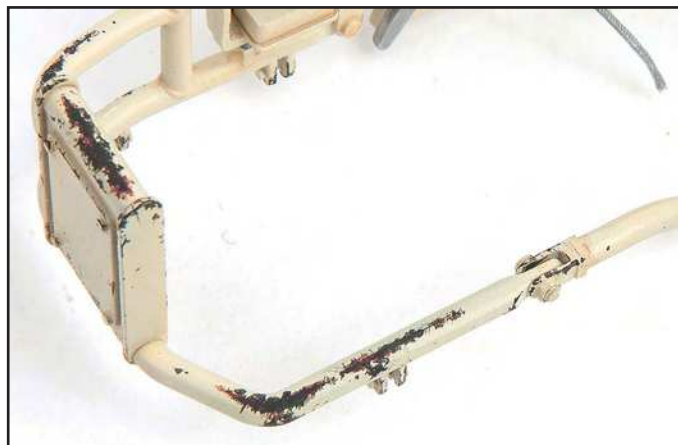
I decided to replace the cables on the gun recoil shield with the more flexible ANYZ chord that I had used for the turret basket cables. Here the replacement cable is in position but there is still touching in of the paint to be done.



I started working on some areas of wear around the recoil guard. These were brush painted using a very dark grey/brown mix.



The top of the frame here is a natural hand hold for the Commander who sits right behind it.



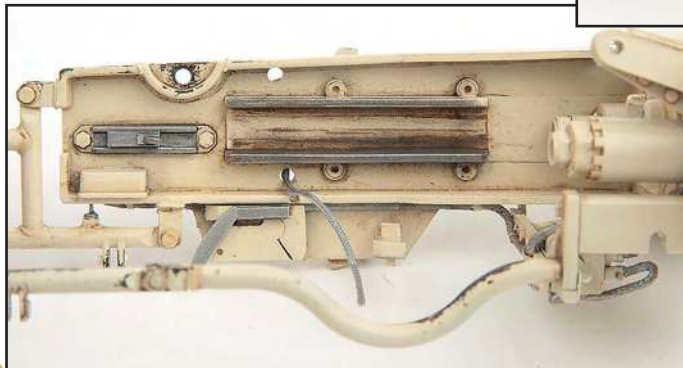
The next step was to add some very small touches of red primer around the edges of the dark chipped areas

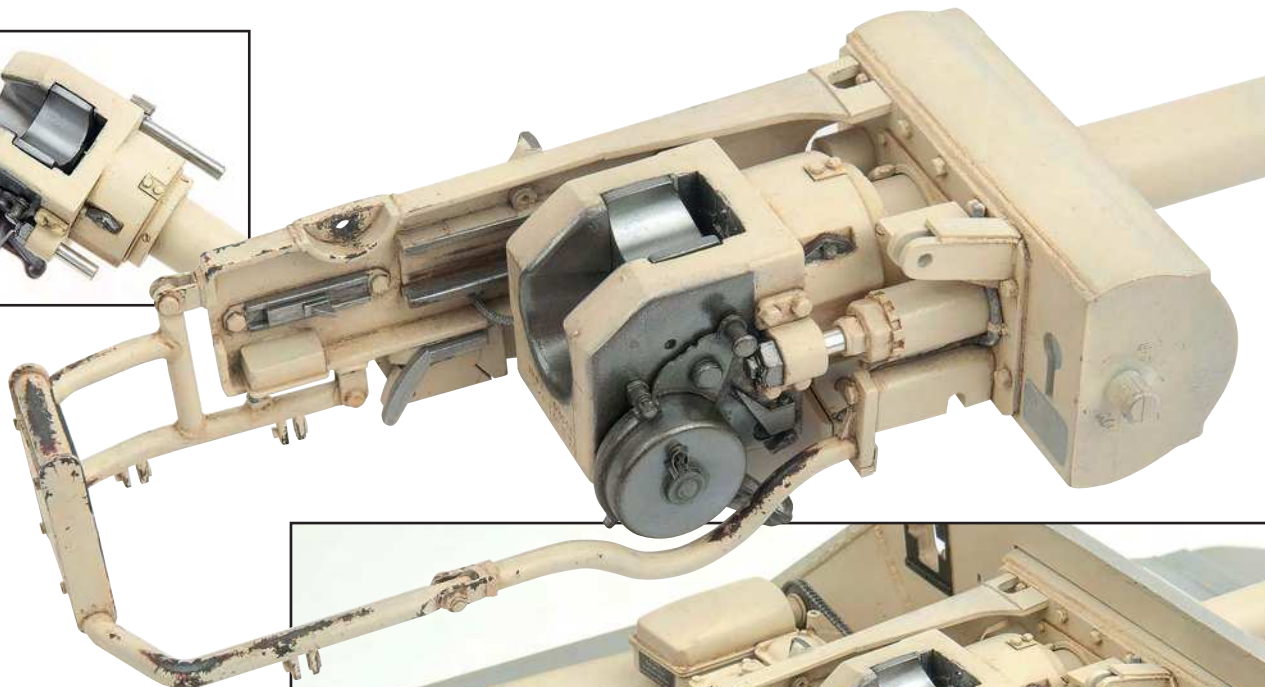


On the lead counterbalance pad inside the shield I added some circular impact marks from the ejected shell casings.

The areas of maximum wear were then rubbed with Uschi van der Rosten 'Steel' Metal Polishing Powder, applied with a small brush.

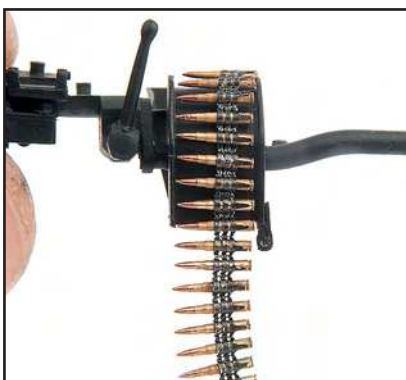
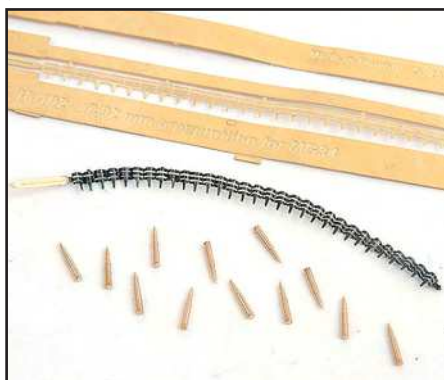
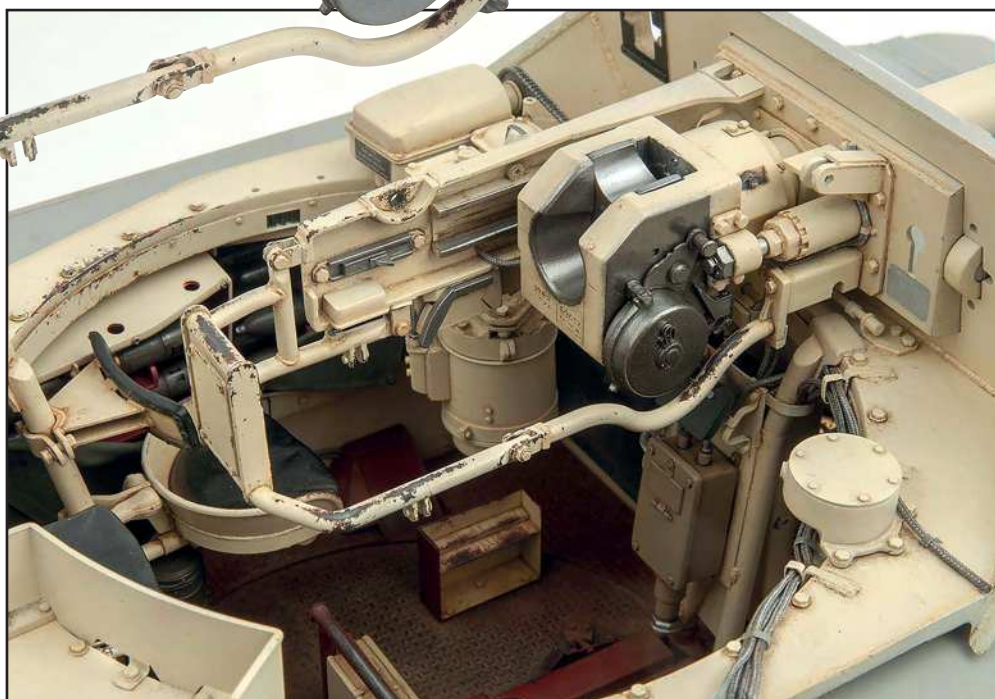
Below traces of old grease were applied to the slider rail inside the recoil shield.





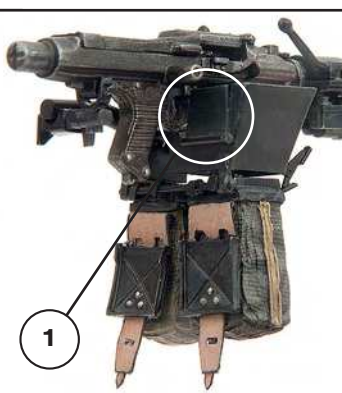
The gun is always an area of high wear but its important to keep in mind how and where this will occur. Rare archive pictures of the interior do offer some guidance with the socket for the travel lock **1** in the shield having its paint worn away. The corners of the recoil guard will get knocked by the turret crew and shell casings offered into the breech are likely to chip the guard rail too. At this stage the breech is just dry fitted to test the overall appearance. Experience has taught me to never glue anything until you are absolutely certain it is safe to do so. The recuperator shafts 2 were sprayed with Chrome over gloss black.

Below With the Co-axial mount already assembled it remained to paint the whole assembly, add the ammunition and the pair of Gurtsack ammunition pouches. The ammunition belt is something of a focal point as it stands out against the black of the gun and its mount. I chose to use the ABER ammunition set 16 102 with its turned brass rounds and photoetched belts.



Although it looks daunting the assembly of the ABER ammunition belt was actually quite straight forward. I used fine tweezers to press the photoetched belt over a bullet to curve it to the shape of the bullet, a process which worked surprisingly well. The shaped belt was then painted

Right The open Gurtsacks are my masters released as part of the AFV Modeller range of correction parts. As I would need another pair for the bow MG I decided to paint them all at the same time. The raw leather undersides of the lids provides an interesting colour contrast with the assorted drab tones used to manufacture the sacks.



The spring clips to hold the sacks were constructed from plastic and a couple of scrap photoetched fittings and mounted on the front of the spent

casing chute. Another final modification was to add a detail I had missed initially, the hinged flap **1** Another final modification was to add a detail I had



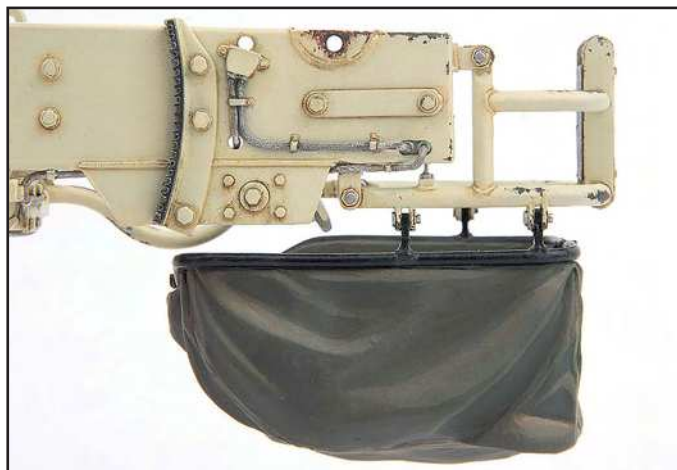
As the bullets are turned brass I could have simply painted the heads and left the casings unpainted but they were a little too fresh looking so I painted them with Mr Metal Color Brass. Every fifth round would be a tracer round as indicated by a black tip to the bullet.



The Co-ax assembly is kept separate from the rest of the gun mount for the time being as there are other parts like the gun counterbalance to install first but a quick dry fit is always a good idea and its good for motivation too.



Without any original colour reference for the shell catcher I returned to the colour of fabric used for the ammunition locker covers. This dark grey/green seemed to match the dark tone seen in the black and white archive images of similar shell catcher bags



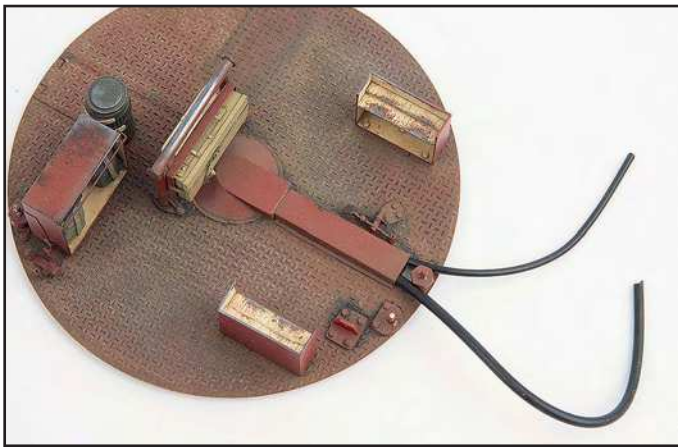
The basket was sprayed with this base colour and then a slighter lighter tone was airbrushed directionally - spraying from the top edges down. This left the underside and the recessed parts of the folds the darker base colour. These creases and shadows were then worked over with brush painting to further define them.



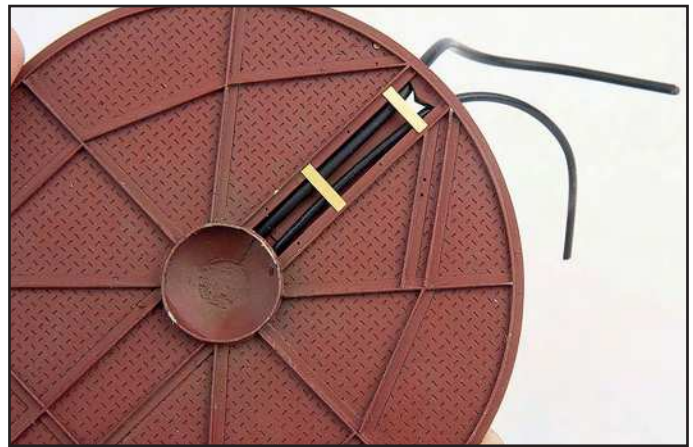
I wanted the effect of dust collecting in the folds of the basket and inside it so brown was mixed into my grey colour and applied on the top edges of the creases where the dust would settle.



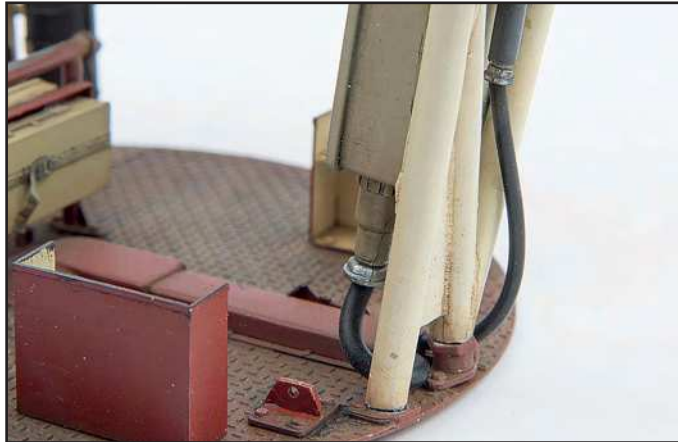
The top frame was painted with Vallejo Air Black to give a satin finish and I added some very restrained areas of wear on the corners of the frame. On the inside of the bag I added some oil stains to the fabric as well as the dust.



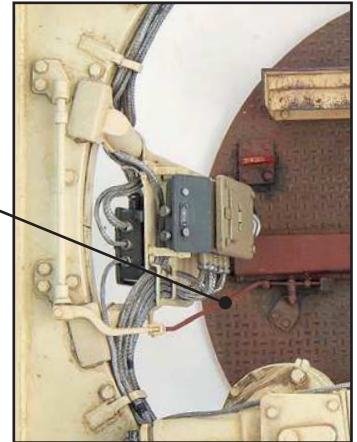
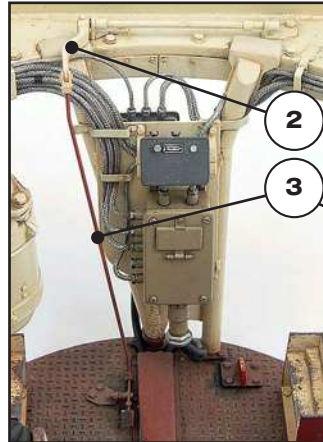
Back to the turntable now which was still a separate part but in preparation for fixing it to the legs I fitted the two power cables which are a flexible black resin.



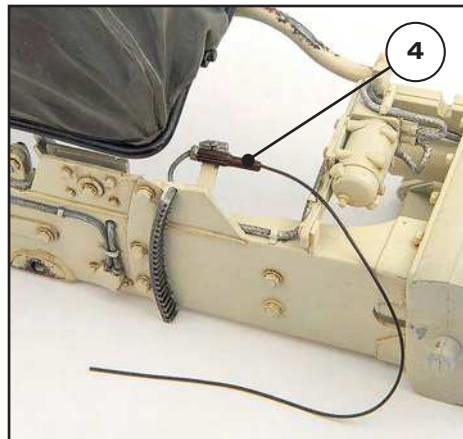
Underneath the turntable I added some strips to hold the cables in position.



With the turntable glued to the legs I could connect up the power cables, the fat one running to the big junction box and the thin one running to the smaller box.

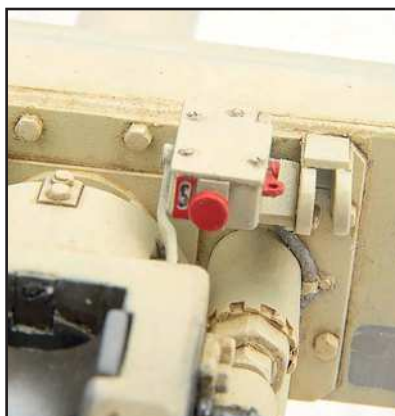


I could also now connect up the foot pedal controls for firing the co-ax MG. The cross rail was already in place so it was just a case of adding the arm **2** and the rod connecting it **3** to the floor pedal.

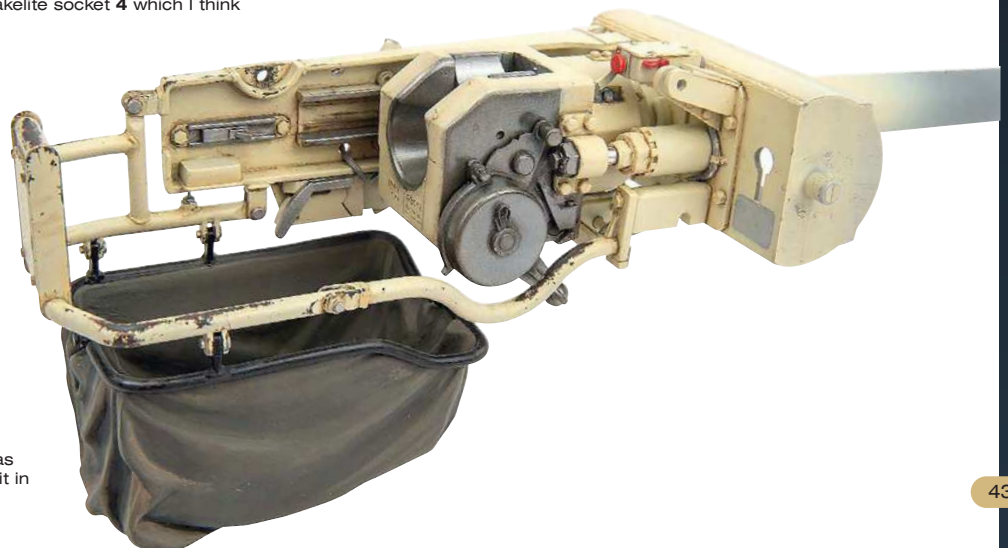


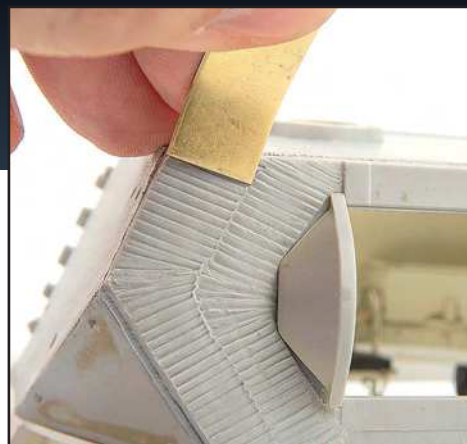
Another part to fit ahead of the main gun was the back up trigger button. Its location on the turret motor housing would be difficult to access once the gun was in place. I added the essential safety clip behind the button connected to the base with some spare photoetched chain. The back up trigger is connected to the firing circuit via a bakelite socket **4** which I think

plugs into the end of the existing socket. I used some flexible resin to make the cable as it will sag naturally but a suitable wire would work just as well. The trigger is fitted to the ring on the base of the motor housing. The connection point for the cable has been pre-drilled



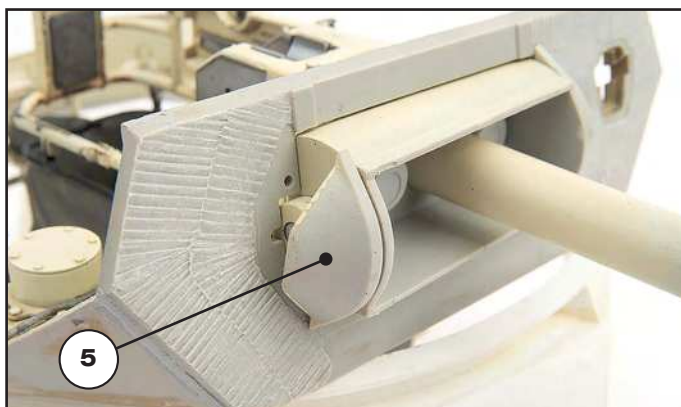
One of the last parts added to the main gun was the safety switch box atop the gun. I modelled it in the safe position as indicated by the 'S' in the window.





The way the main gun is mounted in the turret means that you can quite easily find yourself in a position where you cannot actually install the gun if you move away from the kit assembly sequence as I had. With installation of gun approaching I realised it would be best to zimmerit the outside of the turret before the gun was in position. My first attempts to capture the peculiarities of the Panzer IV zimmerit pattern were less than successful and I ended up stripping off the putty four times before I got it right. Of course as the zimmerit is a manually applied paste there are variations in the patterns both between the factories manufacturing the Panzer IV and the individual

workers responsible for its application. However there are certain stylistic cues that are 'typical' of each factory and I needed to try to capture a typical Nibelungenwerke pattern. One of the features of this pattern is the relatively thin application of the zimmerit paste and the trowelled patterns running from bottom to top, rather than the more familiar top down patterns. By a process of trial and error I realised that I needed a much thinner tool to recreate the pattern. I cut a strip of brass sheet to the required width and used this hand held as my trowel to texture the putty.



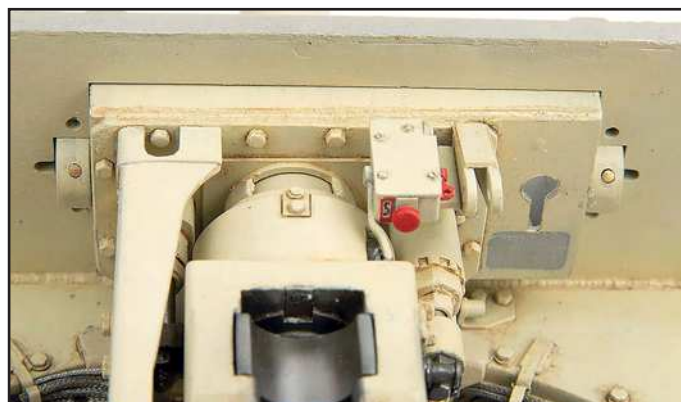
The installation was not without problems. The gun was passed through the opening in the turret from the inside of the turret. The external mount collars 5 then have to be persuaded over the big pins on each side of the mantlet. I only just had enough forward movement on the gun to achieve this.



The external collars were glued in place but I didn't feel this would sufficient to withstand the forces imposed by the weight of the metal barrel so I drilled holes through the collars and into the pins on each side.



I planned to insert 1mm brass rod pins into the holes to secure the pivot point of the gun once I had established an angle of elevation for the gun that I was happy with.



The pins were measured and cut to sit flush with the tops of the collars as seen here.



Even with the pins in position there was still some slight play in the whole assembly so I cut some plastic shims to fit between the external collars and the mantlet. These were glued into place and any excess trimmed off. This area would be covered by the external mantlet once it was fitted.



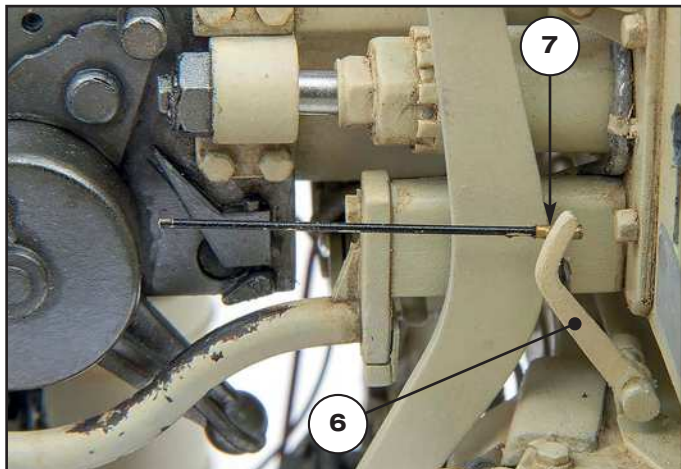
With the gun in place I could connect the power cable for the back up trigger button. With cable already in place as part of the gun it was simple enough to glue the other end of the cable into the hole on the trigger button.



The rest of the cable seen here passing up to the underside of the breech.



The counterbalance cylinder was prepainted and weathered prior to being installed. The pressure marking stencil comes from the AFV Modeller wet transfer decal sheet. The cylinder was then fitted into the turret and glued to the floor bracket and the upper bracket on the internal mantlet.



Next the remainder of the co-axial fire control system was added, beginning with the arm **6** onto which I had glued a small piece of Albion Alloys brass tube **7**. I was then able to insert a pre-sized brass rod which connects to the trigger of the gun. All this is almost entirely hidden once the MG is installed so has to be added now. The co-ax assembly is then fitted and the lower buffer **8** glued into position beneath it. From this angle the trigger control rod is just visible behind the buffer mount.



BEST BRASS AROUND

eduard

M4A2

1/35 Zvezda

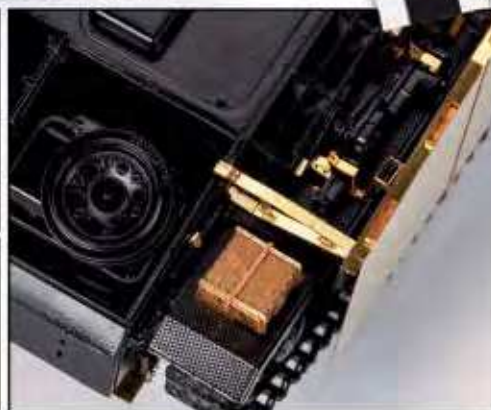
Cat. No. 36450 general set



StuG III Ausf. G

1/35 Takom

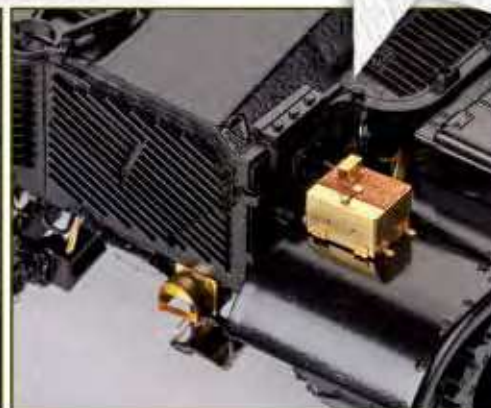
Cat. No. 36451 general set
Cat. No. 36452 schürzen
NOVEMBER 2020 release



M60A1

1/35 Takom

Cat. No. 36453 general set
NOVEMBER 2020 release



all on www.eduard.com

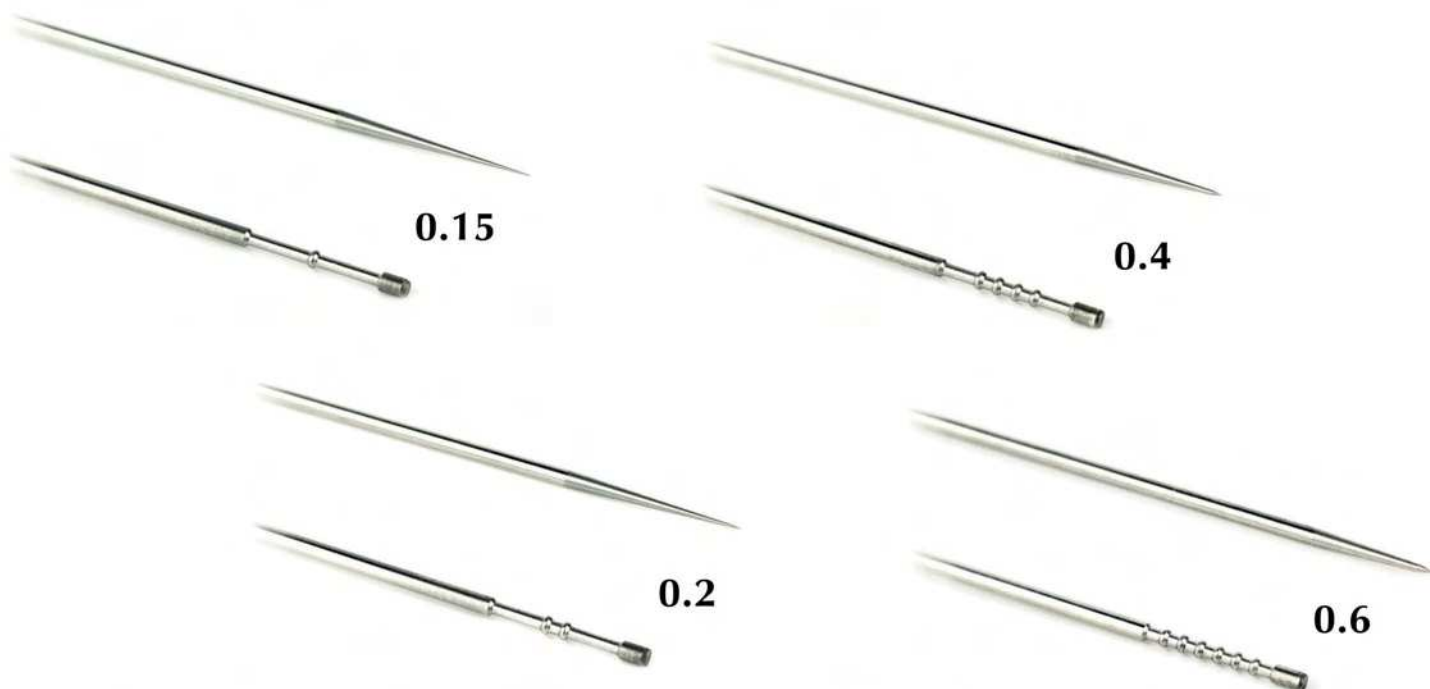
HARDER & STEENBECK

flexible system architecture
#notools



threadless nozzle
#notools

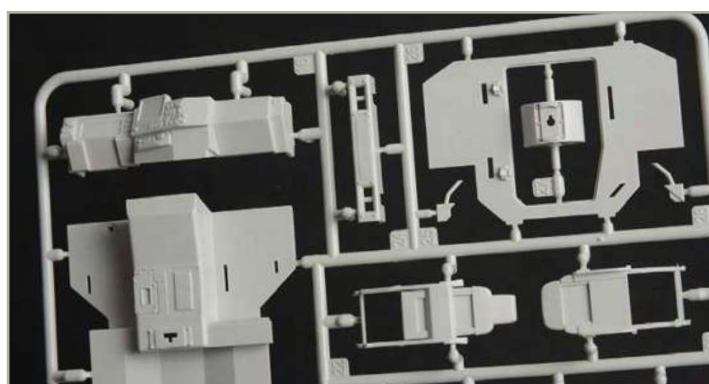
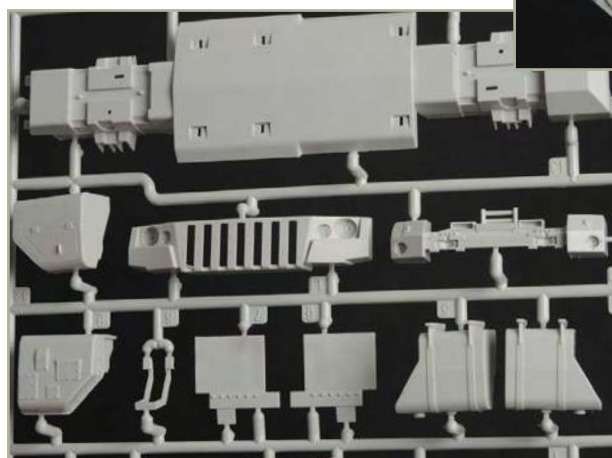
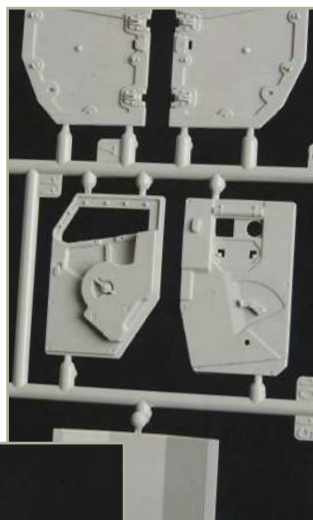
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Meng 1:35 Russian K-4386 Typhoon -VDV

As if the Russian Airborne forces (VDV) weren't terrifying enough they give them this to play with! This specially designed Typhoon is one tough looking vehicle mounting a EPOCH remote controlled weapons station. Meng certainly come up with the goods to keep modern Russian armour fans happy and this looks to be another beautifully done kit. Five sprues in the same pale grey styrene as the Warrior we built in the previous issue make up the bulk of the box contents accompanied by the usual clear sprue, poly caps, vinyl tyres, four springs (which insert into the suspension units allowing articulated suspension should you choose to display the model on some uneven groundwork), a photoetched grill part and some detailed decals. The moulding and sharpness of detail looks simply superb, the single piece body shell makes you want to start building straight away. I do like this new grey plastic even if it's difficult to photograph! As much of the chassis is hidden by armoured protection construction is very simple and the interior is designed as a 'tub' which can be fully constructed and painted (including the turret control) before the main body is dropped into

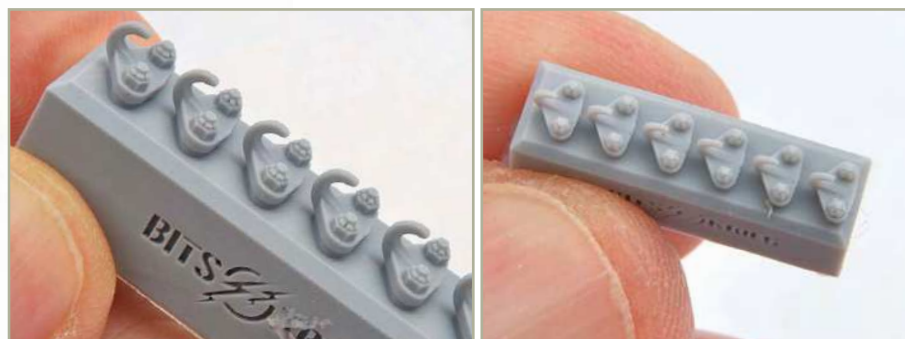
place and smaller details and doors attached. All doors can be posed open with full internal detail including the large rear door. The interior detail is nice without being too fussy, nice decals are included for monitor screens and placards but the detailers amongst us will be waiting for some aftermarket seatbelts as none feature (which we'd rather see than having to remove moulded-on versions). The vinyl moulded tyres are good but no doubt many will be looking to aftermarket resin versions as the real icing on the cake to this kit, Meng do produce their own resin upgrades which are excellent and DEF. have a set in production which will probably be available as you read this. Finishing options are the superb three-tone hard edged scheme or if you chicken-out of that there's an all-over green. This is a fantastic looking kit of a great looking modern vehicle; if you had to push us for any niggles maybe flexible seatbelts as provided with Meng's Bradley would have been nice and tinted armoured glass. Stay tuned for a full build feature on this one!



Special Ops Models 1:16 M1A1 & M1A2 Abrams Gun Barrel

We have just had the opportunity to check over the Special Ops Models 1/16 scale M1A1 & M1A2 replacement gun barrel, designed for both the big Trumpeter and Tamiya kits. As you can see it is ultra-crisp and blemish-free with cleverly designed inner brass tubes to both guide the assembly of the parts and serve to prevent any distortion of the resin parts. The brass tube inner also makes for a flawless smooth bore effect as our photo looking down the barrel shows. The snug friction fit of the the three barrel

sections is superb and the muzzle reference system is a separately moulded part along with its mounting bolts. The fume extractor has a subtle textured finish and the underside of the barrel sleeve has the required rivet detail. Without doubt its a massive improvement on the kit parts and an essential upgrade for anyone building these large scale kits. If you want to order one of these or any of the other 1:16 accessories in the Special Ops range contact Andy Meyers by email: spectre29202@yahoo.com



Bits Krieg 1:16 & 1:35 Panzer III & IV Lifting hooks

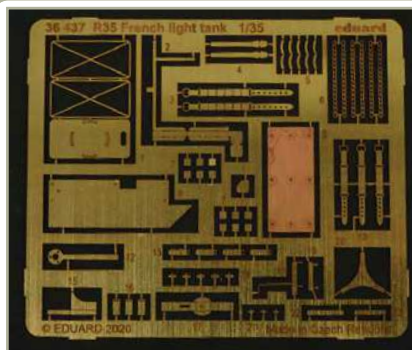
New additions to the Bits Krieg range of upgrades are these superb lifting hooks of the type used on the Panzer III and Panzer IV. There are two separate sets, one in 1:16 BK-16005 with six hooks and also in 1:35 BK-079 with twelve hooks. The hooks are moulded with a spacer from the casting plug making it easy to slice them off with a razor saw. Those building a 1:16 Panzer IV

will certainly welcome these as the kit hooks are moulded in two pieces with a difficult to fill join, making these an improvement in both detail and ease of assembly. The smaller scale versions are just as crisp and delicate and will surpass the levels of detail on kit examples across the 1:35 offerings. For details of these and the rest of the Bits Krieg range visit <http://quickwheelstore.com>



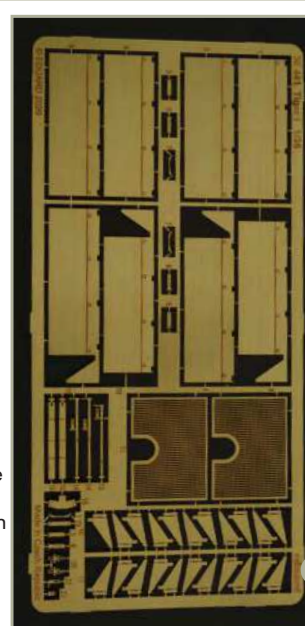
Stalingrad 1:35 Russian Tank Crew

Great characterisation here with these additions to the Stalingrad range. This pair, leaning against a vehicle form part of a larger group, or will work as a stand alone. The quality of the sculpting and the casting both speak for themselves and are absolutely superb. Full details of the these and the others in the group at www.stalingrad.diorama.ru



Eduard

The detail masters at Eduard always have a steady supply of new releases of very usable and 'sensible' photoetch upgrades for those wanting to add a touch of finesse to their latest project. Tamiya's new Renault R35 will benefit from set 36437 with some fine smaller details and the popular Tiger I from Ryefield has a nice set of mudguards, tool fittings and engine deck screens with set 36441 www.eduard.com



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DW35116



DW35114



DW35115



DW35117



1

2

3



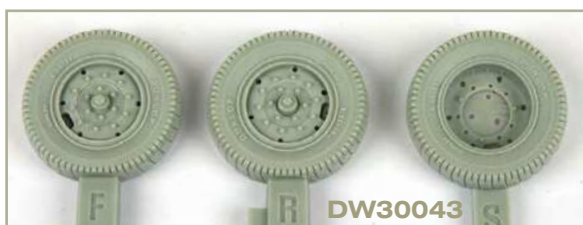
DW30040



DW30054



DW30052



DW30043



DW30044



DM35105



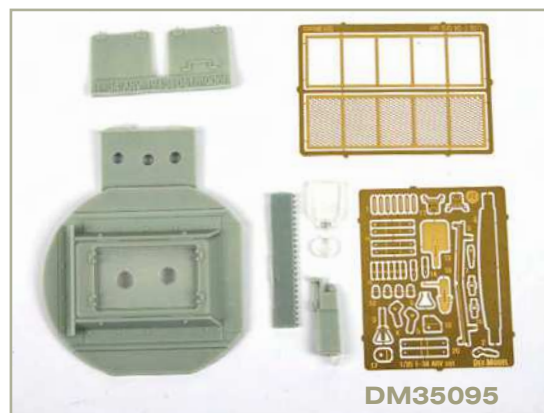
DM35104



DEF. Model

Republic of Korea's Hyun Jin Kim of DEF Models is one of the most enthusiastic and genuine gentlemen you are likely to meet in our hobby and we're not just saying that as he's sent us a whole load of his recent releases! DEF wheels are among the best in the business and can really add a new dimension in finesse to any kit; all come with 'weighted' tyres and at different points of rotation. Adhesive painting masks are also included. Recent additions to the catalogue are 3 different sets for RFM's Type 82E (VW) complete with reduction boxes on the inner rears (set 2 being the sand type hub and tyre). AFV Club's M54A2 gets a set of sagged rears (only rears included) with set DW35116, DW35114 is eight wheels for AFV Club's Stryker Dagoon, Panda's HMEC gets new

boots with set DW35115 and Zvezda's new Bumarang looks superb with set DW35117. Tamiya's classic FAMO gets front wheels and a spare with set DW30040 and any 1:35 Willys jeep will look loads better with set DW30054. Talking of loads, if your jeep has a trailer DM35104 has weighted wheels and cargo (complete with decals for the ammo and ration crates) while set DM35105 gives you 3x6 jerry cans which could be used for all kinds of U.S. vehicles. AFV Club's or Italeri's Dodge WC 4x4 would benefit with set DW30052 and Meng's RR Armoured Car has a choice of two sets; DW30043 and DW30044 which features reversed rear rims. Both come with the spare wheels. Superb in all respects.



DM35095



DM35101



DM35097

DM35092



DM35099

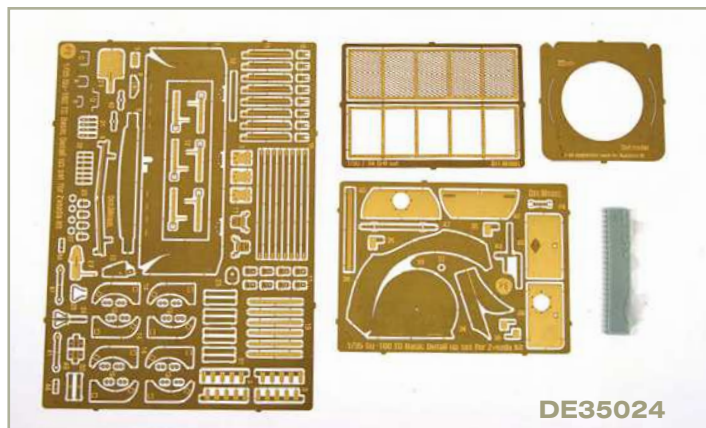
DM35098



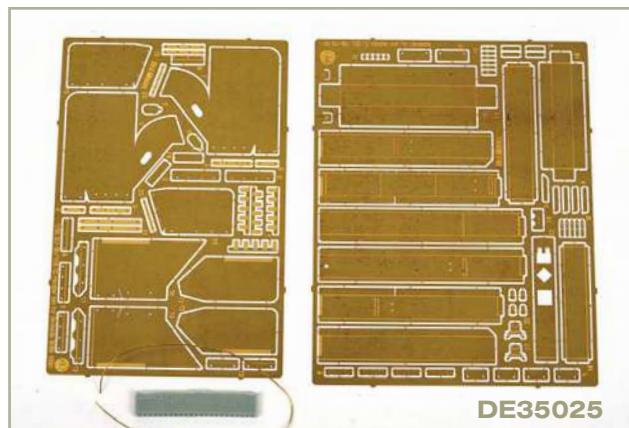
DM35102



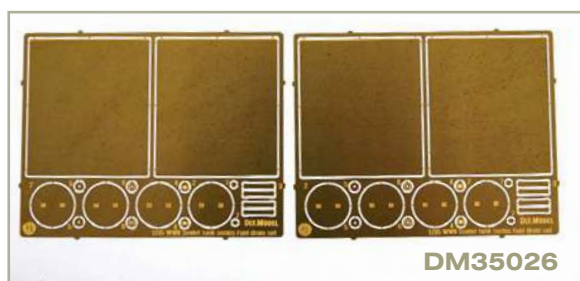
DM35103



DE35024



DE35025



DM35026



DM35094

More from DEF with these upgrades and conversions starting with T-34 Armoured Recovery Vehicles. DM35101 is a WWII period and DM35095 a version for the Academy kit which retains the cupola, both sets contain resin parts and photoetch details. Guns and mantlet covers now with a couple of beautifully done covers for any mid/late Brummbär DM35098 and DM35099 (elevated barrel) and for your Easy 8 M4 is set DM35103. More for M4 based armour with a couple of aluminium main guns, DM35097 for Asuka (Tasca) Firefly and DM35092 to fit Tamiya's latest M10. For Tiger Is and Ferdinand / Elefant is a set of three muzzle covers DM35102. Zvezda's SU-85 and SU-100 are nice recent releases which are in the budget price bracket making this selection of upgrades more tempting. DE35024 provides plenty of fine photoetched detail including excellent rear engine deck screen and resin bolt heads while DE35025 provides full mudguards. DE35026 contains four Soviet fuel drums in photoetch, these will be undoubtedly better if soldered for strength and perfect for creating realistic damage. Finally for the SUs is DM35094 suitable for the SU-85 a barrel and mantlet set. DEF never disappoint with their presentation, subjects and superb quality; head over to their website for the latest news and stockists in your part of the World www.defmodel.com and check-out their Facebook page.



Forgotten Archives 3 The lost Signal Corps Photos

By Darren Neely

Published by Panzerwrecks

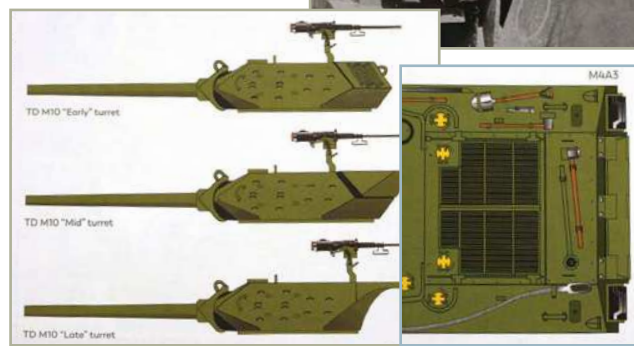
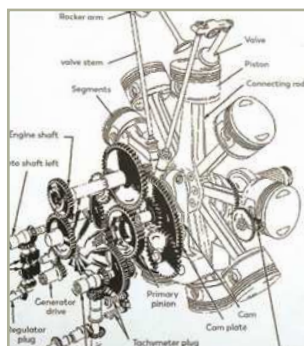
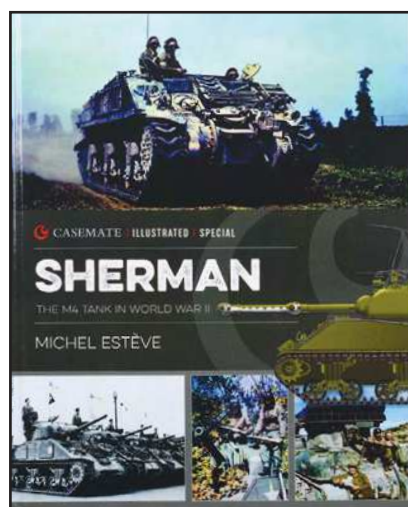
Hardback format, 240 pages

ISBN 978-1-908032-21-8

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The arrival of another hefty edition of the Forgotten Archives series is always a cause for celebration. If you are not familiar with the format, the reader is treated to usually one full page image per page with supporting captions and interspersed now and again with colour artwork of selected images by Felipe Rodna. As well as sourcing the images from the Signal Corps archives Darren Neely has also been able to access images from the family archives of the photographers who shot the images, making the pictures even more unique. The book has coverage from the Mediterranean theatre, the Normandy campaign and the advance into Germany as well as the Ardennes and Winter of 1944. As you might expect the main focus of the coverage is American equipment providing no shortage of modelling inspiration and one or two rarities like the T34 Calliope rocket launcher. Axis equipment also gets very good coverage although its all knocked out or abandoned, but as fans of Panzerwrecks know, there is often much critical reference to be gleaned even from a knocked out subject. Certain photos are also printed with a QR code which will allow smart phones to show the location of the photo as it is today using Google Maps or Street View. Another top quality must have reference from a publisher that always delivers the highest quality. If you don't have volumes 1&2, get them too while you can.



The M4 Tank in WWII

Michel Estève

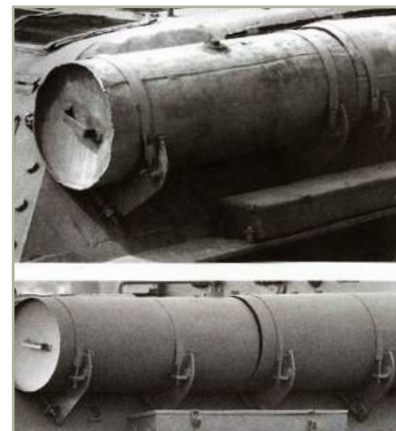
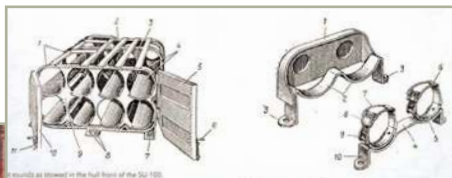
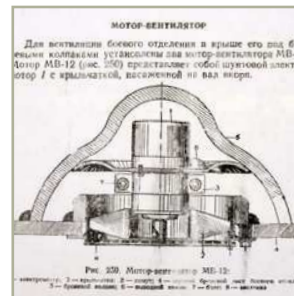
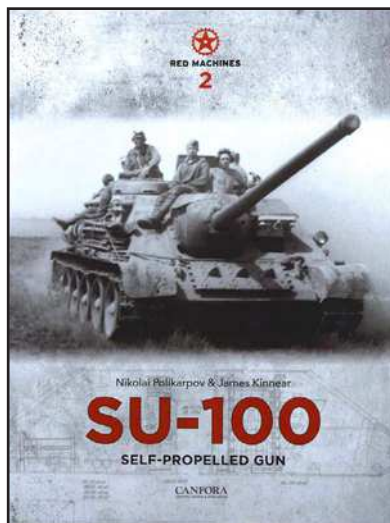
Published by Casemate

Hardback format, 240 pages

ISBN 9781612007397

www.casematepublishers.co.uk

What is there to be written about the Sherman that hasn't already been said? Probably not a great deal but we were pleasantly surprised at how much is packed into this neatly presented hardback in the Casemate 'Illustrated' series. Discovering the author worked on repairs and adaptations of the M4 over his 21 years service in the French Army it really shows through with the depth of information; this isn't just a compilation of war-time images but a very comprehensive reference on the evolution, deployment, crewing, armament and ammunition of the M4 and a wide range of its variants (including D-Day funnies and tank destroyers. Illustrated markings, unit composition (US, French, Canadian and British included) along with colour diagrams and vehicle profiles this book is an excellent all-round reference and introduction to any modeller wanting to expand their knowledge with easily accessible, visual information. Highly recommended reading.



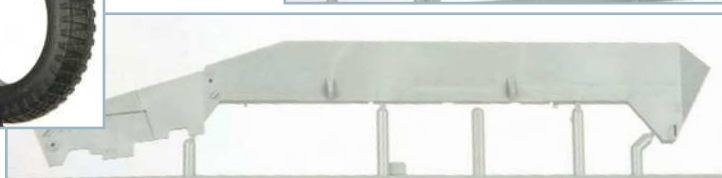
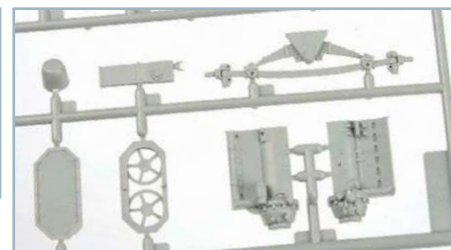
Red Machines 2- SU-100
Nikolai Polikarpov, James Kinnear
Published by Canfora
Hardback format, 176 pages
ISBN 9789198477580
www.canfora.se

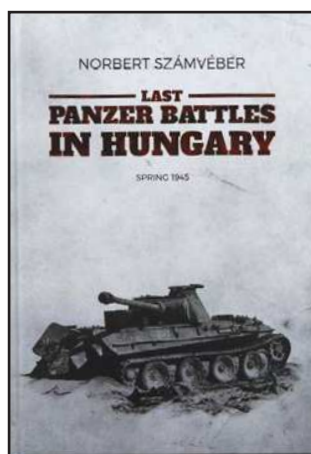
This second volume of Red Machines is a beautifully presented and illustrated study of the Samokhodnaya Ustanovka 100 taking us through the full story from prototypes to its relatively short combat history. Detailing the production at UTMZ and Omsk Plant 174 and the eventual post-war modernisation the author draws on primary Russian documentation which dispels some of the confusion of previous published work regarding factory production changes and timelines. A superb collation of original factory documents and drawings, period photographs, detailed close-ups, museum and post WWII examples and walk around images leaves nothing to chance for modellers looking for a deeply researched, one stop reference on this powerful 'Zveroboi' tank destroyer. Recommended reference to any modeller with an interest in WWII Russian subjects generally.



Revell 1:35 SdKfz 251/1 Ausf.A

Revell continue their collaboration with ICM and have re-boxed their SdKfz 251/A in 1:35 reminding us what a nice kit this is. Not tackled by Dragon or AFV Club (who produced a whole range of Cs and Ds) the Ausf.A was released by ICM and a 'B' done by Zvezda to fill the gaps in the market. As the tooling can only be a couple of years old moulding is as sharp as you'd like and detail is very nice throughout. A solid base is formed with a single-part floor and mudguards to which the suspension and hull sides are added; the complex hull shape is designed well allowing the interior and engine bay (complete with full Maybach engine) to be painted and finished before dropping the hull top on. ICM even replicated the flange where the front and rear hull sections bolt together on the Ausf.A along with other unique features such as the vision/rifle ports and hull tool stowage, all good for a upgraded war-time 'A'. Don't wince at the band-style tracks, they're good; a wipe across the rubber blocks with a sanding pad and most would be happy to use them. At Revell's budget prices you could treat yourself to some aftermarket add-ons or some nice figures, great kit, great value.





Last Panzer Battles in Hungary, Spring 1945

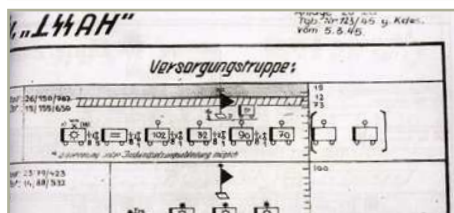
Norbert Számvéber

Published by PeKo

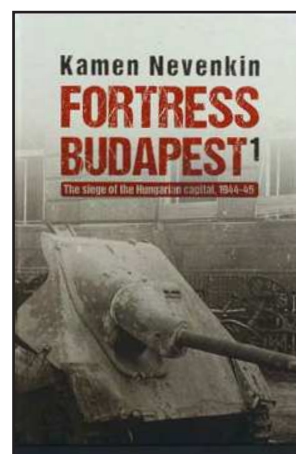
Hardback format, 487 pages

ISBN 9786155583292

www.panzerwrecks.com



A couple of new PeKo titles are now available from the guys at Panzerwrecks on the popular modelling topic of the last stages of WWII and the final German offensives of Operation Spring Awakening. This study offers heavily detailed historical documentation and shows fully the author's expertise drawing on accounts from both German and more recently unearthed Russian documents to answer interesting questions such as how did the Russians face the Kingtiger and Panther in their supposedly inferior armour and to what extent were the Hungarian and Bulgarian forces involved. A good selection of period maps and documents and a number of KO'd German armour photographs complete this very in-depth study.



Fortress Budapest Vol.1

Kamen Nevenkin

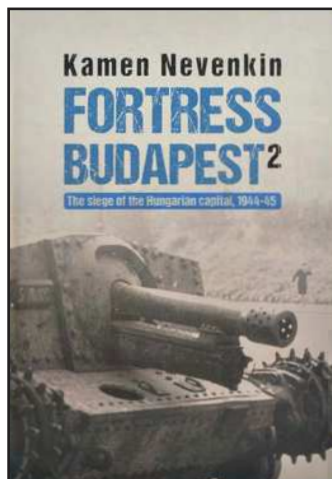
Published by PeKo

Hardback format, 1107 pages(!)

ISBN 9786158007252

www.panzerwrecks.com

The hot topic of the struggle for the Hungarian capital in 1944-45 seems to this day to have left an indelible scar on the Hungarian people, this new and monumental work takes much previously unavailable documentation to bring a new era of information to the serious WWII history reader. This first volume is purely text (the second volume deals with images) and at over 1000 pages still is very accessible do to the break-down and layout which is very nicely presented. If you have an interest in the topic this is an absolute must-read.



Fortress Budapest Vol.2

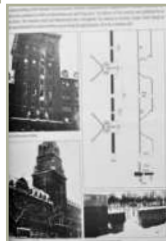
Kamen Nevenkin

Published by PeKo

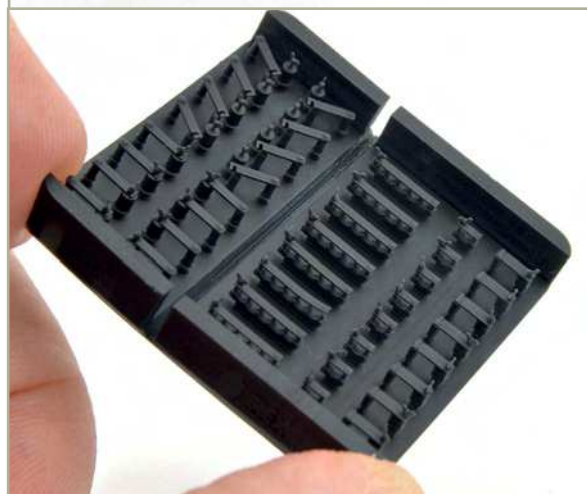
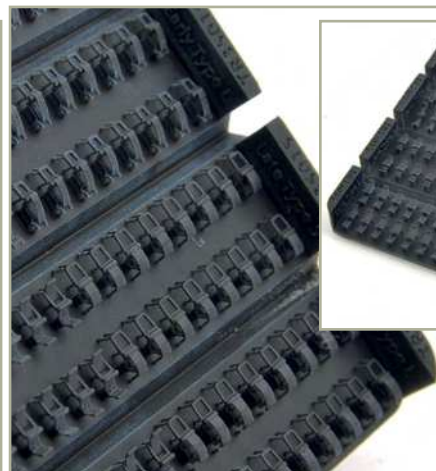
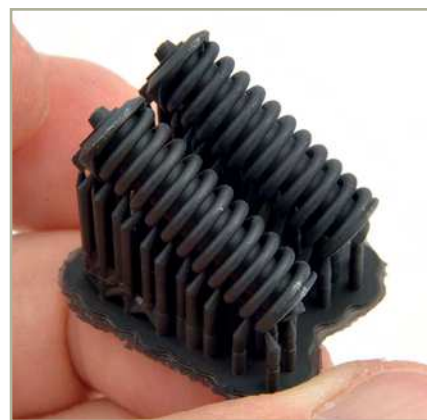
Hardback format, 467 pages

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Volume 2 is not quite on the same monumental scale as Volume 1 at 467 pages but it does explain why this in depth study had to be split into two volumes. Volume 2 serves as the illustrative part and is comprised entirely of photographs, diagrams and maps. There is detailed examination of each of the 68 Stronghold positions with both photos of each position and diagrams showing the location and even displaying the directions of fire from each position. There is also a section of sketches or diagrams showing other defensive positions like an artillery emplacement for example as well as showing the routes of attack against key defensive positions. The levels of detail and research are staggering. The remaining 240 pages are packed with period photos. These are a mix of combat post combat scenes and sections showing the city under siege and the military equipment, both German and Hungarian with even the odd Italian and French vehicle. Without doubt the ultimate study of battle for the Hungarian Capital.



T-Rex Studio 1:16 & 1:35 upgrade sets

As the design studio behind many of the recent big name injection moulded kits, T-Rex are ideally positioned to release their own range of upgrade parts. The majority of these are 3D printed which offer levels of detail and refinement that is simply not possible with injection moulding. A good example of this are the sets of 1:35 German tool clasps TR35015 which are incredibly delicate with a selection of early and late types offered in both open or closed positions. Simply slide in your tool of choice. Similarly TR35011 is a set of German clamps of the type used to secure cables and gun cleaning rods on the King Tiger, complete with wing nuts. Usually you would need to turn to photoetch for this level of detail. German fire extinguishers now, with early types TR35021 and late versions TR35020. Both sets include complete

stowed examples as well as the separate extinguisher and empty racks. TR35004 is another good example of the advantages of 3D print with these Merkava Mk.1/2 suspension units with their incredible open springs. Ideal if you plan to detach the skirts from your Merkava model. Moving up to 1:16 scale now and its a similar solution to the suspension springs for the Takom Panzer 1 kits. TR16001 gives you a vastly superior set of springs with gaps between the coils of the springs. Also for the Panzer 1 TR16002 is the cooling vent pipe, free from the moulding seams of the injection moulded versions. Finally TR16011 is a set of two Modern US water cans, cast in resin.

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Anneliese

1:35

Antonio Martín Tello returns a subject from his past
TIGER Ausf.B sPzAbt. 503 Ungarn 1945



Anneliese

TIGER AUSF. B
503. SPZABT.
UNGARN 1945



Anneliese was a peculiar Tiger II. It was a "initial turret" that, after some vicissitudes survived the Normandy campaign and made its way to Hungary with 503. sPzAbt. along a sister of its same kind, in the winter 44-45. At that time, they probably were the last "initial" Tiger II (excluding the prototype kept for trials and now on display at the RAC museum in Bovington) There is a handful of photographs of these two Tiger II, and three of them, taken

in January 1945, show a whitewashed vehicle being serviced in the snow with the name Anneliese clearly painted in the gun mantlet. Anneliese has become relatively famous among military modelers and several brands offers this decaling option in their Tiger II "initial" kits and some decal aftermarket producers also offer their markings in their catalogues.



I built a version of Anneliese almost twenty years ago. I used the Tamiya kit, a Cavalier zimmerit set and some PE. I remember being quite satisfied with the result. It was one of my first attempts to use some by then "modern painting techniques" (microchipping, oil pinwashes, pastel chalks...) and I even wrote an article about this primitive Anneliese that was published in AFV Modeller issue 7, a true honour.

Some years ago, I got Dragon's "Kingtiger Porsche Turret" (ref. 6312) with a nice box art depicting Anneliese. The idea to build a second version of this tank grew and finally materialised. Let me introduce here Anneliese reloaded.



As I said the main kit used is Dragon's 6312, a true gem from the golden age of the Chinese brand. Under the "Premium Edition" label the box includes a quite comprehensive PE sheet, pre-formed engine grilles, an aluminium gun barrel, magic tracks, metal towing shackles and many other bits and optional parts that will please any dedicated modeller. Of course I could not resist adding more aftermarket items to this model. Following my habit of accumulating extras related to the kit in the box while it is stored, I gathered several "necessary" goodies. Well, the first one is truly necessary. The kit does not include zimmerit and Anneliese definitely wore it, so I used the set from the Polish firm Atak (35025). I recommend it without hesitation; the flat surfaces are

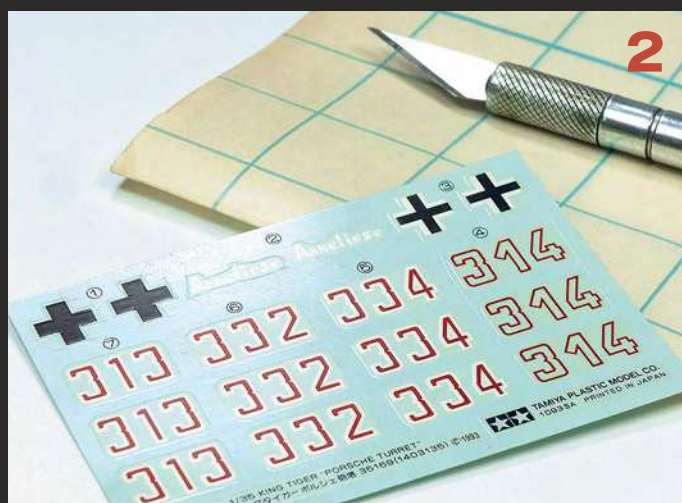
reproduced as thin engraved resin sheets, while a new resin turret shell and mantlet is included to replace the corresponding parts of the kit. For fixing the resin panels I would recommend a two-part epoxy glue which allows positioning of them correctly before it cures. Once dry, I added a little of liquid cyanoacrylate glue along the edges, so it penetrates between the plastic and the resin parts by capillary action. To smooth the edges of the resin panels, or the joins among them, I used putty dissolved in acetone, but be careful, since too much solvent affects the resin sheets. An alternative could be the use of CA glue in gel form, but use it sparingly.



I also used a gun barrel from RB (35B20). Yes, the kit comes with an aluminium barrel but I love RB's muzzle brakes, I can't help myself. Also I added some PE side skirts from ABER (35A40), also from ABER a barrel for the glacis MG (35L063), an RB aerial (35A02) and towing cables from Eureka XXL (ER-3518). This is the first time I used the Eureka products and I must say that now I can't live without them. Finally, some items from the spares such as PE tool clamps, gun cleaning rods... For the spare track links

hanging of the turret sides I chose Tamiya parts. To be honest I do not remember why, I suppose that at that moment I thought that they were better than the Dragon ones for this purpose.

To crew Anneliese I used two figures from Alpine (35132), the ones in the turret, and two torsos from Tamiya (driver and co-driver, from their recent Panzer IV L70) with Alpine heads, all of them wearing suitable reversible winter parkas.



Painting

I started with a base made with a mixture of dark yellow and white primers from AK and then I applied a general coat of gloss varnish (Tamiya X-22) **Pic1**.

The decals provided in the box by Dragon did not convince me. The name Anneliese is backed by a sort of green background and the number 314 is solid black. I do not pretend that my Anneliese is 100% correct. After all, there are only three photos in which the word Anneliese is visible and thus the tank can be undoubtedly identified, but in these photos the number 314 is hollow and the name is only visible in the right side of the mantlet (the left side is

not visible in any photo). I thought it was more logical that the name was painted only on one side, and not in both as several kits instructions suggest. Also the colour of the number is a subject of debate: red or black? To cut the story short, I managed to get a decal sheet from the Tamiya "Porsche" Tiger II, which I found more correct and put only one Anneliese decal on the right side of the mantlet and the balkenkreuz and the "314" outlined in red in both sides of the turret (and not in the rear for no reason, no idea if I should have done it. To the best of my knowledge, there are no photos of this area). For the placement of the decals



I took the photographs of the real vehicle as a guide in the right side and I "guestimated" the position in the other side. So, I cut some pieces of masking paper taking into consideration the size and shape of the decals to be used and stuck them on the model to preserve these areas **Pic2-3**.

I wanted to use the "hairspray technique" to simulate the wear off of the whitewash so I applied an overall coat of hairspray to the model **Pic4** and when dry, I airbrushed a solid coat of Tamiya acrylic white X-2 diluted in Gainotes lacquer thinner **Pic5**. Then I removed the masking paper from the places preserved for the decals **Pic6**. The idea behind the "hairspray technique" is that by moistening the surface with water, the water dissolves the hairspray under the paint in such a way that when it is rubbed with a hard bristle brush the outer coat of paint is removed in greater or lesser extent depending on the amount of rubbing, simulating chipping and scratching. I had used this technique previously and I had found that the solvent used to dilute the white paint is very

important. If water or alcohol is used the paint is removed afterwards very easily, leaving large flaking areas. If lacquer thinner is used as solvent, as here, the outer paint is removed with more difficulty, being necessary to scratch with more force and intensity, but in return you get much smaller and finer chips and scratches. I must confess that in this occasion this process did not go as smoothly as I expected. I found it very difficult to remove the white paint by rubbing it. Only after a prolonged and energetic rubbing I managed to do some scratches and in some occasions, I inadvertently removed all the paint, including primer, instead of only the outer white coat. I had some ideas about the reason for this. One is that in this model I used a different brand of hairspray that could behave differently (both brands are common in Spain and purchased in supermarkets) and other is that I left too much time between I airbrushed the white coat and I tried to remove it (in fact, more than a month). So, note for myself: next time use the other brand of hairspray and remove the outer layer immediately **Pic7**.

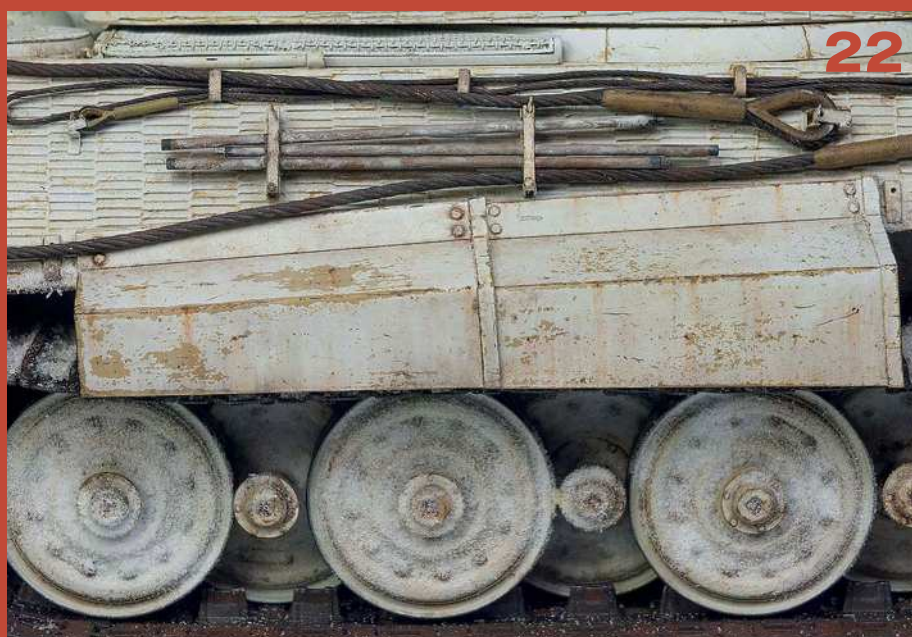


Thus, I had to complete the “chipping work” with the good old method of using a sharp small brush and a steady hand to paint the chips. For this purpose, I used a mix of Vallejo dark yellow and white. Also, and in order to simulate the wearing of the white coat, I applied controlled and localized washes of Humbrol dark yellow diluted in enamel thinner. The washes were intended to create random and faint nuances to represent the base colour slightly visible under the white wash. I had not used Humbrol enamel for ages and luckily I still had an old jar in my cupboard that surprisingly was in an optimal condition when it was opened **Pic8-11**.

Then I painted a “deeper” chipping with Vallejo 928, a very dark brown colour, simulating the metal surface. This chipping is done mainly in the edges and details more exposed to rubbing, such as the tool clamps or the hangers of the spare track links. Of course, it must be avoided on the zimmerited surfaces. Also at this point applied a pin wash of sepia oil paint diluted in thinner around the

details and in the panel separation lines **Pic12**. This is an easy and very effective technique to profile the model and outstand the details. The excess of this sepia solution has to be eliminated with more clean thinner. I also applied some very diluted sepia washes in some areas, creating faint irregular stains and spots. Finally, I applied sort of “reverse chipping” blending very small portions of white oil paint on the surfaces also in a random fashion **Pic13**. The purpose of all this weathering work has to be to create a model full of variations, nuances and shades **Pic14**.

Then I painted the tools, exhaust pipes and spare tracks. It is likely that on the real tanks, the tools were not removed when the white wash was applied, but for a model, representing the tools in a different colour than the base probably increases the variety and interest. So in a compromise between “realism” and “artistic license” I painted some tools as if they had been white washed (the ones on the sides) and some not (the ones on the upper



deck). On the white washed ones I tried to allow the metal and wood colours to be showing through. To do so I used diluted white oil washes and white pigment fixed with thinner and later partially removed rubbing with a brush until the effect was satisfactory. This method was used also for the spare tracks. At this point I satin varnished the model (Vallejo) in order to unify its look and prepare it for the final dirtying treatments. The painting of the tracks started with an overall coat of a very dark grey, then they received a wash of brown and dark rust oils. In order to simulate the polished areas in the inner side caused by the friction with the wheels I masked the "non-polished" portion of the track **Pic18** I applied directly a soft lead pencil and then, I blurred the pencil marks with a blending stump. When the masking tape was removed, a neat "polished" line appeared **Pic19** Since I planned to put the model in a simple scenic base simulating a small portion of a snowed landscape, I added "snow" in the recesses of the outer side of the tracks. This snow was made with a mixture of baking soda and "snow" from the Spanish brand Green Stuff World, both fixed with diluted white glue **Pic20**.

I dirtied the lower portion of the model, especially under the sponsons and behind the running gear, with pigments (Mig Productions' dark mud P033) dispersed in enamel thinner. I also applied this suspension, very diluted, in some horizontal areas, around some details such as the engine deck or around the turret ring. In any case, I used the pigments quite sparingly since I did not want to represent a very dirty vehicle. I also added "snow",

made as described above, in sensible places under the sponsons and in the lower portion of the hull. At this point I put the wheels, which rim was "polished" with the soft lead pencil and blending stump procedure. Finally, I put the tracks retouching the "snow" blobs, and added some more in the mudguards and the wheels **Pic21-23**.

The crew was painted with Vallejo acrylics and put in place at this stage. The model was ready to take its place in the mini snowed landscape. The base is a square piece of foam with the inclined surface in order to give to the tank a dynamic look. Two recesses were carved in the foam to accommodate the tracks and give a weight impression. The base was briefly painted in a muddy color and some grit and leaves (birch seeds) were added randomly **Pic24**. The recesses for the tracks were protected with masking tape and hairspray was applied on the surface, followed by baking soda sprinkled all over. Then, more hairspray was applied in order to fix the baking soda **Pic25**. When dry, I removed the masking tape and added more baking soda on the rear portion of the track paths, moistened this with more hairspray, and the model itself was used to mark the track impression. Depending on the desired opacity of the snow, that is, how much of the ground under it has to be visible, a second layer of baking soda can be added in some areas. Finally, the model is glued in its final place and some baking soda was fixed with diluted white glue around the tracks to integrate vehicle and ground.



Comparing images of the old Anneliese and this new incarnation I feel that I have improved in some areas. I find more finesse in this reloaded version and now I feel more confident with some techniques and mediums, such as the oils and pigments. And what is more evident: now I dare to paint (and show) some figures for my tanks, something unthinkable twenty years ago.

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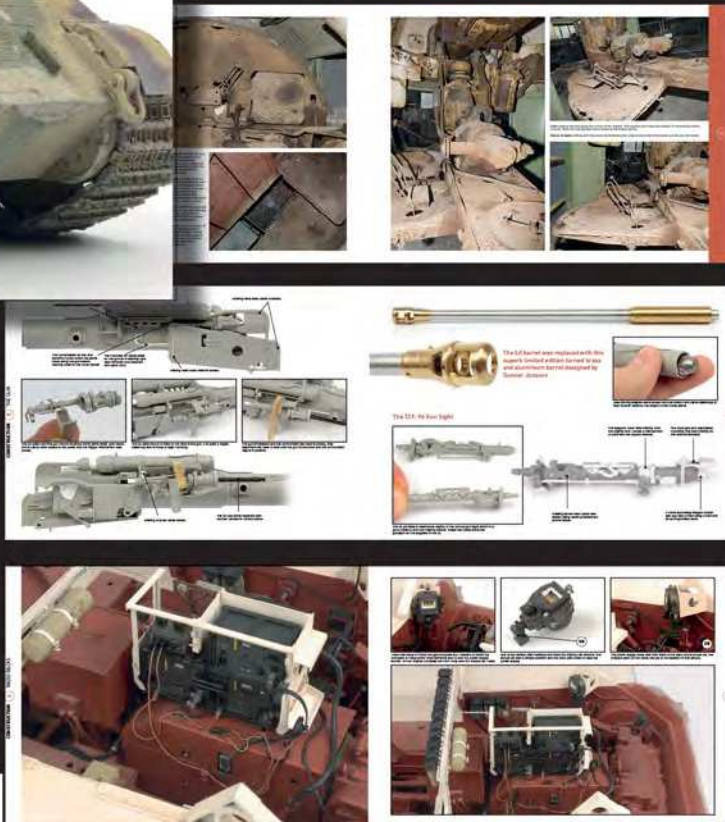
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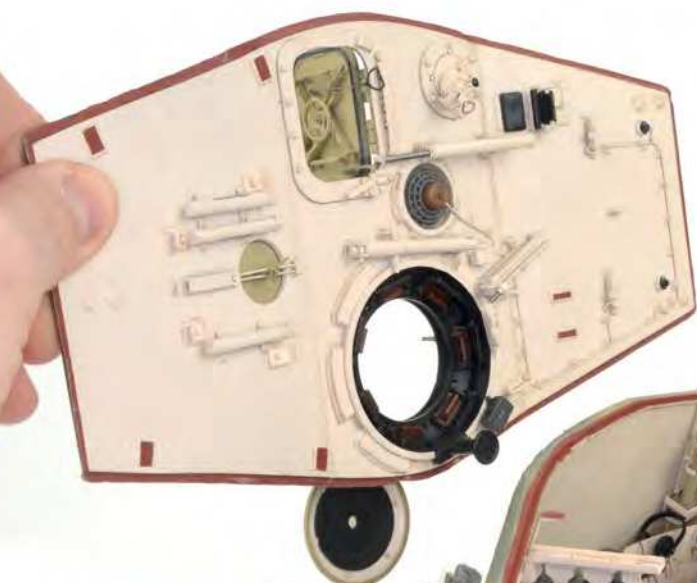
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