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TAGGED T-72

MENG MODELS T-72B3 MBT

1/35
SCALE



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1/35 TYRANNOSAURUS SERIES TS-031

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KING TIGER**

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TAGGED T-72 B3



The B3 is Russia's most up to date variant of the 40 year old T-72 design which entered service in 2012. The new Meng Models kit at first glance looks very similar to their existing T-90 and indeed some sprues have been shared like running gear and upper and lower hull. However the vast majority is new and the kit comes with photoetched grilles, wheel painting mask, a jig to align the suspension, nylon tow rope, clear moulded lenses and periscopes and flexible plastic sprue for the mantlet cover and fuel drum hoses. The only dilemma the kit presented was the choice of a subject vehicle. The B3 has featured in the Tank Biathlon (a competition for tank performance) featuring some very colourful camouflage and one of those schemes is offered in the choice of 5 schemes offered by the kit. A search of Google images for the tank brought up several images of the tank being used by pro-Russian forces in the conflict in Ukraine. Several of these tanks featured large sprayed slogans down the skirts which makes them distinctive and also offered the sort of challenge that I relish, and so with a subject chosen it was on with the assembly.



MENG MODELS T-72B3 MBT MODELLED BY DAVID PARKER





ASSEMBLY

It does not take long to have the basics of the B3 roughed in like this! I rubbed down some of the raised rib detail on the roadwheels for a more used look and I also glued all the torsion bars in position so that they would no longer flex. Care is required when assembling the spare track parts on the rear hull plate, especially parts F4 and F5 in order to work out exactly how they interlock. Cleaning up the fine fuel hose which connects the fender mounted fuel drums also requires care as does the control rod for the engine deck vents, simply because they are so fine. When fitting the fuel cells and stowage bins on the fenders I would recommend locating the rearmost parts first and then working forward as I managed to cause myself some minor alignment issues by not positioning the front sections A26 and A29 exactly. It is also worth considering assembling the skirts but not installing them to assist in painting and fitting the tacks. When assembling the pair of fuel drums you have to fill a hole in one of the ends of the drums (F20) but I substituted one of the spare ends provided on Sprue B which saved me the job of filling the hole. The flexible plastic fuel hoses that connect the drums lack the ribbed appearance of the real thing due to the limitations of the moulding process. I



delicate mouldings like the fuel lines above and control rod below need to be cleaned up carefully.



The stowage bins were primed to check the fit of the seams and joints before fitting them to the turret.

New hoses were fitted to the fuel drums and self-adhesive aluminium tape was used for the clamps.



I switched to Friul tracks instead of the kit ones because the real ones are a very similar colour to the white metal. I had to trim down the track teeth around the idler wheel so they would fit but this also makes it easy to line up the tracks when they are fitted.

replaced these with flexible resin oxygen hoses available from MDC (www.modeldesignconstruction.co.uk) which are ideal and have the correct ribbed appearance. The turret assembles without any problems although I would recommend marking off the ERA blocks as you add them. I discovered a missing one during the painting process as they are scattered about the turret roof it is

easy to miss one. The gun barrel is moulded in two halves but assembles well and thanks to the centreline ribs on the sleeve only the rearmost section which meets the mantlet required any clean up. The barrel is modelled in a fixed angle which I found too high for my taste so I adapted the mantlet cover to allow me to drop the gun.



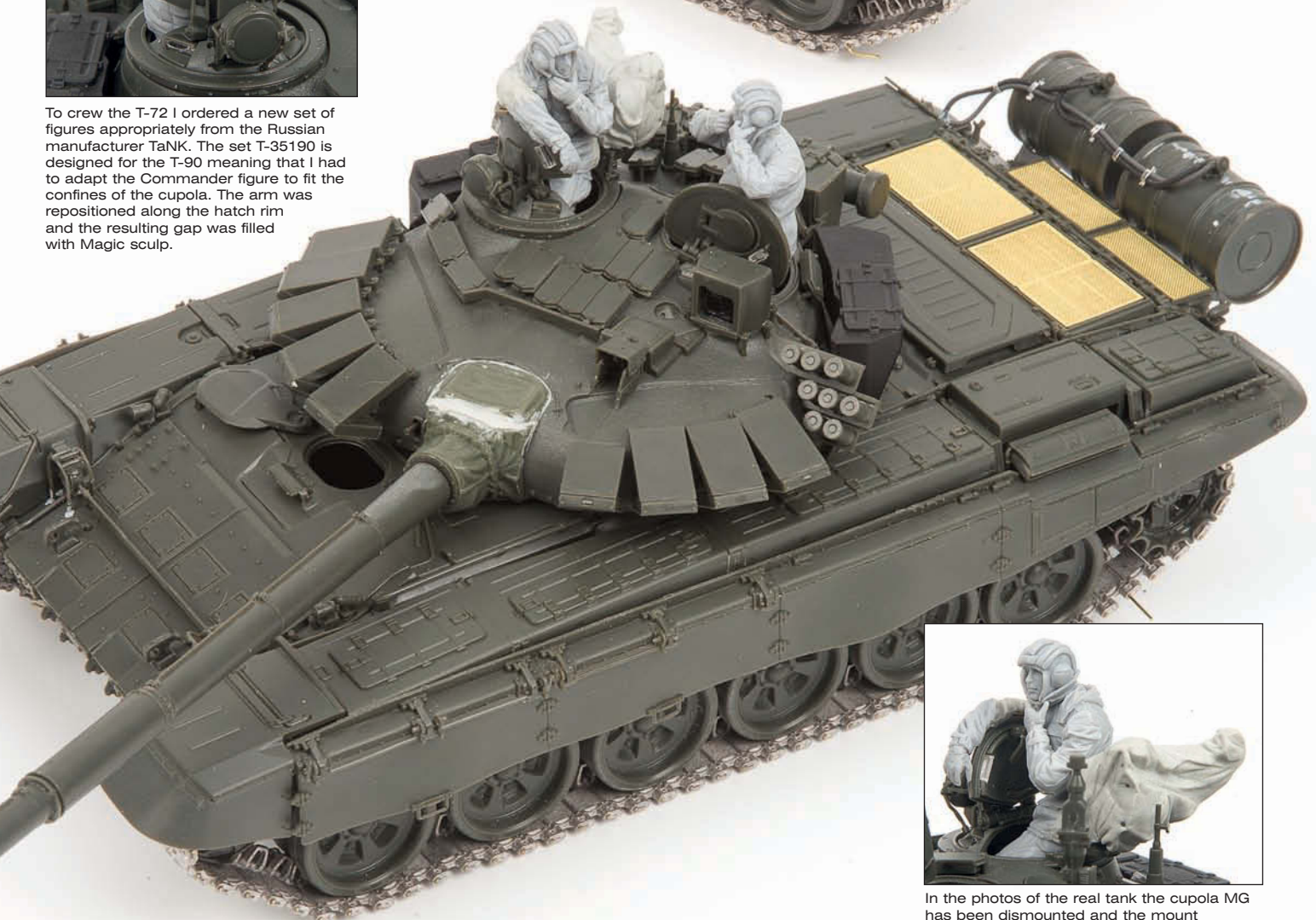
B3



Everything is tacked together here for this pre-paint shoot but the front mudflaps, skirts, gunner's sight and gun barrel are all separate.



To crew the T-72 I ordered a new set of figures appropriately from the Russian manufacturer TaNK. The set T-35190 is designed for the T-90 meaning that I had to adapt the Commander figure to fit the confines of the cupola. The arm was repositioned along the hatch rim and the resulting gap was filled with Magic sculp.



In the photos of the real tank the cupola MG has been dismantled and the mount covered with a tarpaulin. I used Magic Sculp to cover the the mount checking the fit with the figure as the fit is very tight.

COLOURS



I began by spraying the whole model with Mr Finishing Surfacer 1500 Black followed by an appropriate base coat of AKAN (Russian made acrylic paint) 73020 4BO Protective Dark Green. The tires were painted with Mr Hobby H77 Tire Black using the mask provided with the kit. All the rubber skirts and mudflaps were painted with Vallejo Air Black mixed with a touch of grey because it has a realistic dull sheen ideal for these rubber parts. The turret numbers and unit marking were brush painted onto the bins again using acrylic colours.

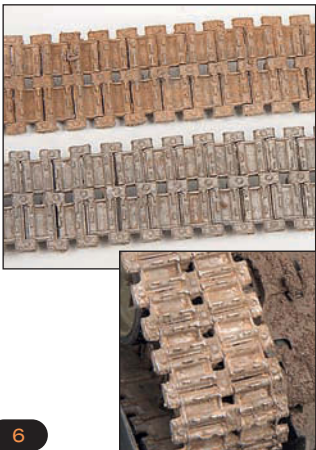


A dark grey/green pin wash is applied all over the tank and the same shade is used to spatter very diluted wash across the green to break up the uniformity.



With the base colours and a dark pin wash applied I began to add some dirt and dust. Rather than using oil colours for this I applied washes of acrylics which I find have a better density. The picture above shows the start of the process with areas of the bow treated this way in contrast to the rest of the hull. The tracks were given a

thin wash of the same mud colour acrylics and then I mixed some pigments with white spirit and worked this mix into the tracks. Once this dried I used a stiff brush to remove the excess. The final stage was to roughly work in Tamiya Texture Paint into the tracks, wiping away the paint from the contact areas.

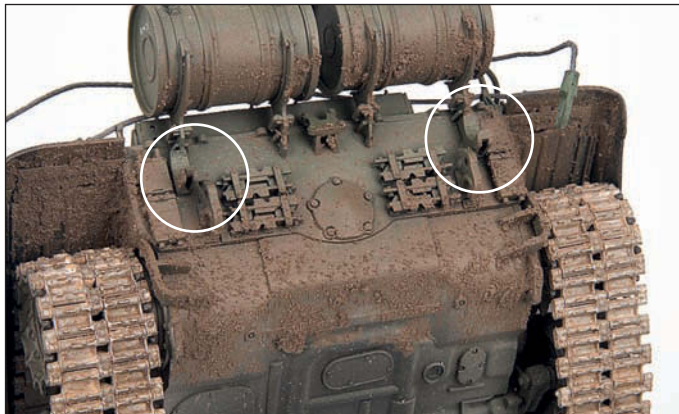


Chipped paint on the fuel drums was brush painted using Vallejo dull aluminium mixed with a little pale grey.



BLAGGING THE TAGGING

Adding the spray-painted slogans was the part of the model that I had really been looking forward to although it was not something I was going to attempt to replicate with an airbrush. The tank features two sets of markings, first the sets of rail shipping markings with the vehicle centre point 'H-2200' and the circle with cross inside. These have been on the vehicle for a time and have been discoloured. I mixed a dirty brown grey to paint these on the skirts, copying the style of the lettering from the photo. By thinning the paint I was able to feather the edges of the letters to give a softer sprayed appearance. The slogans applied over these look very fresh and bright so I used a pure white vallejo acrylic to brush paint these. I replicated the various blobs where the spray paint has paused causing the paint to pool and again I feathered out the edges, not every one but selectively. I only had one image of this tank so I had to guess the markings on the opposite side. For this I borrowed the СССР markings from a photo of another tank.



LOGGING ON

I always think that it is well worth improving the unditching log on the back of the tank by using a real one. In 1:35 this becomes more of a stick than a log! I had already cut away the plastic log to leave the pair of mounting brackets and the rear of the tank was smeared with more of the Tamiya Texture Paint. I selected a suitable diameter stick which was cut to the required length and the pair of straps added. The stick was then mounted and treated with mud splashes and the pair of tow ropes could then be secured to the tow hooks.





FINAL TOUCHES

Fuel stains around the filler caps on the trackguards add interest and I tried to mix fresher areas with older spills where dust has



collected and soaked into the fuel. On the fuel drum I added thinner smears of fuel running down from the connectors at the top of the barrel.

Small pieces of hemp scattered over the bow add to the impression that the tank is in the field and not the parade ground.





The crew were painted with Lifecolor acrylics with the digital camouflage being exceptionally demanding and time-consuming. With a base colour for the uniform applied I used a fine brush to apply the paint in the smallest dots I could achieve, grouping them together to build up the pattern. I did not complete the lower legs as these are hidden inside the vehicle. TaNK <https://models-hobby.com>



With the model complete further photos of the vehicle have been passed on to me which show that the numbers on the right side of the turret should be painted on top of the turret cheek reactive armour. It also shows three exclamation marks on the skirts behind the exhaust, an area cropped off my original image. For the moment our print deadline prevents me from making any adjustments and perhaps it will just stay as it is.



Chris Jerrett converts Tamiya's Leopard 2



History plays a big part for most modellers, and many would consider themselves students of history. Then there are the modellers who are interested in the technical aspects of military modelling. I fall in between the two and also have a keen interest in modern history and the weapons of the Cold War, including the Leopard series of tanks. After 10 years of marvelling at the WWII big cats, such as the Tiger, Tiger 2 and Panther, I became interested in the continued development of the tank in post-war Germany. It turns out the Leopard series is closely related to the WWII Tigers and Panthers. I bought my first Leopard 2 model kit in 2009 and have not stopped modelling Leopards since.

Great Dane

My latest Leopard is the Danish 2A5. Accurate Armour recently released a conversion kit for both the Hobby Boss and Tamiya kits of the Leopard 2. I had wanted to model the Dutch Leopard 2A5 for some time, but there was not an accurate kit or upgrade set available.

I decided to use the Accurate Armour set for the Hobby Boss kit, and all was going well until I came to the conclusion the Hobby Boss kit did not hold up well compared to the Tamiya kit. I switched gears on my build and used the Tamiya kit mixed with parts from the Hobby Boss kit and some of the Accurate Armour resin parts. This turned out to be the best

approach as I prefer plastic to resin. I did have to buy three kits, so I recommend to anyone wanting to build the Danish Leopard that they purchase the Tamiya kit and the Accurate Armour kit. For people who have the Hobby Boss kit in hand and want to build it, the Accurate Armour set will cover 80% of the bad details.



1:35



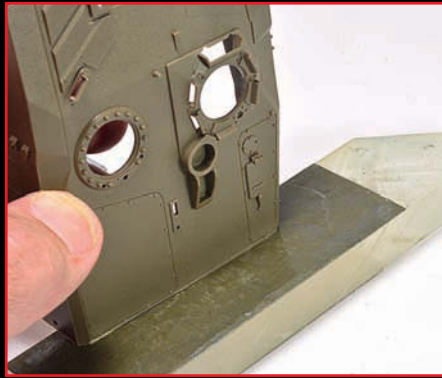
Starting in on the build, I first eliminated all the Tamiya kit parts that would not be needed. I then cleaned up the parts that would be used and sorted them in bins, with one bin each for the turret, hull, and running gear. I cleaned up the resin parts at this point as well. The cutting of the main parts of the hull and turret to fit the resin parts was done with a small saw. Accurate measuring is important. The turret bins the German tanks have are different to the Danish version. I sanded the resin parts with wet sandpaper and used an epoxy glue to fix them together.

Throughout the build I added the larger photoetched parts. I used extra photoetch from Eduard's set number 36028 for the Tamiya kit. There are many good parts in this set that helped add detail to the model. The Tamiya kit is a gem but there are details that are missing and one is the welds. Without the weld seams the kit loses the appearance of being made of sheet metal and takes on the look of a moulded box. To add the welds I used stretched plastic cut from the kit sprue. I glued it in place with Tamiya Extra Thin cement. Accurate close-up photos of the

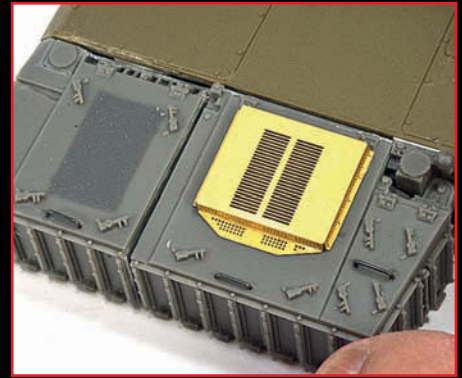
tank are needed to find where the missing details are. The medium-sized resin parts were now attached to the plastic using super glue. I created extra support for the hull using square plastic tubing. This added integrity to the model, which was important, as with the metal tracks and the resin parts the end result will be a heavy model. Other moulded-on detail, such as the hose on the rear deck, was cut away and remade using plastic rod with photoetched detail.



The cutting begins, checking the measurements three times always helps!



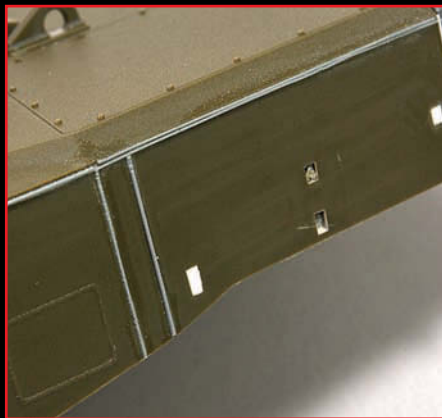
I use wet and dry sand paper glued to acrylic sheet for a smooth surface some of my blocks are now 20 years old.



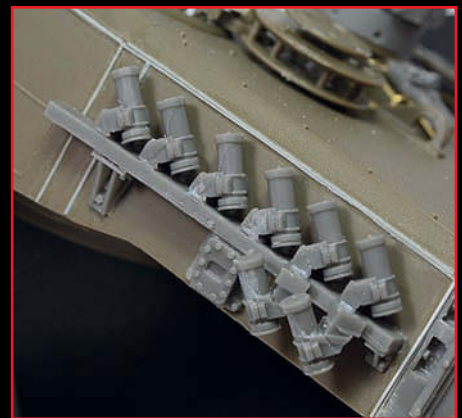
The PE that came with the AA kit is very well done; this vent for the rear of the turret is very detailed.



I use a metal dental pick to gently texture the weld seams made from plastic sprue.



The straighter the stretched sprue the better to replicate neat weld beads.

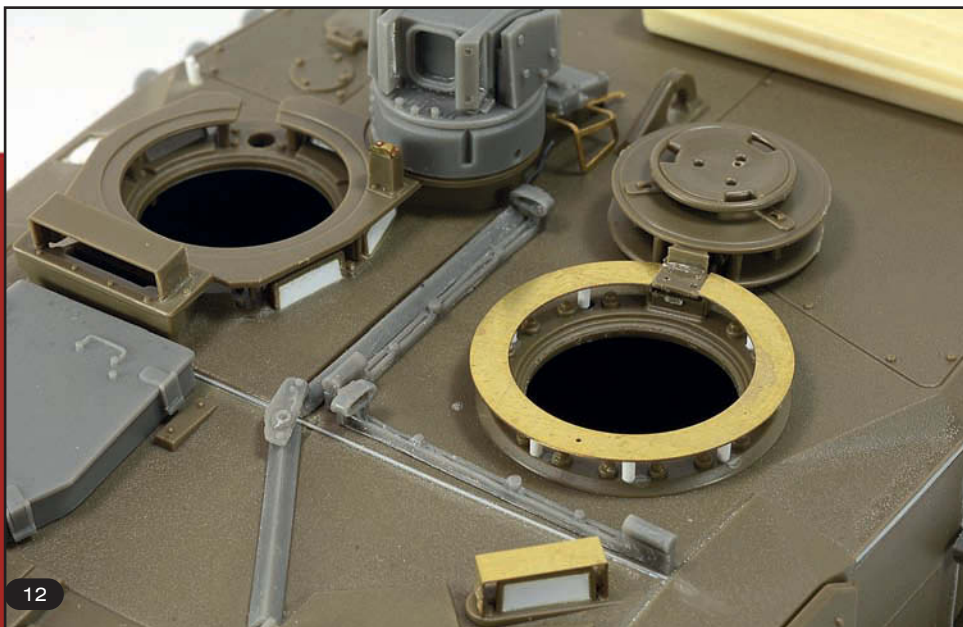


Epoxy glue was used to set the smoke dischargers in place, the slow dry time gives you ample time to align the parts.

To add interest to my model I decided to have the top half of the front add-on armour removed. The Danish crews often take this armour off while training. I was going to scratch build this part but at the last minute I checked the side skirts parts included in the new Meng Leopard kit and they did include the parts to model the skirts in one of three ways (there are actually four ways that appear on the real

tank). I checked the fit and the measurement and all was good. The major part from the Hobby Boss kit that I used was the extra armour on the front of the hull. This part was inaccurate in that the bolt heads were moulded on the surface. To correct this I had to drill out each hole and replace the moulded detail with plastic rod and a bolt head. I used resin bolt heads from Plus Model. The last major part

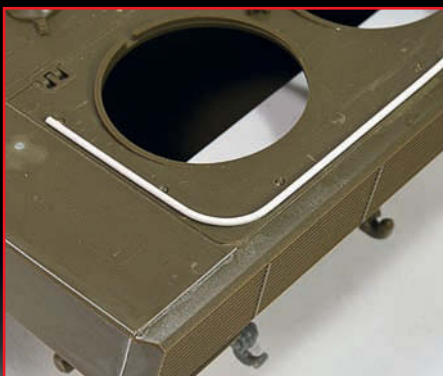
was the auxiliary power unit that had to be added to the rear right hull. The build was finished off with Fruiil tracks and cables from Eureka XXL. I then put together all the sub-assemblies to take pictures of the completed model. But it wasn't going to be a Danish Leopard until the paint was on it. Before painting began I took some time to try out storage placement so I knew what would work on the finished model.



Removing molded on detail is always a chore, proper tools help.



A new hose is modelled with plastic rod. I bent the curve using my knife handle.



The new part is glued in place using Tamiya Extra thin cement. Extra details are added with parts from the Eduard PE set.



I added reinforcements to the hull because a side of the structure was cut away making the alignment difficult.



Taking the time to get the details exact I drilled all the raised bolt heads and replaced them with recessed ones



Test fitting the add-on armour to the Tamiya hull, more cutting had to be done to make sure everything was aligned.



The power unit needed some fillets and weld seams added for a precise fit, once in place it really looked the part.



Green Machine



A primer coat does more than prepare the model for the paint work. It also helps hold the finer parts in place.



Shadow areas are pre-shaded with a dark brown colour.



This green mix turned out perfect, getting the right green is one of the hardest parts of military modelling.



The effect of the pre-shading is obvious in this photo.



With the black paint on the model takes on the look of the Danish vehicles. These areas were masked and painted dark green.



The markings came from the Echelon set "Fearsome Cats of Europe"



The unit markings from the Accurate Armor upgrade set were used.



When the paint and decals were dry I gave the model a clear coat to protect the finish. A yellow tint is added as an extra colour filter.

The green the Danish Army use is unique to their tanks. Even though they are part of NATO, they use their own camouflage of a deep green over a base coat with black areas. Before I started the painting I experimented with the colours to mix a good match for the real paint. I spray my mixes on other models or plastic card to come up with the best match. This is a process that has to be taken

seriously to get the look of the real thing. The model started off with a primer coat of grey. I used Tamiya primer from a can. I used a dark brown/black tone sprayed in the recessed areas. For the green mix I came up with to match the tone of the Danish tanks I started with Tamiya XF58 Olive Green mixed with 30% XF62 Olive Drab, with the tone brightened with a little drop of tan and

lightened with white. The black was straight from the bottle using Tamiya XF1 Flat Black. The paint was applied freehand without masking. The add-on parts on the Danish tanks, such as the commander's weapons box, were painted a darker green. I masked these parts off and used Tamiya XF61 Dark Green to paint the underside of the Mexxas side armour on the hull, which is often seen in the same green tone. I then applied the clear coat to smooth out the surface of the model for the decals and for the washes and filters. I like to add a little yellow clear to the Tamiya clear to help prevent a lightening of the base and to add depth. For the markings, Echelon's "Fearsome Cats of Europe" set was used. If you're a fan of the Leopard you need this set. There are markings in it for Greek, Finnish, Swedish, Polish and Danish Leopard 2A4s, 2A5s and 2A6s. The decals were applied using Decal Set from Microscale. I've been using this stuff for 30 years - now that's brand loyalty.



The oil colours from 502 Abt. are effective for filters.



Fine rust detail helps give life to the tank. The rust is oil paint thinned and applied as a controlled wash.



Dust is added using pigments mixed with paint and thinner...

Down and dirty



Paint chips revealing old paint or the primer coat colour are done using acrylic paint and a small fine brush.



The lower hull received several layers of dried dust and dirt, the first layer being sprayed on to fully cover the base colour.



Alclad is a great paint to use as a primer on metal tracks and it was good for this model to reveal the silver worn metal.

When I start on a build I often have a plan for the weathering. I have three basic ways to finish and I find that almost any model will fall into one of these. They are: wet/muddy, dry/dusty, and wet/snow. For the Danish Leopard I decided on a dusty look after seeing great photos of the cat in open plains covered in dust. Before I get into the weathering I wanted to concentrate on creating some wear on my model. This included rusty parts, scratches and worn paint. I broke it down into three main sections, running gear, hull and turret,

the first having the most wear and the last the least wear. I started with some filters and washes. The filters are part of colour tone of the painting process, but also partially contribute to the dust build-up. A dark brown oil was mixed with thinner to help blend the camo colours and also to help with dirt build-up in recessed areas where the crew have difficulty cleaning the tank. Every tank has rusty bits and these are great for adding points of interest. For a tank like a Leopard 2 that is well maintained and relatively new it's best to

add rust to thinner metal parts that rust easily, as well as to areas where the paint has been scratched off, revealing the bare metal. I used several light and dark tones of red and brown oil paints to add rust. I simply applied the oils with thinner and moved them around until I had the desired look. During this time I also added paint chips using acrylic paints brushed on or applied with a sponge. It's important to find the right primer for a vehicle so you can show the paint chipped off to reveal the primer colour.



I painted the inner part of the wheel silver and used the hairspray technique to create a worn look. To help with painting the wheels I cut a hole the size of the wheel into dense foam to cover the tyre. A stencil was used to protect the tyre wall from overspray.



The first dust is very subtle.



Very gradual applications of pigments and weathering powder are built up avoiding any harsh and out-of-scale contrasts.



Final touches include some dark oil paint washes to create damp areas in the dust...



and small areas of bare metal through constant crew contact.



For the dust I mixed Humbrol paint with a small amount of dust-coloured pigments. The mix was thinned with Humbrol thinner and applied to the model with a series of brushes. You can make it as subtle or extreme as you want by just adding more pigment for a heavier layer of dust. For the hull I first sprayed the area with Tamiya XF78 Wooden Deck Tan and then applied a variety of dust tones. While all the dust and rust oils were drying I took some time to paint the road wheels and tracks. The metal parts of the tracks were first given a coat of Alclad Aluminum. This is a base metal colour. The inner part of the road

wheels got the same paint. The Alclad was set aside to dry for a day. I then give the tracks and wheels a coat of hair spray. Over the tracks I sprayed a dark brown colour. I then washed them lightly with water to lift off the paint to reveal the alloy colour. Several washes of rust tone were the next step, followed by hand-painting the rubber track pads black. The wheels were painted in the green colour as the tank, and using the same technique I wore away the paint with water to reveal the silver colour. This is very effective for depicting worn paint on aluminium. What I find to be important for proper depiction of

dust on a small scale model is tone and texture variety. To finish the dust, straight pigments were applied in areas to add texture and tone. For wet dust areas I added dark oil paint mixed with artist's thinner. Extra fine dust texture was also added using a Tamiya pigment set. The yellow colour is great for added dust. The model was finished off with some silvering and wet effects. To depict worn metal or buffed steel from crew contact I used Tamiya metallic grey mixed with their retarder so I could paint it using a brush. Wet effects were Mig Productions' Wet Effects used straight from the bottle.

There seems to be a perception in the armour modelling world that the days of complex conversions and difficult resin kits are coming to a close. I tend to see it differently, there are still plenty of tanks and vehicles to model that are not in plastic kit-form. The Leopard series of tanks is no exception.





winners 2015-2016

Sergiusz Peczek AMX-30B

Meng have announced their 2015-2016 top three entries to their successful on-line modelling contest. Winners from the monthly prizes (based on the number of public 'likes' on the Meng Facebook page) were presented to an international panel of judges (including our very own Editor) to score according to a set of extensive rules.

A very difficult task considering the first prize was a whopping \$2,000 with \$1,000 for second and \$500 for third. Congratulations to Sergiusz (remember his Brummbär in issue 89?) for taking the honour of first place with his superb AMX-30B. More details and images are over on Meng's Facebook page.



Zhang Chengxi M2A3



Lukasz Orczyc Musialek



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M10

OUT OF TEN

Fabio Sacchi
gets top marks for creating
an accurate M-10



I think that the M10 or its derivatives, such as the Achilles or M36, are quite well-known subjects amongst modellers. In spite of the M10's popularity and the availability of surviving examples, the treatment that kit manufacturers have given to this subject in 1:35 has been extremely poor.

It's true that two major producers (AFV Club and Academy) offer several kits of the M10 and M36, but all of them, including the latest Academy M10 incarnations, are plagued by several measurement errors and poor turret interior details.

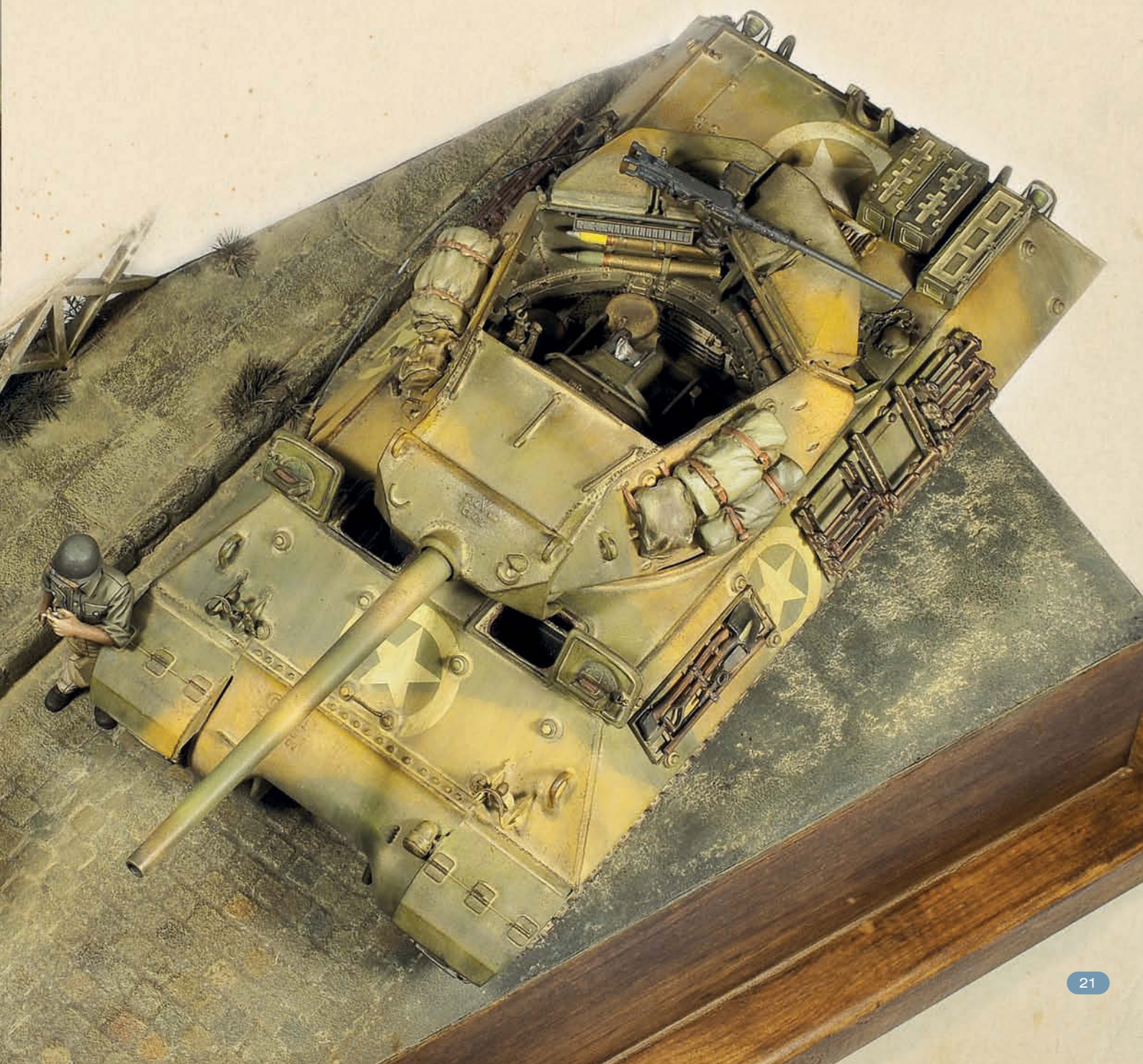
On several occasions I have read requests from modellers asking which of the two kits is the best.

Well, the right answer should be "none of them". AFV Club's, once built, looks OK-ish from a couple of metres away, while the Academy one, being too narrow by far, looks odd.

This project is actually one of my everlasting shelf queens, as, if memory serves, I started working on it back in 2004 and it is a 'kit bash' of parts from several companies, plus a fair amount of scratchbuilt parts, including the complete turret.

I won't bore you all with tiny rivet-counting details but I would like at least to highlight the most critical weaknesses and what can be done to fix the problems. I'll explain in the same order that I tackled the model: hull, turret, then gun.

1:35



Start at the bottom...

Thanks to some ordnance drawings that author and modeller Steve Zaloga provided me with, I was able to compare the upper hulls from both the AFV Club and Academy kits. The one most plagued with inaccuracies is Academy's: it is too narrow, although not dramatically (1.5mm in total), but since the turret ring splash diameter is correct it's enough to make it appear narrow. Front armour angle is way off too, causing a big problem that shifts the hull roof backwards, which in turn compresses the front area between the roof edge and turret ring too much and shifts the engine deck backwards, making the rear plate almost vertical.

This front roof compression is the reason why the driver's and radio operator's hatches have a weird shape. They should be rectangular with just the rear outer corner rounded.

The early one-piece transmission is nice, but the upper bolt strip detail is plain wrong

for this early model and bolts should be exposed with just the front lip as a bullet splash guard.

Running gear is acceptable, though not the most accurate on the market, and interior details are OK at gearbox level, but not for the driver's and radio operator's seats, which in M10s were linked with two braces to the side walls and not to the floor as in the M4 family. In addition, the radio, an SCR 508, is wrong. Tank destroyers used the SCR 610. Ammo stores are almost correct, except that the cartridge fibre tubes were not fixed on the walls but simply stacked in layers with one belt to keep them in position.

AFV Club's upper hull rendition is much better. In total it is off here and there by fractions of millimetres and if you have one of their most recent kits, the front hatches have a decent shape. Somewhere during production, AFV Club corrected their tooling in order to have a correct shape as

initially they were rectangular.

Major flaws in AFV Club's kit are the lower hull and transmission cover, which are somewhat too short in height. That's the reason why the one-piece cast transmission cover is way too skinny, making the front mudguards appear to be floating. Interior details are passable.

Again, here you have the wrong radio and wrong ammo storage walls.

AFV Club's bogies are the worst amongst M4 style kits. Wheels are too big in diameter and due to the "workable" design obtained with soft vinyl spring packs, the braces sit at too steep an angle.

Having reviewed all of this mess it was clear to me that to obtain a more decent and accurate M10 hull I needed to kit-bash parts.



So, I used a Dragon M4A2 lower hull, Tasca one-piece early transmission cover, Tasca running gear and the AFV Club upper hull.

In spite of fact that so many different kits were used, they went together fairly well and overall the final shape was way better than expected. Due to a mistake, I had to cut away the metal strip running on the bottom of the upper hull sides, which I substituted with a 4.8mm plastic card strip. Interiors were bashed from Academy (front transmission) and AFV Club (seats, under-turret floor and firewall). Cardboard tubes

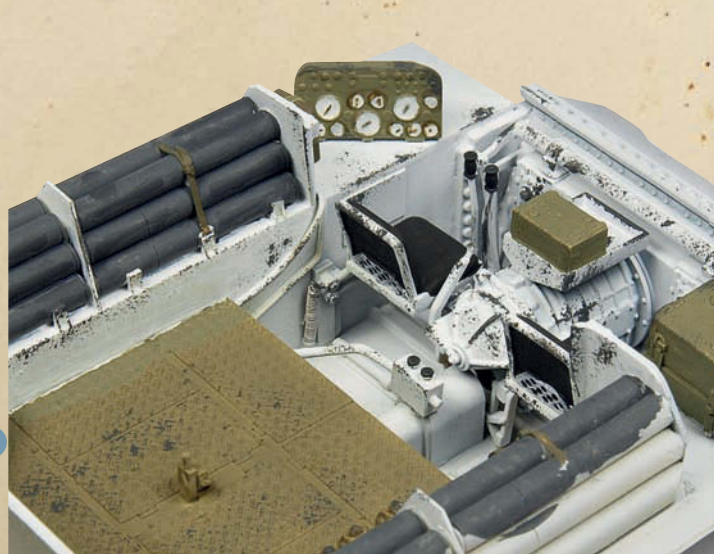
were lathed and copied in resin. The SCR 610 was scratchbuilt and actually became a Formations master.

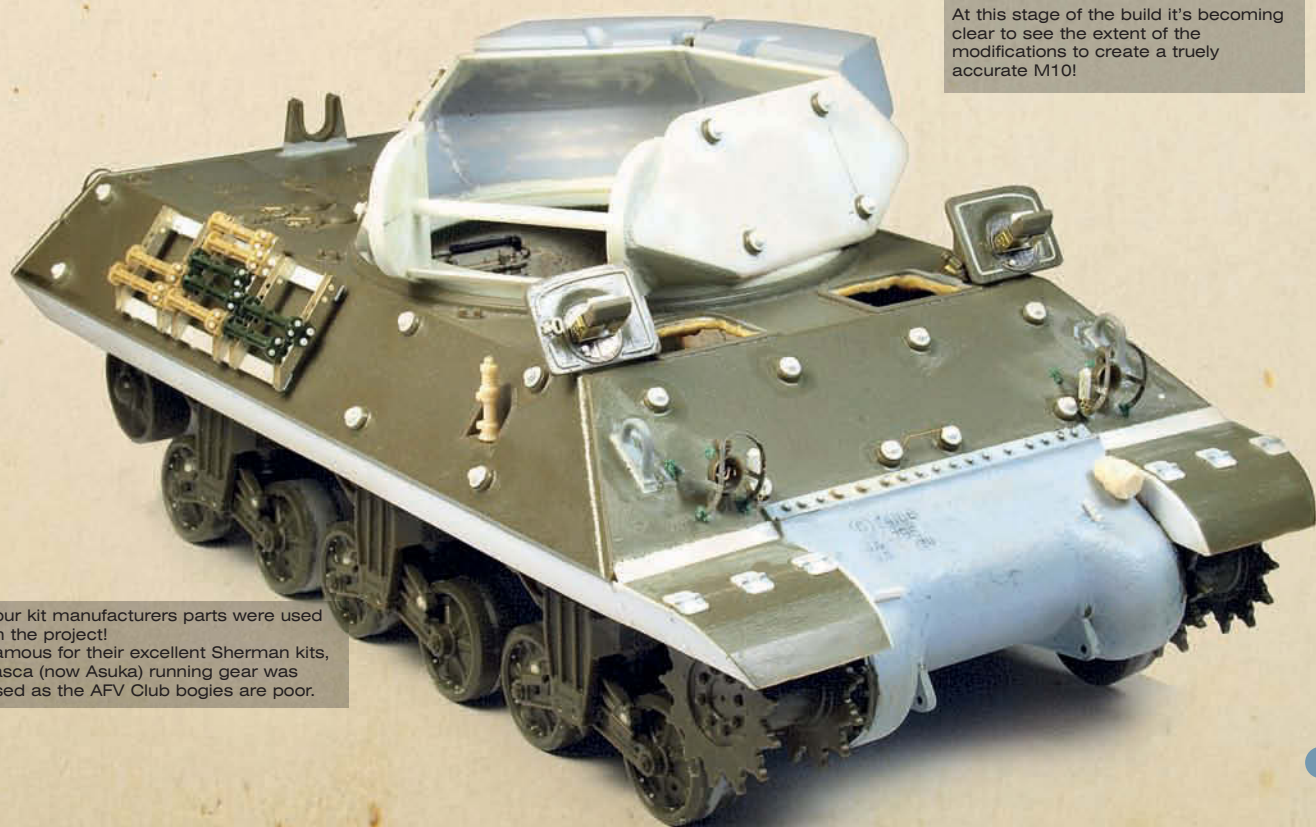
The front hatches, while decent in shape, do have poor interior details. This is not a problem if you plan to leave them closed, but I didn't, and in the open position they stand vertically. I therefore improved the roof shape with a cutter in order to pronounce the 'bulge'. With 0.25 x 0.25mm strip (Plastruct seems the only company with this size in their catalogue), I rebuilt the contour and the handle. Periscope housings and rotating support were

supplied by a generic Aber reference dedicated to the Sherman.

The additional armour fixing bolts are OK but to my eye they lack a tad of sharp detail, so I made them with a (very old) Reheat Models punch and die set.

Grouser holders are an Aber reference, but as it is dedicated to Academy's kit (with its related measurement issues), I had to use ministrap for their horizontal supports. I later found out that the hull was the easy part of the project.





At this stage of the build it's becoming clear to see the extent of the modifications to create a truly accurate M10!

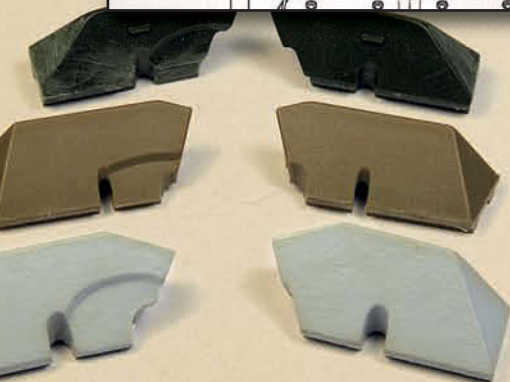
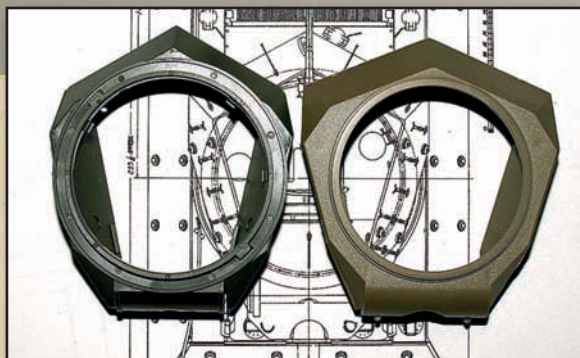
Four kit manufacturers parts were used on the project! Famous for their excellent Sherman kits, Tasca (now Asuka) running gear was used as the AFV Club bogies are poor.

Turret trouble...

The M10 turret was built from a cast and lathed ring onto which four armour walls were welded. Those four armour pieces were precisely curved: two sides were bent on the bottom to connect with the ring rear, two walls were bent in the middle to give a double angle, as well as the bottom to connect with the ring. Triangular "fillers" were also bent at the bottom and welded on the turret angles, two in front and two at the rear. These are the details that everyone failed to reproduce in scale but I understand it would have been a challenge to mould. However, both Academy and AFV Club turrets can't simply be corrected. Academy's is way too narrow, including the front gun armour. AFV Club's is too short and too large, with front gun armour way too large. Both also sport an inaccurate roof slope. Academy's turret ring is spot-on but the gun trunnion position is wrong. AFV Club's turret ring is way too narrow while trunnion position is ok. In this case, starting from scratch is the

only solution if you want accuracy. The trick here is to ensure that the turret ring has the correct dimensions and that the two trunnion holders sit at the correct distance from centre, are spaced correctly and have the correct thickness. Be correct with these dimensions and the rest of turret shape will (almost) fall together, because the sloped walls will sit well only in the right position and their shape will determine the angles of the rear walls. After all major shapes were checked and checked against scale drawings, I added some epoxy putty to areas that were curved, namely the lower parts of the side walls and rear walls. Once satisfied, I added weld beads. I slightly exaggerated the welding effects because they were instrumental in hiding some small imperfections in the joints. With the basic shape done I started the rear counterweights. By correcting the turret shape, the counterweights, no matter if AFV Club or Academy, will not fit

as they were shaped to follow the incorrect profiles. By using AFV Club counterweights as a base I added shims of plasticard to beef them up, and with Tamiya epoxy putty, I filled the holes to strengthen the pieces. I then carefully and slowly sanded them down to the right shape, finishing them with finer paper and texturing with Mr Surfacer 500. Next was the gun shield. I started with the AFV Club piece by cutting it into three parts and narrowing it by 4mm. The gun collar was somewhat modified in shape on my lathe and two lines of welding added. Finally the short turret roof was made from a piece of 0.5mm plasticard. Internal accessories were based on AFV Club parts. The 3 inch rounds were a master originally done for, and planned to be released by, Formations. Be aware that the 3 inch brass rounds from Armorscale are oversized and won't fit.

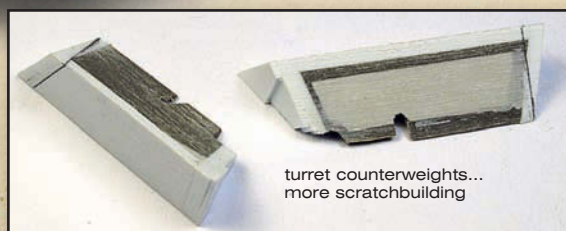


Here we can see the extent of work to create an accurate looking breech.

Niether turret is remotely correct, it was time to resort to some old-school plastic card and putty!



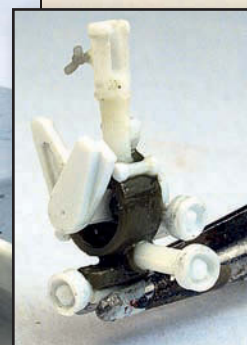
Turned barrel is from Aber



turret counterweights... more scratchbuilding

Also, the gun situation was not good. AFV Club's rendition has a decent breech, which can become a decent base for detailing, while their gun cradle is way too large with details and shape incorrect. Academy parts solve some of these issues, so I mixed the parts and detailed the breech with styrene pieces, as well as the cradle from Academy. The gun barrel is from Aber, which is correct in diameter compared to AFV Club's offering (more similar to a 90mm than a 3 inch) but 4mm too short according to my reference. Luckily, I could add a 4mm insert on the back as it

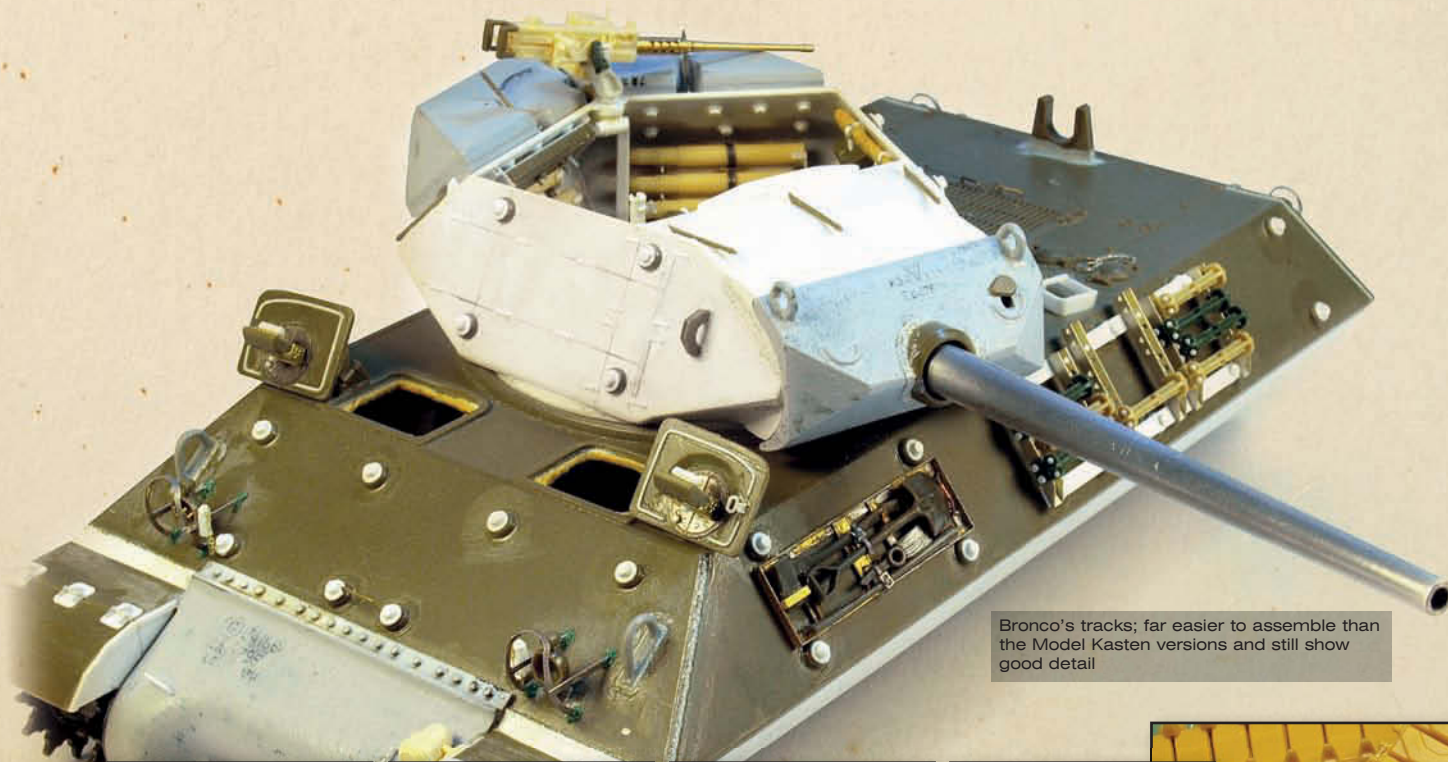
would be then hidden under the turret roof. With all major parts completed I added a Tasca Early Style VVSS bogie set. As the M10 was much lighter than average M4s, suspension volute springs were less compressed. To do that I substituted the foam that Tasca supplies with their set with a piece of 1.5 x 25mm ministrip. This will raise the suspension just a tad, rendering the lighter weight pretty well. The tracks are from Bronco and worked very well. They are easier to build than the Model Kasten set, even if a little less detailed.



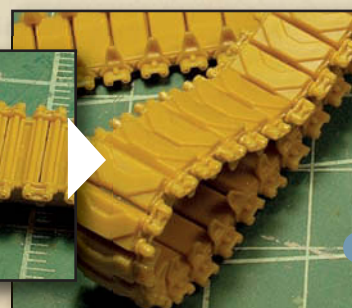
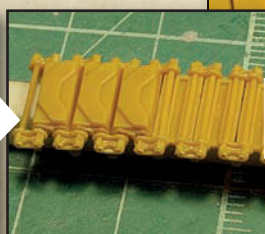
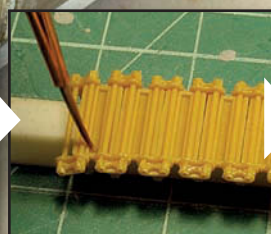
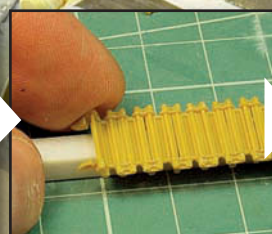
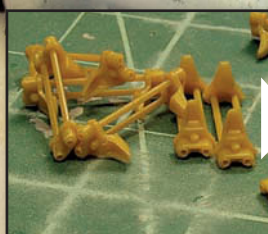
The turret MG is an old, but still very well detailed, upgrade from Formations, depicting an Early .50 cal., with early ammo case, and the barrel is from Adler's Nest. I had to scratchbuild the MG pintle

as the M10 has a unique design and no one makes it correctly. In the meantime, Japanese Company Adler's Nest released an US antenna base that could be realistically bent, as well as

split in accurate sections - too good for a geek to resist! Profiting on this, I posed the antenna bent and fixed on one side of the hull, making it very realistic as most wartime photos show this fixing.



Bronco's tracks; far easier to assemble than the Model Kasten versions and still show good detail



When in Rome...



I wanted to depict a vehicle that entered Rome in 1944, and after the fighting was then stationed in Via Casilina Street. Italy Campaign vehicles quite often sported camouflage schemes and therefore they may be a welcome diversion from the usual full Olive Drab scheme. The base Olive Drab was disrupted by applications of Light Earth colour. Also typical of the Italian Campaign is the abundance of white stars in addition to the original markings, in this case a

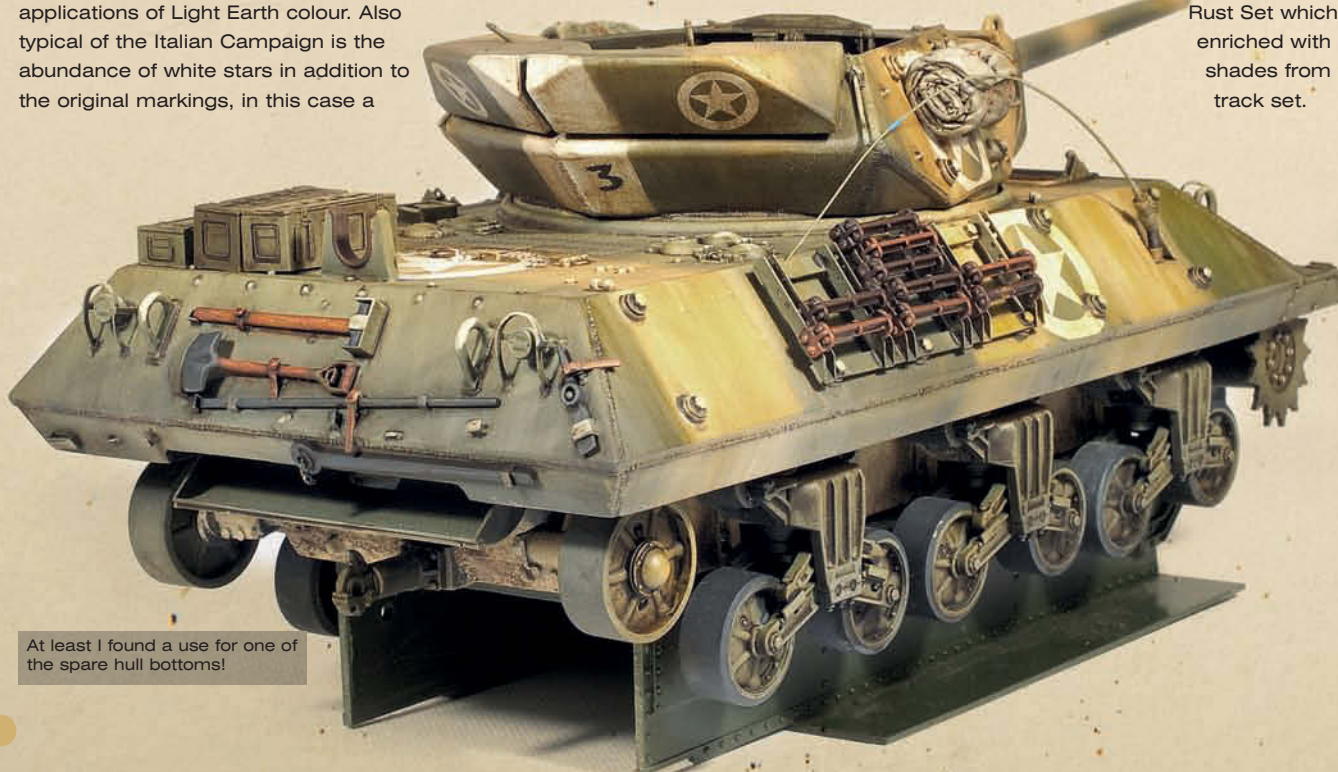
white strip on the back of turret with the vehicle number handpainted in black. I started with an Olive Drab base using Lifecolor's Modulation Set and Light Earth tone while the Olive Drab was highlighted with the "flashed tone" included in the set. Light Earth was slightly highlighted by

adding a drop or two of white to the

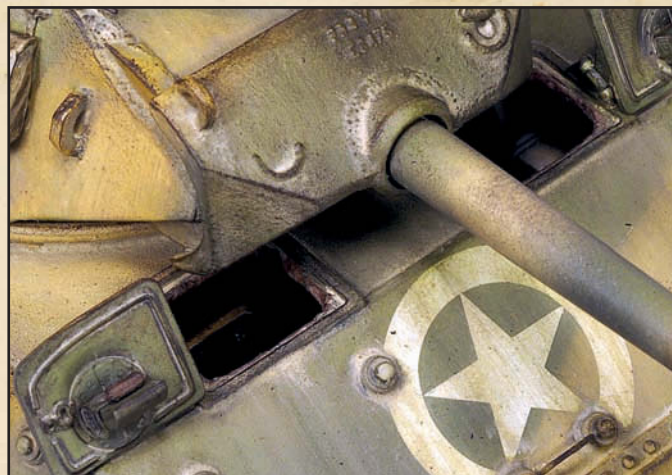
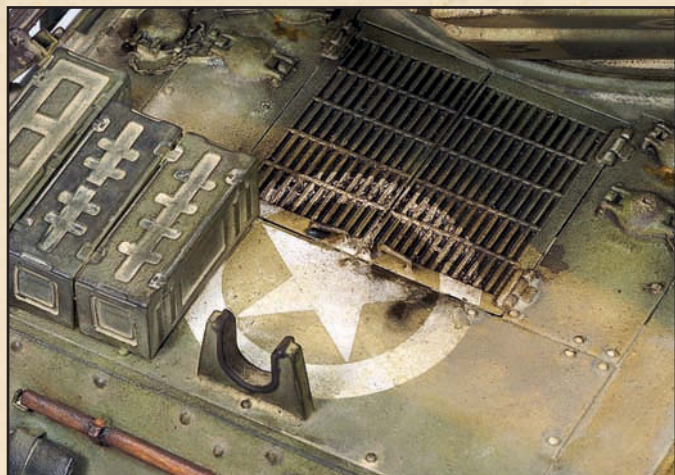
base colour.

Once base tones were well dried, I started to hand paint all the accessories. For tarps and rolls I made use of Lifecolor's US uniform sets. They are great sets and give you a wider palette of green shades, which is great to avoid a flat and uniform tone. Grousers were painted using Lifecolor's

Rust Set which was enriched with rust shades from their track set.



At least I found a use for one of the spare hull bottoms!



After spraying a satin coat I applied the stars. This was a somewhat challenging operation as most of them are applied just over the additional armour fixing bolts. I used the Archer transfer set with Archer decal sheet. While a little complicated, it allows you to use transfers exactly as normal decals. Of course there is their potentially fragile nature to consider, but if handled carefully, they are very effective. Once they were dry another overall spray of satin was applied, this time to fix and protect the transfers from the weathering. A first layer of filters was applied by using oils. It helped to increase tonal richness and add some depth to the whole model. After that, before fixing the bogies to the hull, I reproduced dirt and mud on the hull sides behind the running gear. In this case I used two tones of Lifecolor pigments which were mixed and fixed to hull with clear matt acrylic.

My M10 was then dusted with AK enamel effects and the rear exhaust deflector was treated with new

Lifecolor liquid pigments. These are a quite new product in the weathering arena and actually I received some pre-sale test shades while I was working on this model and I married them with their Oil and Grease grime as I wanted to achieve the sooty and oily appearance of a diesel exhaust. I have to say I was quite impressed. They are very flexible and as a bonus, they mix very well with other Lifecolor Acrylics, allowing thousands of potential uses and effects!

My base is inspired by real landscapes of the "Casilina" causeway. It was (and still is) an important road that allows you to enter Rome from the south. When entering Rome's outskirts it is paired by a rail track and paved

with stone on the outer portion while the centre is tarmac.

Stone paving was made by engraving a piece of balsafoam, while tarmac was obtained by mixing sand and white glue. Once dry, it was then sanded down. The result is a very realistic and non-uniform tarmac.

To make the scene live two Warriors figures were chosen and they were masterfully painted with acrylics by my friend Pino Ortolani.





This project was a true shelf queen taking approximately ten years to see finished. Fun was had in searching for solutions to fix the mountain of inaccuracies and see them once completed, still exhausting and somewhat frustrating!

M10



I have to thank Steve Zaloga for his great support in providing scale plans of the M10 and Pino for his kind painting of the figures. As I sit writing this article, TAMIYA announced a new M10 kit! I really do hope it's a more accurate kit than their predecessors and I hope that my words here can help to confirm that.

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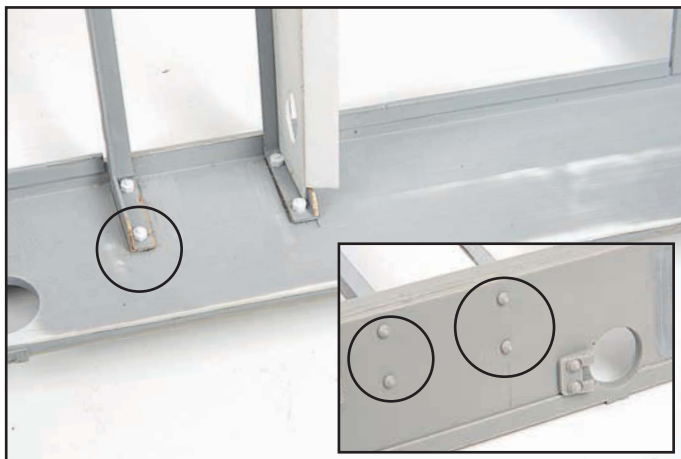
Panzerkampfwagen

David Parker builds Trumpeter's 1:16 kit

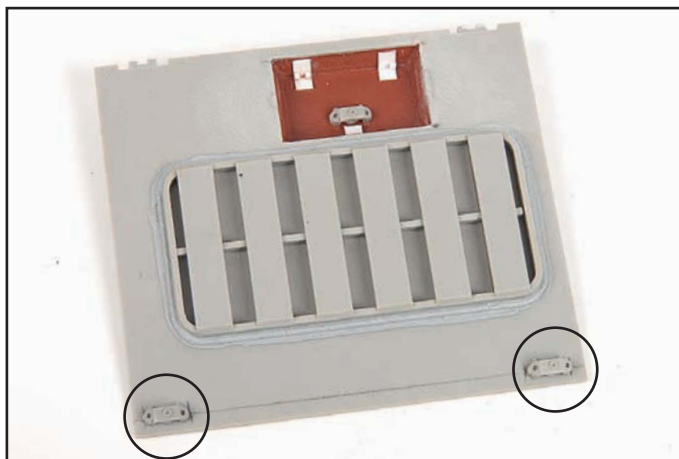
Part Nine

A busy schedule and a couple of other projects have resulted in me not having as much time to devote to the panzer IV for this issue. Nevertheless I have managed to tidy up some loose ends like adding the interior detail to the engine deck hatch and with the hull removed I started to clean up the interior which blank but has

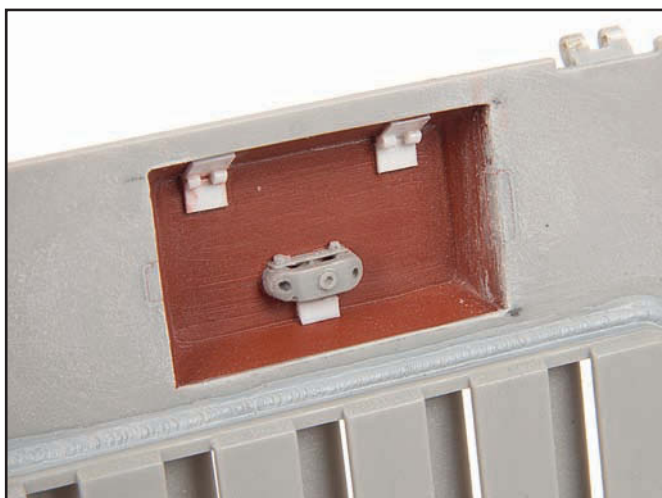
a large recess which needed to be filled. In the course of this work I realised that the corresponding external deflector detail was wrong the vehicle I was modelling so that this had to be corrected. I also made a start on assembling the main gun which inevitably threw up all sorts of areas that required improvement or



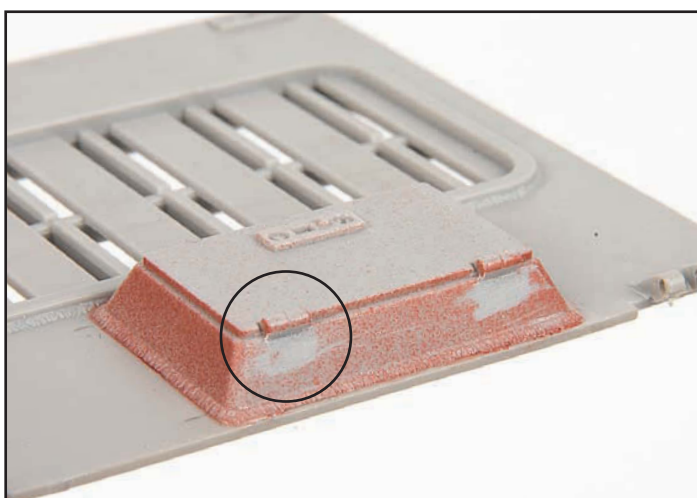
Tidying up some loose ends from the previous issue I angled the bottom ends of the two hatch support rails and added the bolts which correspond to the pair of conical rivets on the external plate.



On the inside of the radiator hatch I added the pair of hatch locks and fitted the cover for the radiator filler cap.



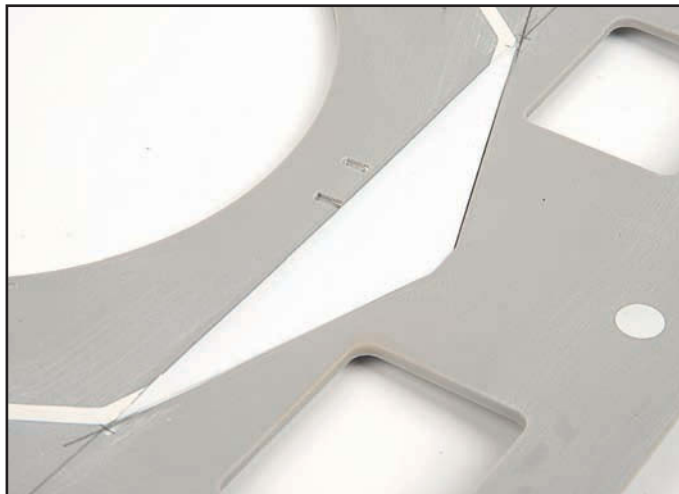
I cleaned up the pin marks inside the filler cap cover and added the internal hinge detail along with another of the hatch locks.



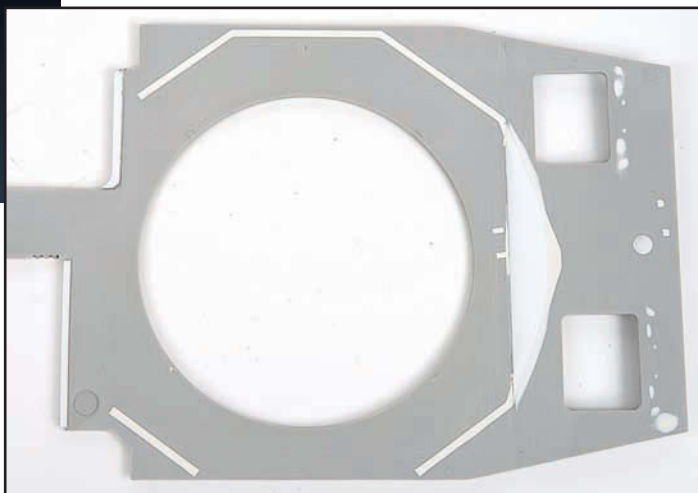
On the outside of the cover I carved away the lower section of the pair of hinges which is not correct.



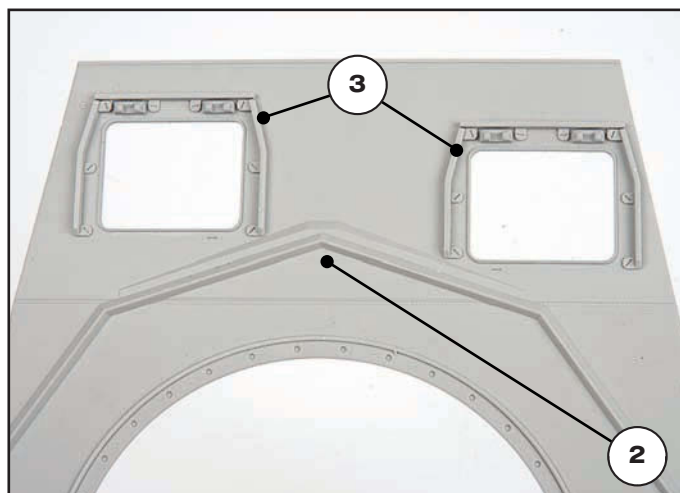
Having cut out the hull roof it was time to tidy this up with the recesses for the splash guards filled with white Milliput. The large void **1** between the front hatches where the splash guard is moulded into the roof was filled with a sloping piece of plastic card.



Here the section of plastic has been glued in place, but it does not exactly conform to the slope of the roof plate so the gaps and difference in levels were to be filled with more white Milliput.



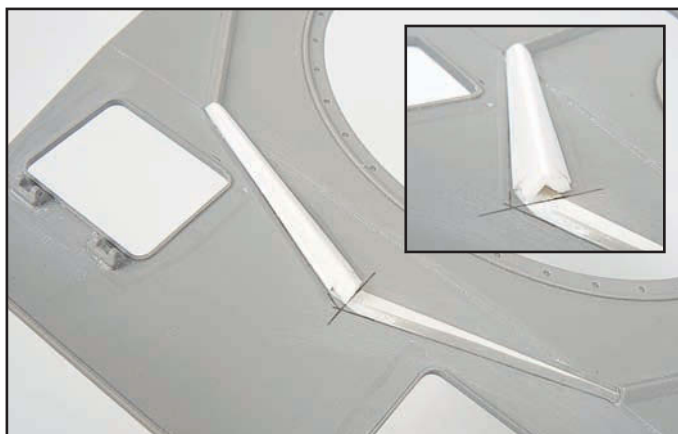
At the same time various sink marks around the from hatches an the locations for the radio racks were also filled and sanded. The entire roof plate was then sprayed with several coats of Mr. Surfacer 500.



On the outside of the hull roof the kit features the protective ridge **2** around the turret which was phased out after the Ausf G and not appropriate for my vehicle. Likewise the protective ridges **3** around the hatches are also wrong.



I used a motor tool to grind away the ridge details before removing the last of these details with chisels before sanding the area. The sanding process has exposed the areas of white filler and plastic used to fill the underside.



I had to construct the new simplified late style ridge from plastic sheet. I glued two pieces of plastic together to make a right angled section which was then cut and sanded to shape to make the ridge.



The matching piece for the other side was carefully trimmed to size, plenty of testing is essential here to avoid errors and it is always wise to cut pieces oversize and trim them back in small increments until a good fit is obtained.



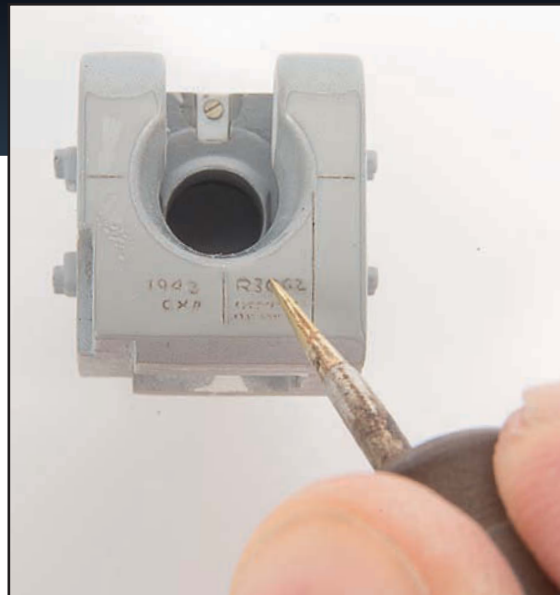
The centre of the ridge has a cut out slot along the bottom edge to allow water to drain out down the sloping roof. I added weld beads from Magic Sculpt along the edges and the central joint.



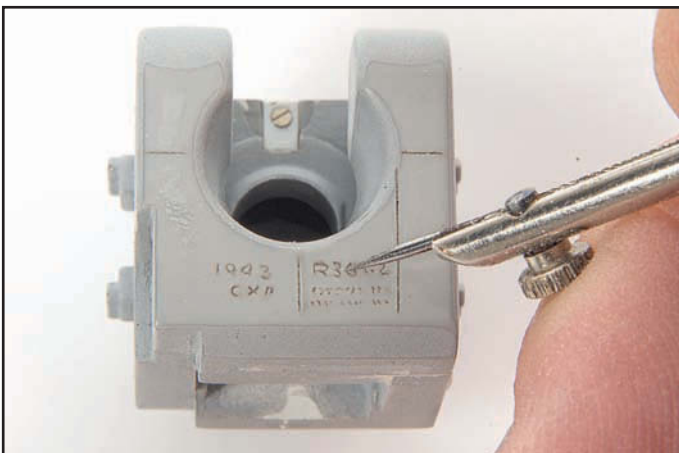
While working on the deck I drilled out the various screw heads and replaced them with ABER photoetched ones for a more realistic appearance



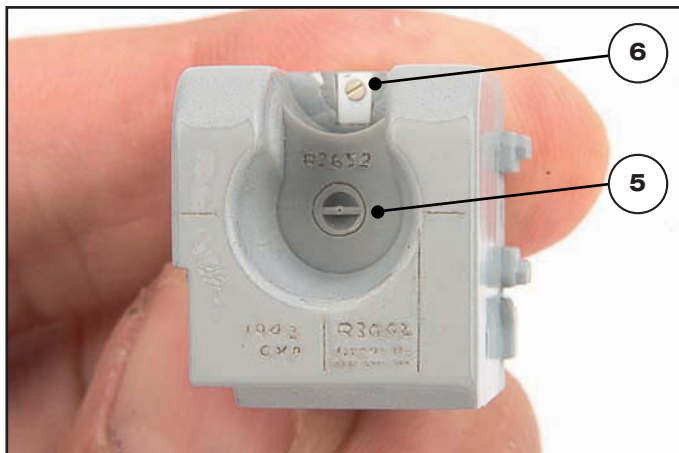
The final task was to seal the weld beads around the new ridge with Mr. Finishing Surfacer 1500.



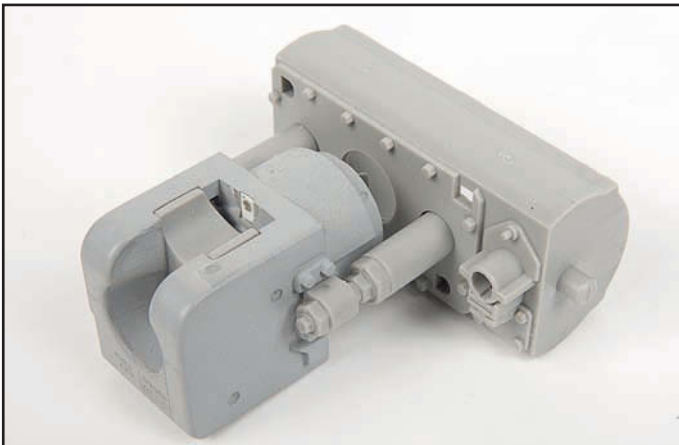
jumping to an entirely different part of the kit I made a start on the main gun, beginning with the breech. This is moulded in several pieces which were assembled and the gaps filled, sanded and filled again to ensure a seam-free appearance. The gun safety switch **4** was removed so that the area could be polished. The breech block was also sanded to fit correctly into the block. The block was polished using progressively finer sanding sponges in preparation for the bare metal finish the will be used on large parts of it. **Right** The breechblock has various engraved lines and numbers on it. To apply these I used a heated pyrogravure to spell out the letters.



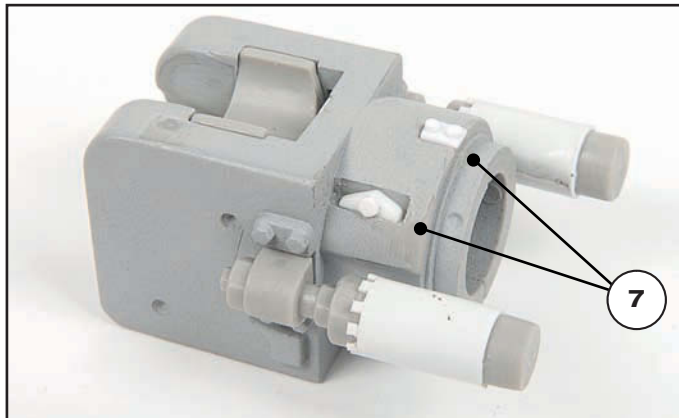
The lines were engraved with a needle point and this was also used to work over the letters to clean them up and sharpen the detail



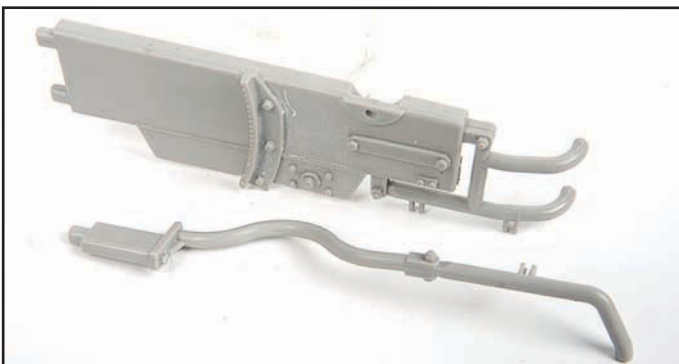
The same procedure was used to add the numbers on the breech block and I used a pair of springbow dividers to engrave the ring around the firing pin **5**. I also added the small tab and screwhead detail at the back of the breech **6**.



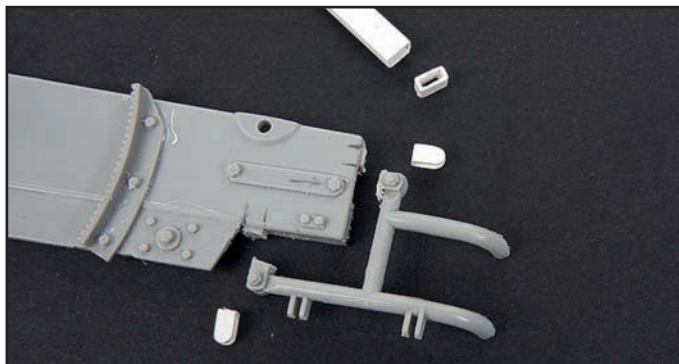
The pair of recuperators on each side of the breech were dry fitted with the mantlet and checked against my references.



The recuperators are missing the distinctive sleeves with the stepped edge so these were cut from thin plastic sheet, rolled and dipped in boiling water to maintain the tubular shape before being glued in place. I cut two slots into the barrel sleeve and added the missing details **7**.



The recoil guard for the gun had a few moulding flaws which needed filling and the hinges for the guard rails are moulded solid so these would need to be corrected.



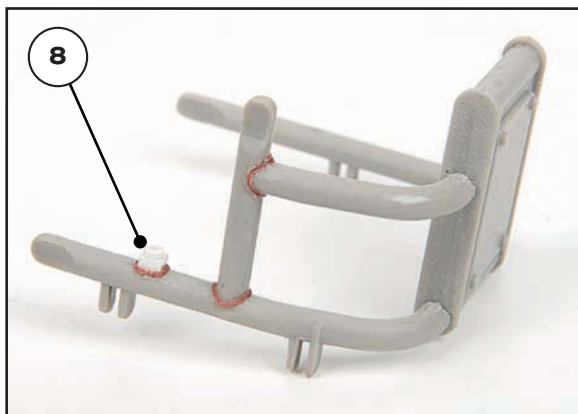
I cut the rails from the main shield and I used some rectangular tube section from the Maquett range to make new hinges.



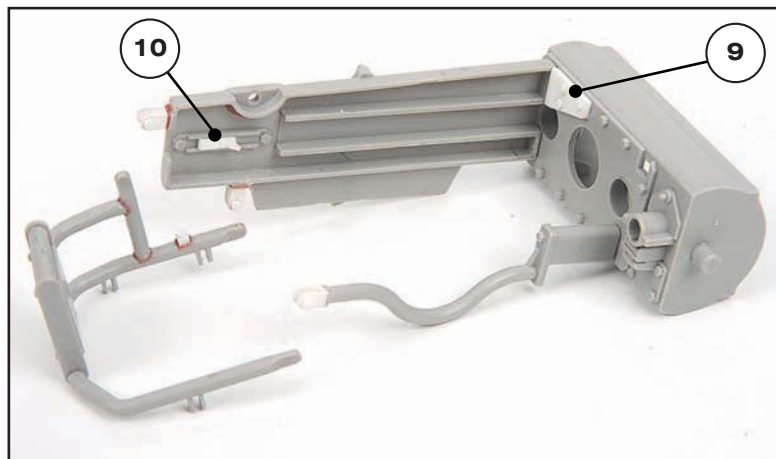
The hinges on the tubular guard were sanded off and the pegs shaped to fit into the new hinges.



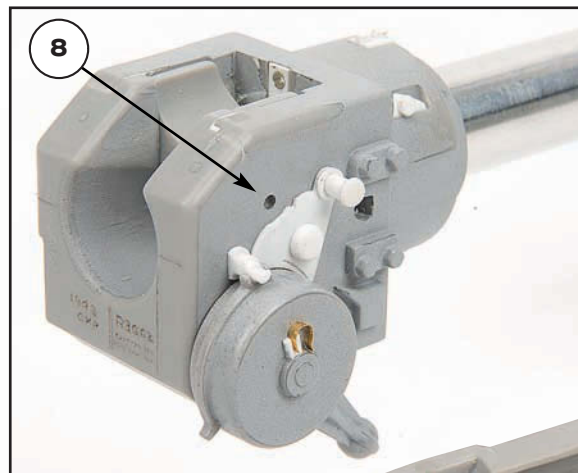
I used Slater's fine plastic rod to add the fine weld detail on the shield.



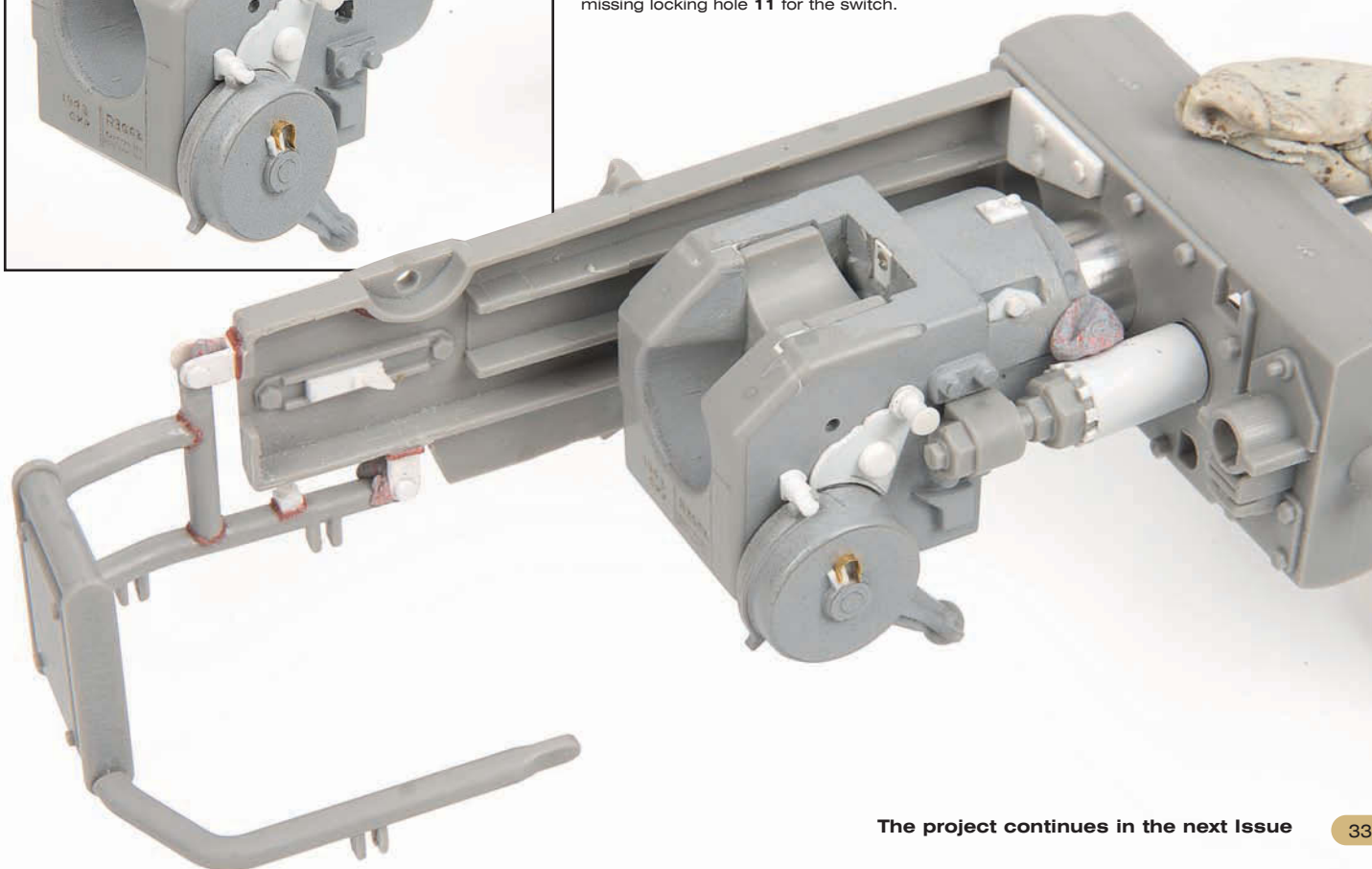
I did the same to the missing welds on the tubular frame and I added the missing stop detail **8**.



Dry fitting the complete recoil guard this shows the additional mounting bracket **9** and the recoil gauge **10**.



Left Sometimes you can miss the most obvious details and I suddenly spotted the shape of the breach block. The kit offers the version with the rounded shoulder whereas the angled shoulder is more typical for later production vehicles. The round version is also inaccurate as the top of the block is not completely horizontal but slopes down before curving into the vertical face. I decided to modify mine by cutting off the rounded shoulders and softening the edges of the block. I added the missing detail from the centre of the breach operating handle and I made a new safety switch and drilled the missing locking hole **11** for the switch.



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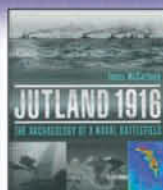
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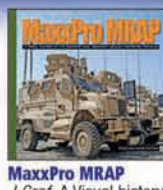
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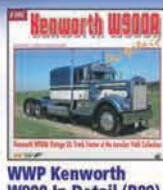
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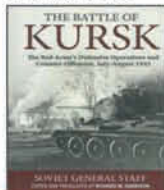
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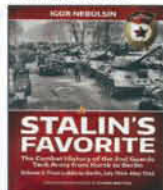
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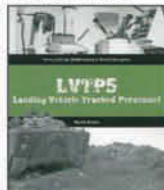
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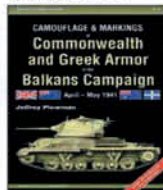
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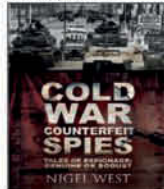
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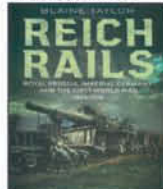
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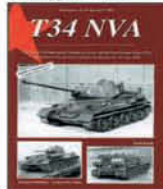
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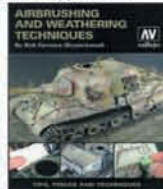
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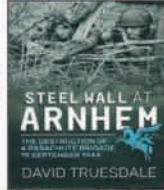
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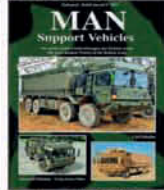
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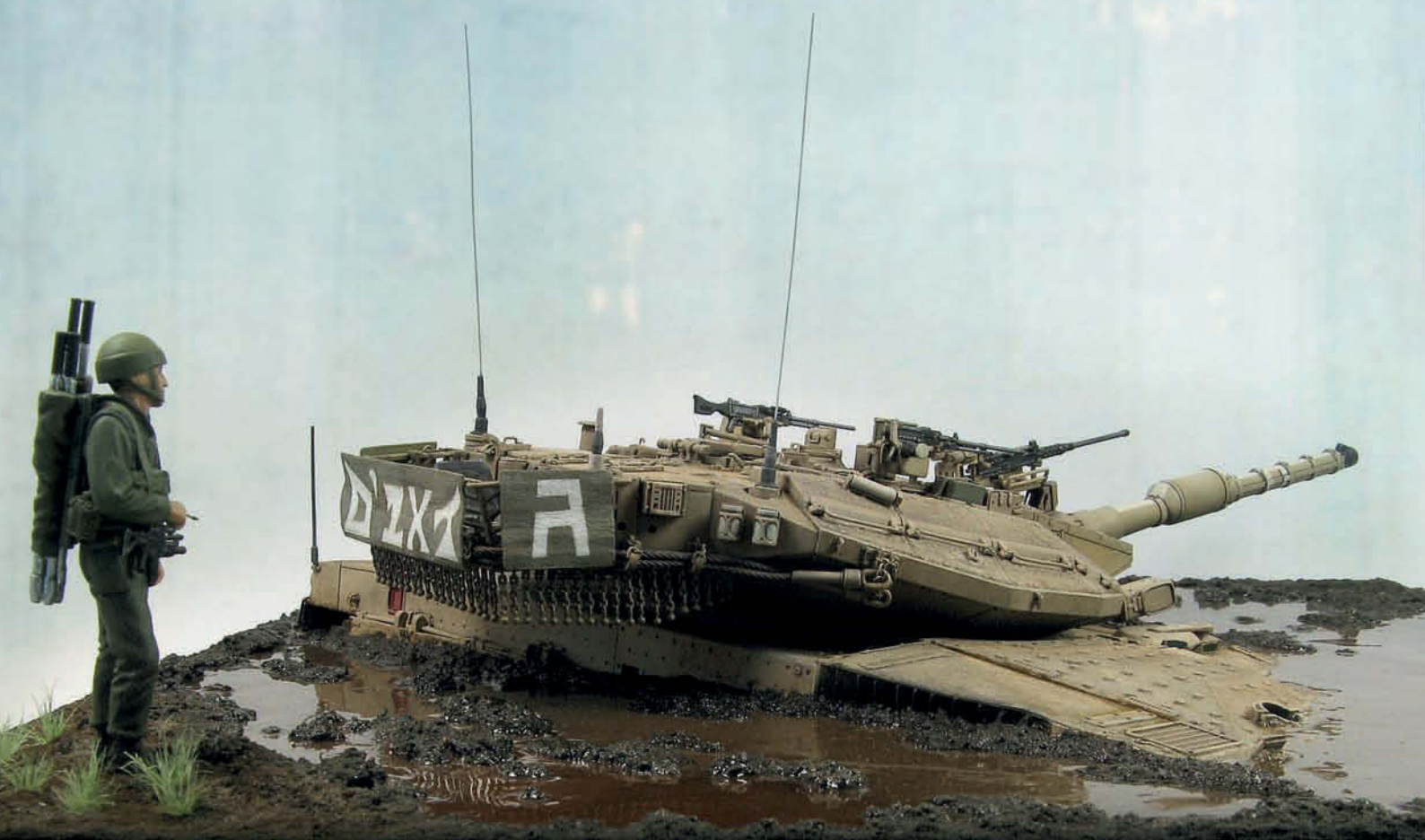
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Anyone who is even remotely interested in armoured fighting vehicles most likely has heard of the Merkava (which means Chariot, in Hebrew). As I'm a fan of modern armour, I just couldn't resist building a model of this famous tank. Although various versions of the Merkava have been available in 1:35 scale for many years, the Chinese manufacturer, Meng Model, decided to release another one choosing to depict the classic IIID Dor-Dalet (Hebrew for Fourth Generation) variant.

The kit itself can't be classified as a multimedia type because you won't find a single photo-etched part inside the box. However, the styrene parts are so nicely molded and detailed you can easily build the kit almost straight from the box with great results. Naturally, 'brass monkeys' may choose between the numerous photoetched sets that have been developed for Meng's kit, which will surely add some value to its final appearance. As I'm not afraid of scratch building, I chose to conjure up some extra details on my own.

Once all the main sub-assemblies of my kit had been completed my friend Kamil Feliks Sztarbala, sent me an interesting picture of a Merkava tank that had sunk into the mud and was awaiting recovery.

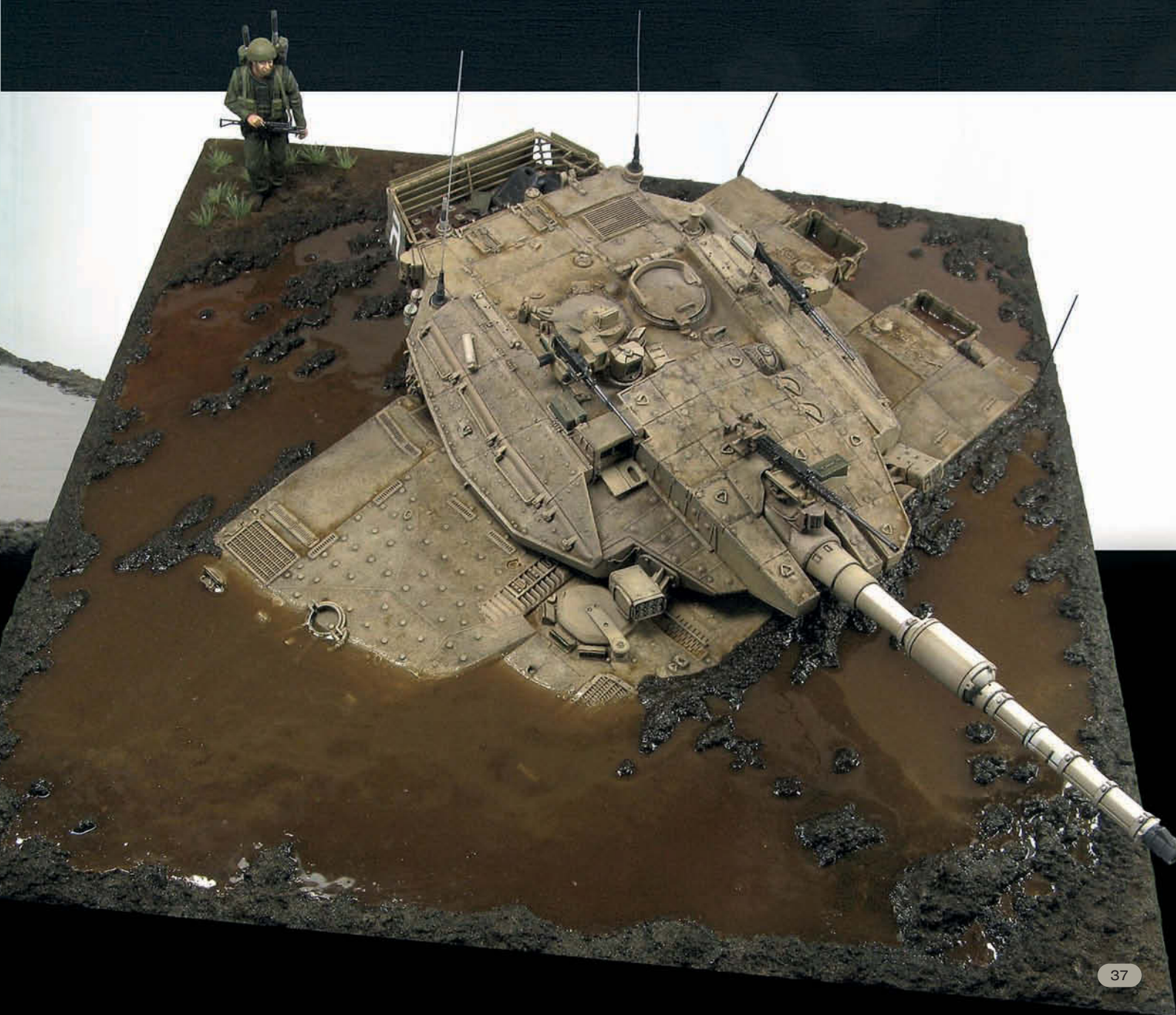
Even though I had never done anything like this before, I decided to face the challenge. I therefore left the lower hull, running gear and suspension for another future project, as for this vignette, I needed only the upper parts of the vehicle displayed.



mud shark

meng's merkava modelled by **Rafal Bulanda**

1:35



meng's merk'

Despite the fact that most of the kit parts are reproduced at the highest standards I decided on some extra details of my own. I firstly made the cover of one of the smoke grenade launch containers from pieces of styrene sheet, and attached this in an open position. The exhaust louvers also seemed to be too thick, so I replaced them with accurately cut pieces of 0.25 mm styrene sheet. Next, I corrected the mounting bolts on the driver's hatch. The kit includes two variants of the latter part, but some of its details are moulded in the wrong places. I also hollowed the handles of the bore evacuator, and added some welds to this part. New clamps for the turret were formed from pieces of stretched sprue (heated over a candle flame). Due to a problem with fitting the turret basket, I had to modify the upper part of its framework. I

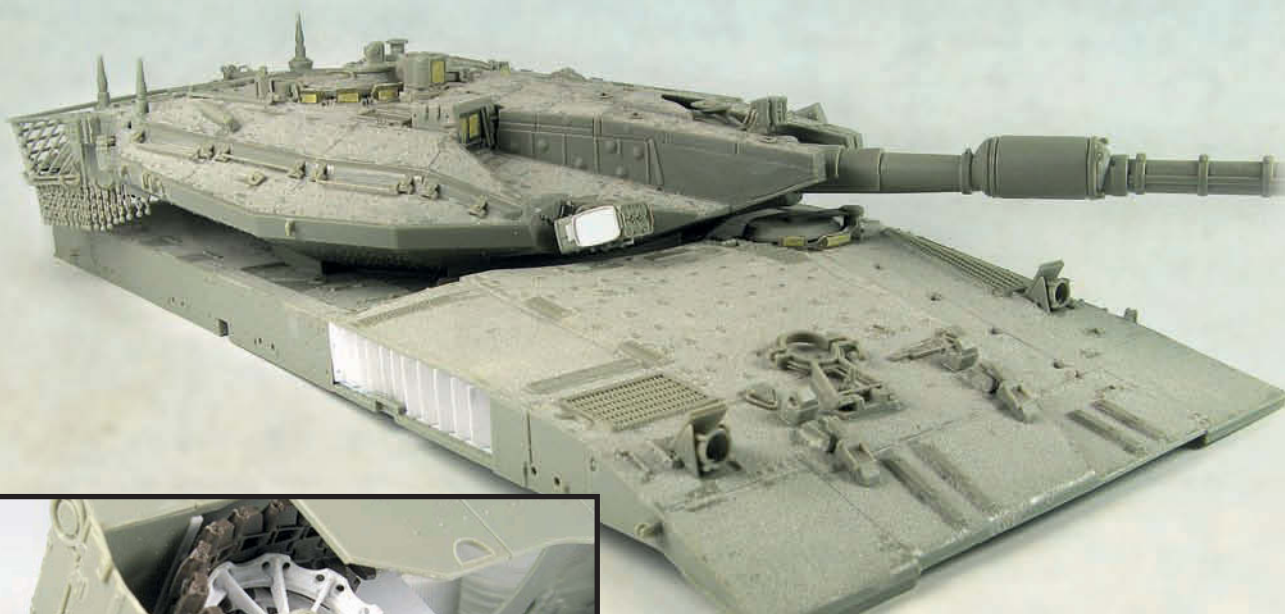
also drilled the chains of the ball armour, and slightly improved the motion detector housing mounted on the gun mantlet. Unfortunately, the vast majority of the tweaks made are only discernible in close-up photos!

The representation of the prominent anti-slip coating of the upper surfaces of hull and turret was recreated using chinchilla cage sand. Although baking soda is claimed to be the most useful product for this purpose, my initial tests revealed that chinchilla sand allows us to create a realistic, uneven texture. I set this with Tamiya Extra Thin Cement. The excess sand was easily removed using a toothbrush. I then attached the replica canvas sheets to the turret stowage basket. To reproduce them, I cut some

pieces of aluminium foil, and coated them with a few layers of tissue paper, using white glue as the adhesive. The small hooks that hold the canvas sheets were formed from thin wire. Of course, I couldn't forget about the rear stowage basket liners which were made from pieces of 0.25 mm styrene sheet.

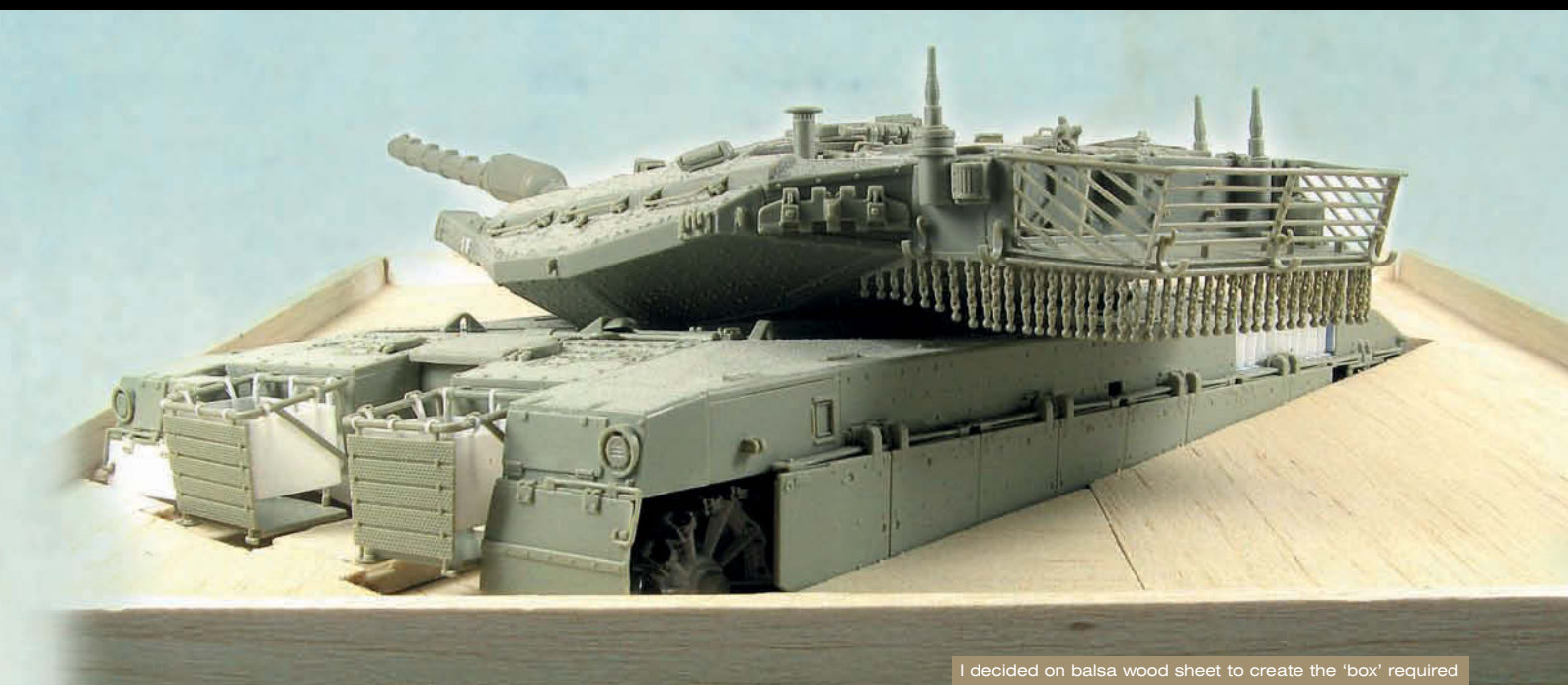
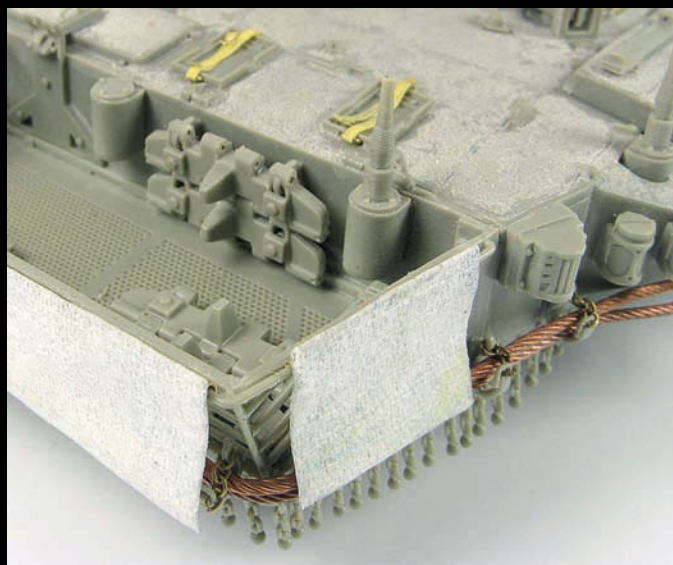
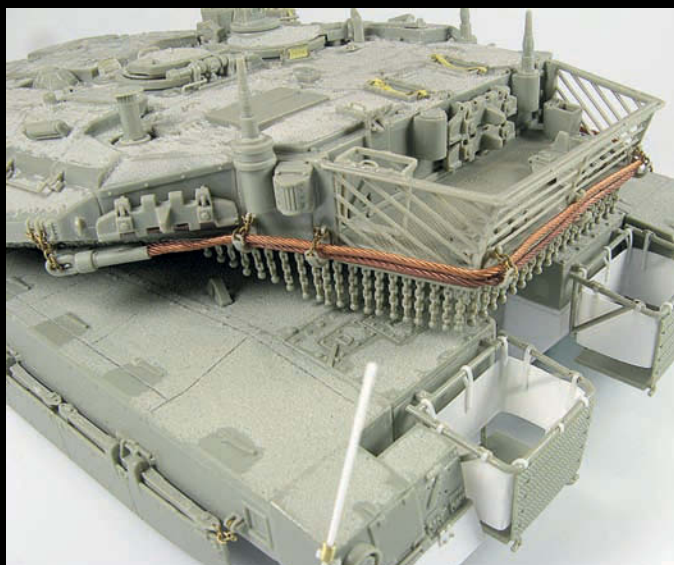
As I'd decided to keep the whole lower hull and suspension for another project, I had to scratch build the parts of the lower hull and idler wheel which would be visible after "sinking" the Merkava. Finally, I added Eureka XXL towing cables, RB Model metal antennas, some wiring, width markers, and a few straps, cut from Tamiya masking tape.

No wheels, suspension or tracks takes a whole lot of time out of building an armour kit!



--After seeing the photograph that inspired this scene, I had a future project in mind for Meng's lower hull and running gear so I decided to replicate the section of the rear sprocket and hull which would be seen (as in the photograph I was recreating).

There are many options for replicating anti-slip textures. My choice here for it's non uniform texture and scale appearance is chinchilla cage sand available from pet specialists and very inexpensive.



I decided on balsa wood sheet to create the 'box' required for my base. Balsa is both easy to cut and prepare for final finishing of the frame. The frame was kept deep to enhance the illusion of the sunken Merkava waiting to be rescued.

With a few dry-runs determining the exact final position, I lined the balsa on the inside of the box with sheet styrene so it would avoid any distortion from the moisture of the groundwork materials.

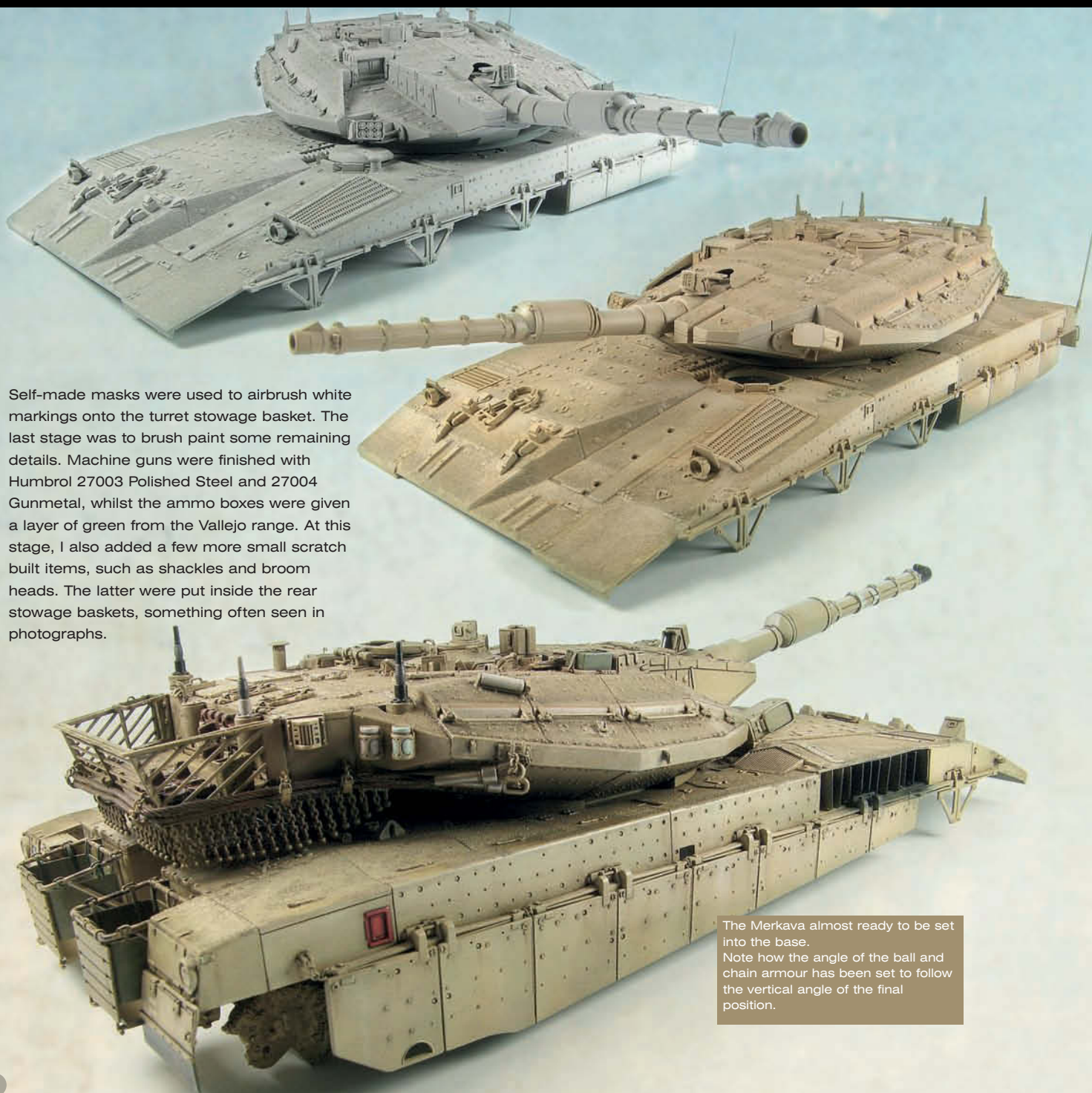


infamous IDF colours

I started the painting phase by priming the kit with Mr Hobby Color H417 Grey. Next, I sprayed a base coat of Tamiya XF-78 Wooden Deck Tan, and randomly added some shadows by airbrushing the base colour, mixed with a few drops of black. The first highlights were applied with Mr Hobby Color H313 Yellow. As I found the visual effect a bit too strong, I blurred the highlights with a filter, made from strongly diluted Tamiya XF-78 paint, and then highlighted some chosen areas again, by applying a mixture of Mr Hobby Color H313 Yellow and a little H11 White. Further highlights were added to the edges and chosen details with a more heavily diluted mixture. The smallest details, such as bolts, clamps, the edges of grills and

viewfinders, were highlighted with a mixture of Vallejo's 70819 Iraqi Sand and 70883 Silver-grey, applied with a brush. I then applied an overall filter made from Mr Hobby Color H70 Gray. A small number of paint chips was replicated using a piece of sponge, held with tweezers, and a very fine brush. Once I'd sealed the paintwork with a layer of satin varnish, I applied MIG Productions P220 Dark Wash into all the recesses. The excess wash was quickly removed with cotton buds and paper towels. I then applied another layer of satin varnish. This allowed me to add more depth and contrast to the side armour plates, using the fading technique. Basically, I applied small dots of Van Dyke brown, white and

yellow oil colours, and blended them with a brush, dampened with white spirit. Next, I weathered the upper surfaces of the hull and turret with Tamiya Weathering Sticks, namely Mud and Light Earth. Kremer's Natural Umber pigment was also brushed on here and there, and fixed with Zippo lighter fluid. Some damp patches and stains near the fuel filler caps were brush painted with Vallejo 70939 Smoke, heavily diluted with Sidelux. The latter is an acrylic floor varnish produced in Poland, which may be compared to Future / Klear floor polish. It works very well as a clear gloss coat and thinner for water-based acrylic paints.

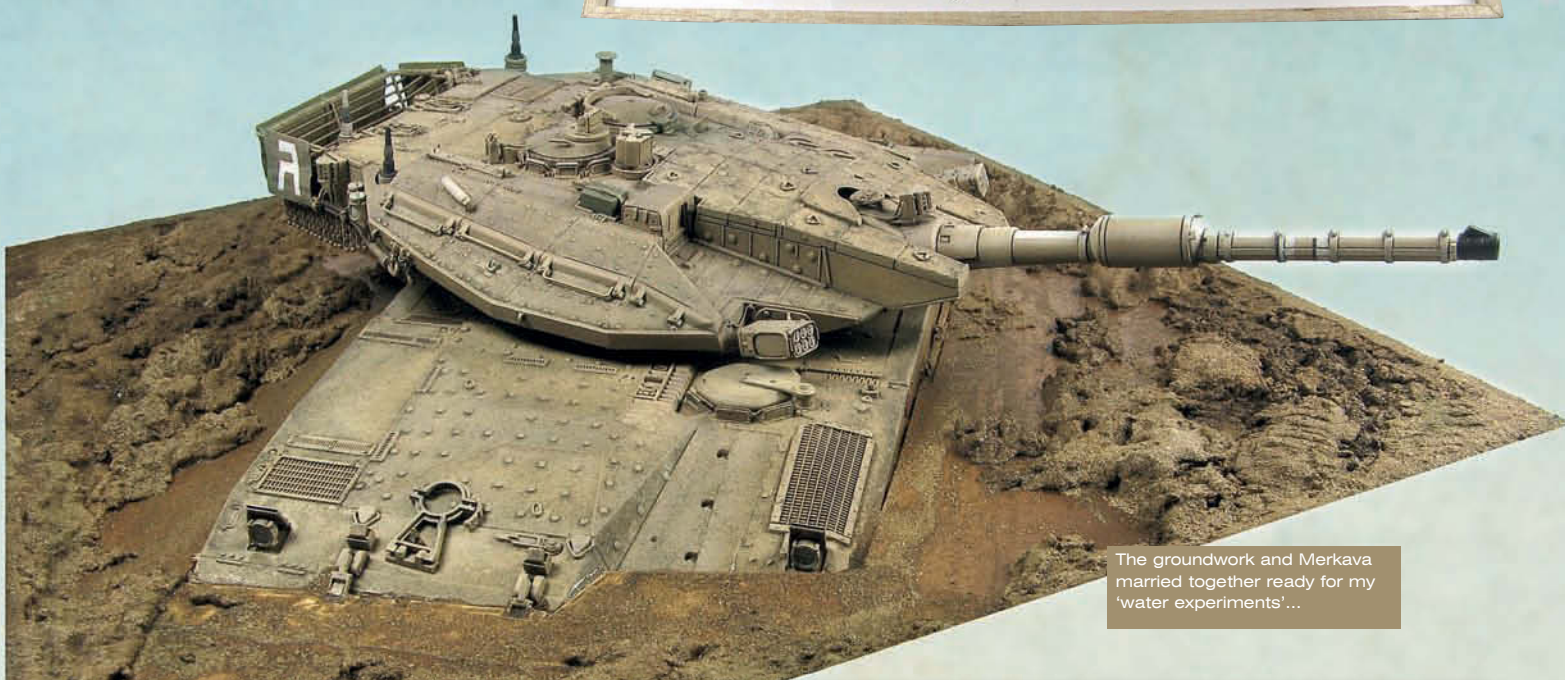
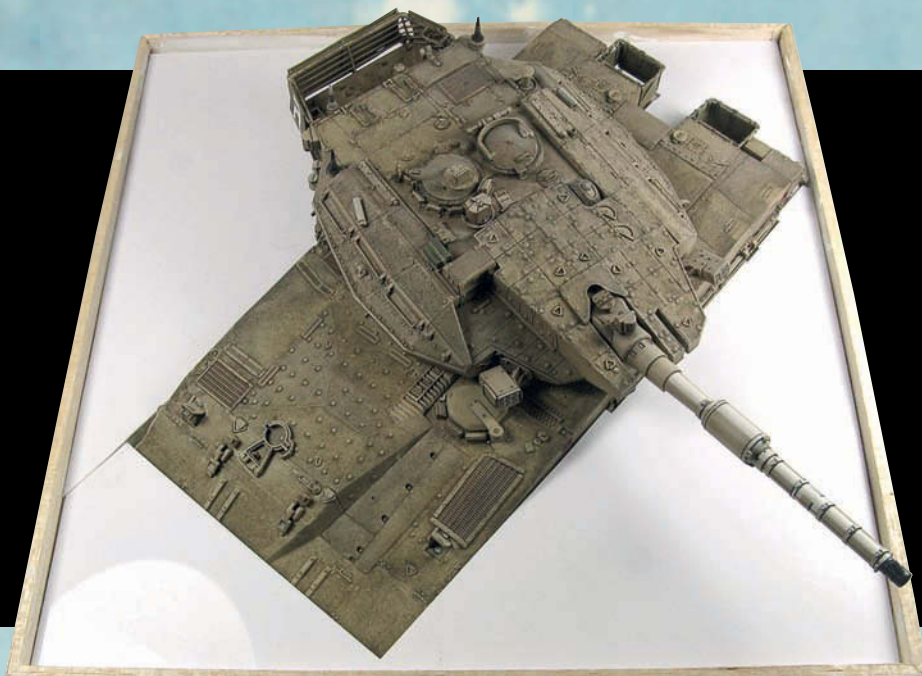


Self-made masks were used to airbrush white markings onto the turret stowage basket. The last stage was to brush paint some remaining details. Machine guns were finished with Humbrol 27003 Polished Steel and 27004 Gunmetal, whilst the ammo boxes were given a layer of green from the Vallejo range. At this stage, I also added a few more small scratch built items, such as shackles and broom heads. The latter were put inside the rear stowage baskets, something often seen in photographs.

The Merkava almost ready to be set into the base. Note how the angle of the ball and chain armour has been set to follow the vertical angle of the final position.

mud-muddle

Now it was time to face the real challenge! First, I created a box structure from pieces of balsa, and glued a properly shaped piece of Styrodur foam inside it. Upon test-fitting, I made a few adjustments and permanently fixed the vehicle to the ground. Next, the kit was covered with pieces of styrene sheet, which were also glued to the ground. I then sealed the whole surface to prevent any leaks during the “water” pouring stage. Mud was mixed from potting soil, baking soda, Kremer earth pigments and household priming emulsion.



The groundwork and Merkava married together ready for my 'water experiments'...



1



2



3

I applied this mixture over the whole area around the tank, instantly forming it to represent various grooves, depressions and ruts. A coat of priming emulsion helped the mixture to cure. A real problem appeared whilst trying to pour the water onto the ground. Although nothing unusual had happened during my initial tests, in the end, Vallejo's 'Still Water' (1) turned out to be a big disappointment. The behavior of the liquid poured cold water on my plans! Despite the fact that I applied the liquid strictly in accordance with the manufacturer's recommendations,

it soon started to 'fold' on the edges, and crack here and there, despite adding a retarder in order to lower the surface tension. Moreover, the liquid began to draw off the pigment from the ground, making the edges of 'water' areas appear white! An experiment with silicon (2) also did not produce the desired results. A possible reason could be thinning it with acetone which evaporates very quickly. Quite unexpectedly, I created an amazing cracked-mud effect (3), but it had nothing in common with feel of the vignette, and the photo that worked as my main

reference. Polyester resin became my third choice – finally a good decision! I formed a muddy pond by pouring subsequent thin layers of resin, coloured with earthy Vallejo acrylic paint. To create the effect of disturbed water in front of the tank, I tapped the freshly applied resin with a brush which had been slightly dampened with paint. It is worthy to note that resin heats up when the chemical reaction begins, so you have to be careful during the pouring process, as it may result in damaging or deforming the small plastic parts of your kit.



The pungent odour is another disadvantage of the resin, thus I don't recommend working with any liquid resins indoors at home. Once the resin had dried, I airbrushed it with a few layers of gloss varnish. I also retouched the mud grooves with pigments, and sealed them with a clear gloss coat. The sides of the base were

finished with Maireri Polycolor 3D black acrylic paste. The final touch was to add a few grass tufts from Polák Model's scenery sets, and a miniature lone IDF soldier. The latter was a reworked figure, sourced from DML's Israeli Paratroopers set. I painted it with various acrylic colours from Vallejo's Model Color range.

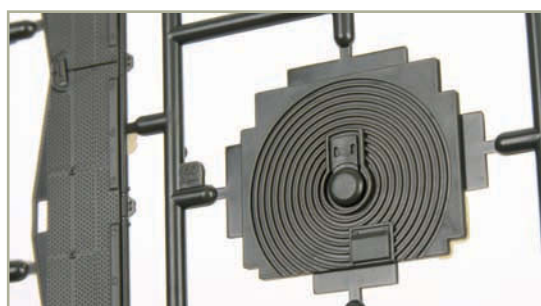
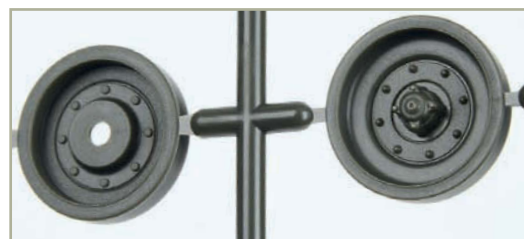
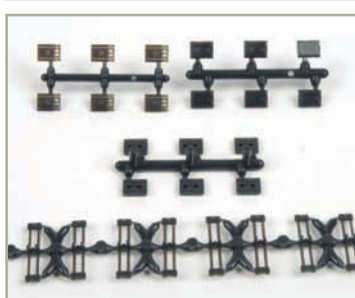
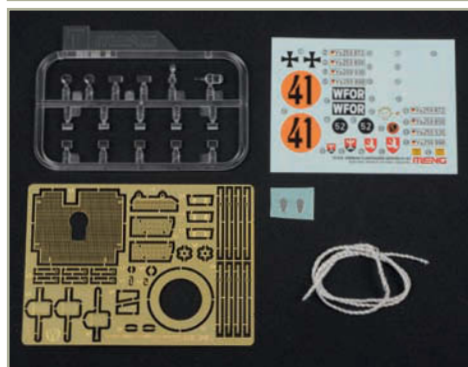
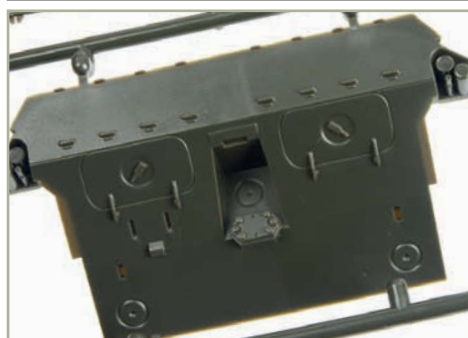


A modified figure from Dragon's IDF Paratrooper set adds a human touch and sense of scale to the scene. The creation of the mud and water was certainly a challenge but it has created a unique vignette. It's not often you see IDF subjects modelled showing wet mud never mind stuck up to their waist-line in it!





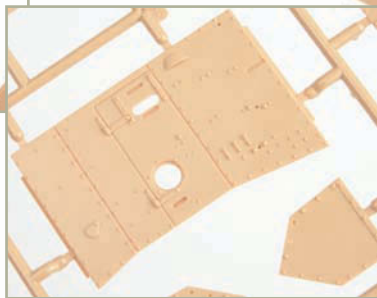
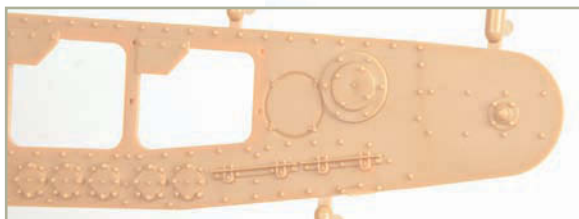
mud shark



Meng 'Gepard' A1 / A2

Meng's highly regarded Leopard family shows no signs of slowing down and fans of the marque will be delighted to see the Flakpanzer Gepard added to the catalogue. The Gepard is such a purposeful and unique looking vehicle it's hard to imagine the impact the initial design must have had in the early 1970s. An A1 or A2 version can be built with clear call-outs throughout the excellent instructions. Meng are regularly coming up trumps with their presentation and packaging and have us eager to take a look inside. A general glance across the sprues shows the usual intricate and fine moulding, of particular note are the fine perforated areas around the upper-hull, beautiful slide-moulded gun muzzles (practice and 'live' ammo versions are both included) and the realistic weld beads. Looking in more detail it's surprising that very little (if any in fact) of previous Meng Leopards share parts with this kit with the exception of the tracks. Something Meng should be commended on is their willing to listen to modellers and experts in their field with many kits being adjusted and improved. A good example here is the improved suspension

components and roadwheels with the unique Gepard hull well represented (longer than the Leopard with specific wheel spacing) and the excellent exhaust slats on the hull sides. More high-tech moulding is evident with the subtle anti-slip texture on the toolboxes and the single piece front mudflaps. As mentioned, the tracks remain the multi-part, workable units as seen previously; time consuming but very nicely detailed. We often cheat on vehicles with side skirts and only assemble the track that can be seen, bad news; from the information we've gathered no operational Gepards with the Bundeswehr ran with side skirts (with the exception of very early examples). Easy to rectify if you choose to leave the parts off with the bonus of showing off that newly detailed suspension. A sensible amount of photoetch is included along with a clear sprue, mirror inserts, nylon tow cable (best replaced) and decals to mark four German options. A nifty 'soft' sprue includes straps and rolled stowage. Another must-have Meng release for Leopard family fans.



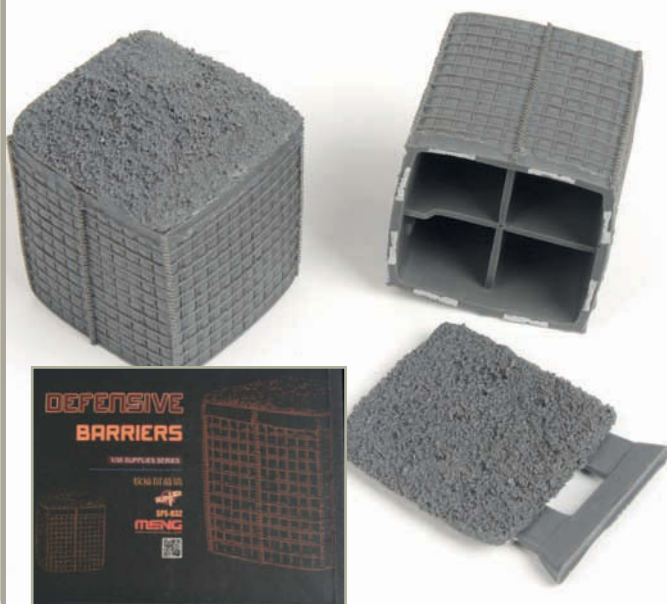
Meng 1:35 British Medium Tank Mk.A 'Whippet' and British Infantry

A Special Edition here from Meng with their wonderful Whippet packaged with a set of four superb British Infantry figures from Master Box. We built the Whippet back in issue 86 and remember what a pleasure it is to assemble with some very clever design and moulding with even the repetitive steps (such as the wheels and tracks) made very satisfying. Working closely with the Tank Museum at Bovington, Meng have assured us of accuracy and some very fine detail throughout but with the bonus of being a real 'weekend build' should you wish. The figures present an instant

vignette with the typical enthusiastic officer directing some somewhat reluctant looking infantry. Master Box produce some excellent figures and these are no exception, really as good as it gets for injection moulding with great anatomy and detail, certainly a match for the quality of Meng's Whippet. A cracking set for any Great War fan and judging by the quantity in the competition we saw at the Scale Model Challenge show, very popular indeed!

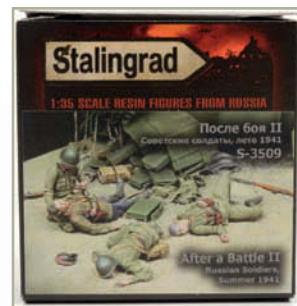
Meng 1:35 Defensive Barriers

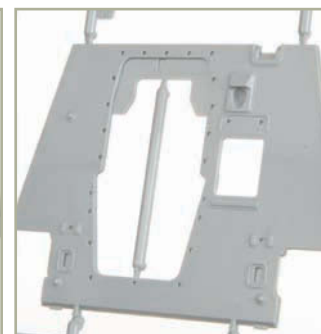
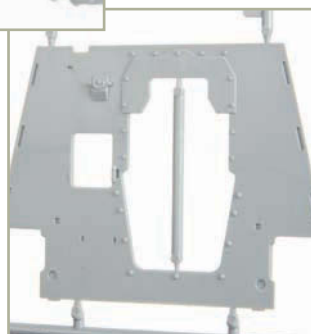
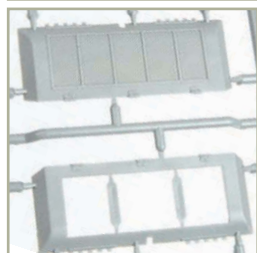
Another nice addition to a modern diorama or vignette from Meng with a set of two roadblock-style wire cages. Each comes moulded in two pieces in a lightweight resin which holds some very intricate detail and texture and will paint-up a treat. Keep up to date with Meng's news at www.meng-model.com



Stalingrad

A poignant subject is tackled in this new release from Stalingrad depicting a scene 'After the Battle' with superbly sculpted early-war Russian casualties. Two wounded infantry and one officer figure are included with an infantry figure tending to the officer with some clever interlinking of limbs and hands resulting in very realistic anatomy. Associated head-gear and weapons are also included, a great little vignette which could suit a number of vehicles. See Stalingrad's full range at www.stalingrad.diorama.ru, simply some of the best figures available in 1:35.





Mini Art 1:35 SU-122 and SU-85

News of these kits has been around for some time now and at last we've got our hands on some to take a good look at what's on offer. Basically the SUs are pretty much the same T-34 based vehicle, the main difference being the obvious main gun, mantlet and front glacis. With this in mind we'll round-up all the different versions and give an overview of the series. Let's start by saying our initial reaction when fumbling through the chunky boxes was 'Wow'. Mini Art have been steadily releasing kits over the years and you can't help feeling they've been making their way towards releasing these SUs (and T-44s which we'll also look at). Both are available as 'Full Interior' or partial interior kits, pay your money and take your choice as they say. The full interior kits are very hefty boxes with over 800 parts, and when they say 'full' it is just that; from the drivers position right back to the gearbox and

exhausts, all with the same standard of stunning detail. The V-2-34 engine is a kit in itself (I think also available separately from Mini Art?) and is very comprehensively detailed. The hull and running gear assemblies very much as the actual vehicle so one of the obvious routes of a destroyed SU could be successfully achieved straight from the box, nothing is simplified. Photoetched parts are included as options for more experienced builders although I doubt these kits are aimed at the novice, more for kit connoisseurs to savour with little. Even if you prefer to skip the interior the external detail make these the new default choice for anyone wanting to model these great looking SPGs. Mini Art have really gone all-out with these kits and demonstrate that they can mix-it with the best manufacturers on the market and still offer superb value for money. Fantastic kits.

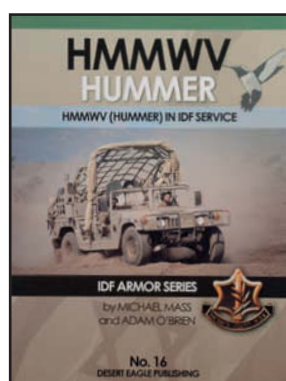


Paper Panzer Productions

If 1946, prototypes and 'What If' German armour catches your imagination you must take a look at the range of upgrades and conversions from Paper Panzer Productions. High quality casting and in-depth research present some very tempting projects. PPP35017 is an interpretation of the GT-103 gas turbine power unit. The set comes with photo-etch grilles for the dual turbine exhausts and two backplates: one for the Trumpeter E-50 and E-75 kits and one for the Dragon King Tiger kits along with a rear deck section. PPP35024 is a conversion based on a photograph from 1945 mounting a 88mm Flak on a Bergepanzer IV and PPP35023 is a very detailed set of idler wheels for E-50 or E-75 which will fit both Trumpeter's kit parts or Fruii versions.



PPP35021 Einheitsturm Reichswerke Hermann Göring 1947 is a comprehensive set (although purely fictitious) depicting a more heavily armoured turret and whopping cannon for the 'E' series of tanks. RB have produced the barrel and antennae and there's a choice of cupolas. Let your imagination free of rivet counting! www.paperpanzer.com is the place to go to find out more



Hummer in IDF Service

Michael Mass and Adam O'Brien
Published by Desert Eagle
Softback format, 82 pages
ISBN 978965 7700 020
www.deserteagle-publishing.com

Long time servant of various roles in the IDF, the HMMWV, is the latest subject of the long serving modellers' guides from Desert Eagle with their sixteenth release in the IDF Armor series. We're presented with the usual high-quality visual approach with over 200 bright and clear images in large format detailing the various roles carried out by the vehicle including TOW mount, ambulance, observation and training. The 'standard' versions are also covered in depth with walk-around format images of the triangle and

rectangle window versions but you're sure to be tempted by some of the interesting conversions (many of which are offered by aftermarket companies) with plenty of kits to choose from and the photographs offering superb detailing reference. Again, Desert Eagle deliver exactly what modellers need; highly recommended reference and reading which coincides with the arrival of Meng's superb 1:24 civilian Hummer...we wonder if a military version could be released in future?



AK Interactive

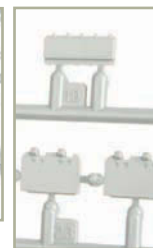
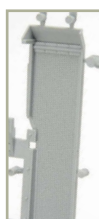
The guys at AK are always busy and have added some more collated colour-sets to their catalogue. AK4190 contains six colours applicable to vehicles of the Spanish Civil War (actually a good set for any early WWII modeller also with German and Russian colours included) and AK4220 is a set of USMC and US Army colours of WWII where different camo was used (PTO and Italy for example). More standard US attire is set AK4210 with a selection of greens and olive drab for both USMC and Army vehicles and for the more modern US subject modeller is set AK4230 eight colours to cover all variations of the MERDC camo patterns first seen on the 1970s. All of these acrylics perform

equally well brushed or airbrushed although AKI's thinner is recommended if spraying.

Four new sets of AKI's 'Figure' series cover the popular WWII period. These acrylics are developed for brush painting with high pigmentation for good coverage. The sets contain base tones, shadows and highlights, an excellent start if you're new to the art of figure painting. AK3110 is for Afrika Korps uniforms, AK3120 for Russian subjects, AK3140 for German Field Grey and the tricky SS summer and spring camo is made easier with set AK3060 including step by step instructions

Sparmax Arism VIZ compressor

If you're in the market for a budget, quiet and compact compressor for your workstation, The Airbrush Company may well have the answer with this new Sparmax unit. Measuring at only 20cm in length it would suit even the tightest of desks and is very quiet (handy if you do any airbrushing in a shared, open space!) The air flow is 16-18 lpm (0.57 -0.64 cfm) and a pre-set maximum pressure of 3.4 bar (50 psi) so suitable for most regular modelling applications. Along with the power supply and air hose there are a couple of innovative features included the first being an auto-stop airbrush holder which basically cuts the power when the 'brush' is placed in the housing. Another item which attaches to the airbrush itself is the 'Silver Bullet Plus' which acts as a moisture filter and pressure bleed valve (usually built into more expensive compressors) the pressure chosen can be viewed on the compressor's built-in gauge. The Editor has given this compact machine a good run-out and performance all-round has been very good from spraying high-volume base coats to finer line work. With the range of Sparmax airbrushes available you can set yourself up with brand new airbrushing equipment for the price of a few kits. The Airbrush Company's confidence in Sparmax products extends to a one year warranty, go to www.airbrushes.co.uk for details. Excellent quality and value.



Dragon 1:35 10.5cm StuH.42 Ausf.E/F

With Dragon also announcing a StuG 'E' and 'C/D', at last we're into the territory of the 'short barrel' vehicles in Dragon's long line of StuG III variants. Our sample kit here is of the Infantry Support 10.5 cm gun mounted to the earlier external radio pannier super-structure. No surprises as we look inside the box, much of the kit we've seen before but there is a superbly moulded new upper hull, roof, gun and mantlet. The usual jumble of sprues dedicated to other vehicles are present meaning there's as many parts spare as there are actually used, the moulding is still superb with fine and delicate detail throughout making these Panzer III based kits still amongst Dragon's very best. The inclusion of photoetch makes for

great out-of-the-box building, this release includes the front mudguards in brass which is ideal for replicating some damage. The inclusion of the usual fighting compartment detail is welcome and the breech assembly of the new 10.5cm looks really well done. Although this StuG series is hard to fault, some modellers may choose to replace the DS single run tracks which lack a tiny bit of the sharpness of their single-link styrene counterparts. Another superb StuG III from Dragon although along with the Cyberhobby editions we're into well over twenty versions of the latest generation kit!



Soviet Armour in Foreign Wars

Published by Inside the Armour Publications

Softback format, 194 pages

ISBN 97809932 58824



This is one chunky release from ITA which covers some great topics by some great modellers. As the title suggests, there is massive scope to the popular topic of modern Soviet subjects in use Worldwide from an NVA T-54 right up to T-72M1 in the Libyan Civil War. Projects also in focus are BMP-1, Shilka and some more generic reference on figure painting techniques (by Alex Long and very easily understood) and some nice large-format reference shots of armour graveyards in Afghanistan. There's a good mix of in-depth builds with conversion and detailing and also step-by-step finishing techniques and general diorama planning and construction, all making for a packed and interesting read even if

Russian armour isn't your main area of interest. There will always be something new to learn from the likes of Andy Taylor, José Brito, Kristoff Pulinckx, Ivan Cocker and Ken Abrams sharing their work. Kits are released at such a rate these days there are maybe some better options as starting points which have been made available very recently but this doesn't detract from some very inspirational projects. A nice bonus in the form of a decal sheet to replicate a couple of the T-54s and a T-55 is included along with a photoetched fret by Voyager for Tamiya T-55 engine deck mesh-worthwhile added value! Available now from www.insidethearmour.com

0.5mm Procon Boy LWA Trigger Type



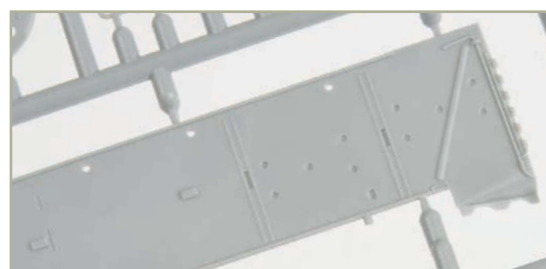
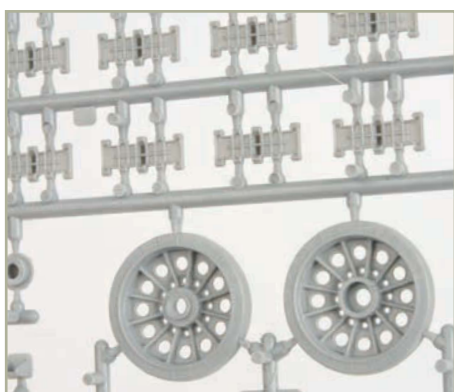
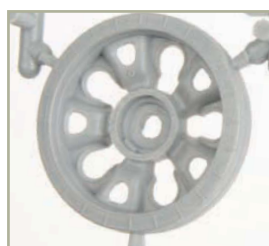
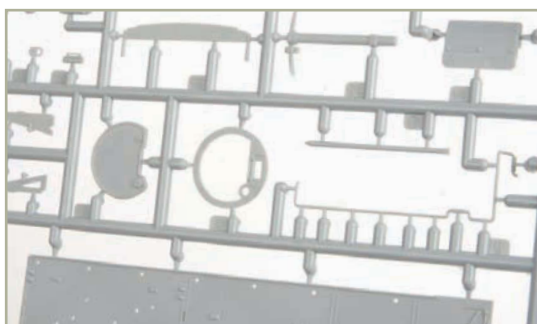
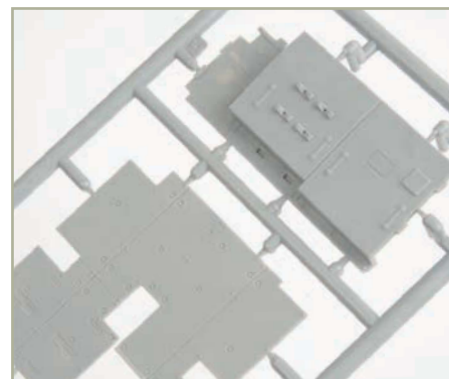
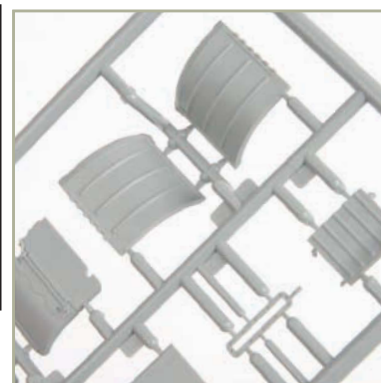
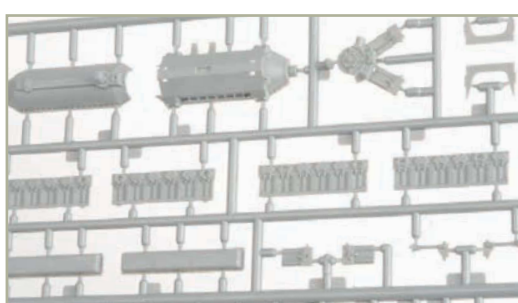
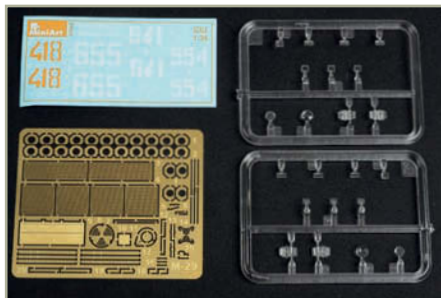
0.3mm Procon Boy WA Double Action



Mr. Hobby Airbrushes

We have recently been testing two of the Mr Hobby airbrushes, the Procon Boy LWA Trigger Type spray gun and the Procon Boy WA Double Action. Starting with the 0.5mm LWA Trigger Type, this is big bruiser of a gun designed for putting down big areas or base coats, something it does extremely well! It has a large capacity removable paint cup and a choice of nozzles offering a flat wide spray the angle of which you can adjust or the more familiar cone spray. The trigger action works well although the brush would benefit from a pistol grip handle to improve the feel of the brush in the hand. The big nozzle will accept any paint or

primer without complaint and I have to admit that I quickly fell in love with this robust brush, so much so that I have decided to keep it. Moving now to the 0.3mm WA Double Action which is precision airbrush which is easily capable of producing pencil fine lines with ease. It features an integral air valve under the paint cup to fine tune air flow and there is an adjustable restrictor at the base of the handle to limit needle movement. The paint cup is fixed and generously sized. The brush is well balanced and has a comfortable trigger pressure. It certainly performed as well as my usual brush for finer brush work as well as general painting needs.



Mini Art 1:35 T-44 and T-44M Soviet Medium Tank

A first here as a mainstream kit, the T-44 is a fascinating step between the T-34 and T-54 and this release will be very welcome by fans of Soviet armour. The 'M' version is the upgraded version with some T-54 part upgrades such as engine and electricals and what would become the very recognisable wheels and tracks. Both kits contain full interiors (albeit without transmissions and radiators) but the correct engines included in each case. Mini Art's moulding is excellent throughout and these kits, as the SUs, are for the builder who really wants the nth degree in detail and is prepared to put the time in on their build with around 800 parts and some ultra- delicate finesse they're no weekend build! That said, if you decided to go for an external only build you'd cut the work by around a third. Delicate tread plate pattern and cast textures show Mini Art flexing their moulding-muscles to show

they can match the best in the business. The kit's design allows for the major components of the hull to be assembled, painted and finally joined together with the front upper hull and turret theoretically able to be removed for your final display to show-off all the interior detail. With photoetch, individual link track and superb detail this is a true out-of-the-box project which will keep even the most picky of modellers happy with maybe the only downside being the tank's limited combat use over the years; the T-44M marking options are restricted to training vehicles but the T-44 has vehicles from 1956 in Budapest and some very tempting 'What If' captured vehicles. Terrific kits of these important transitional tanks which are a must for Soviet armour fans. Now with around 300 products on offer www.miniart-models.com is well worth a visit with an excellent downloadable catalogue.



AMMO of Mig Jimenez

Sets of six of Ammo's acrylics which are ready to brush or thin if desired for airbrushing will be welcome by Russian armour modellers, set 7160 covers the variations on greens used from 1935 to date (including an information booklet). 7161 is volume 2 of Modern Russian colours and 7162 contains the funky 'Expo' colours of demo vehicles. 7159 offers six 1950 to date U.S. Army

colours (including interior green). Smart Set 18 gives you the four main Chinese PLA colours and a set containing weathering effects for German three-tone camo subjects is a good start with mud, filter, wash and streaking effects all included. www.migjimenez.com has details of all of their product ranges.

Mr. Almighty Clips

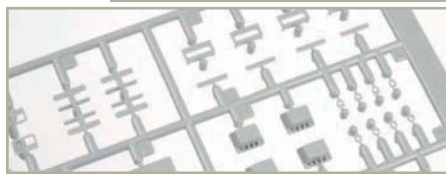
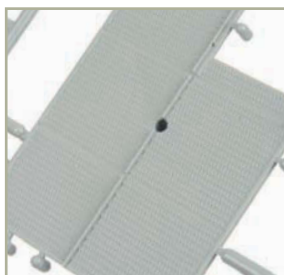
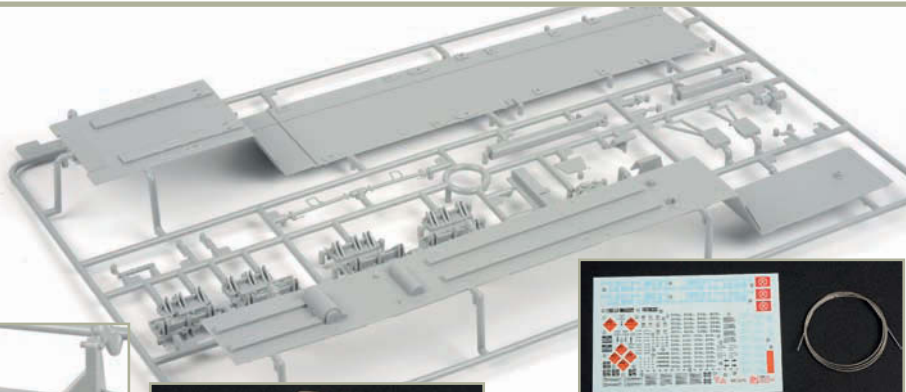
Already pressed into use in our spray booth, and proving very handy from the off, are these soft-jawed multipose grips ideal for holding smaller parts and assemblies whilst painting. The steel plate of the base has enough weight to prevent any accidental knocks, a moulded section has two paint jar or oddment holders. All of the 'arms' can be pivoted and twisted into shape and easily detached from the frame too, making this a very useful workbench aid. Available in the UK from Mr Hobby and Albion Alloys retailers, our thanks to Albion Alloys (the Mr Hobby distributors for the UK) for our sample.



Aber

More news from Aber in 1:35 starting with a barrel, 35L-209 for the Dragon Pz. Beob. Wg.V and 35L-161 containing a two piece 4" mortar for WWI Mk.IVs. 35L-195 is for another WWI subject, 8mm Hotchkiss Mle 1914 MG, 35L-202 is for the new Tamiya SU-76 and more Russian barrels for the new Mini Art kits; 35L-204 for the SU-122 and 35L-203 for the SU-85. For the Dragon M6 there's

a full set of barrels in set 35L-200 and another full set of armament with set 35L-197 for the British WWI Mk.V including two 6 pdrs and six 8mm Hotchkiss MG barrels. See Aber's massive range of top-quality upgrades over at www.aber.net.pl



Dragon 1:35 MIM-104F Patriot SAM M901 PAC-3 Launching System

A mighty-sized box from Dragon here under their 'Black Label' sub-brand which contains some big sprues and plenty of parts. The box art shows the accompanying radar trailer unit but the kit only contains the missile launcher on its M860 transport platform. Parts are well moulded in DML's usual matt grey styrene with some sharp detail, walk-ways are nicely represented and the antenna mast is delicately done. Safety rails around the generator unit are supplied as braided metal which is a nice touch and for better definition of detail the tread and outer face of the tyres is moulded in softer DS styrene. Surprisingly for such an intricate piece of equipment, no photoetch parts are included. Many of

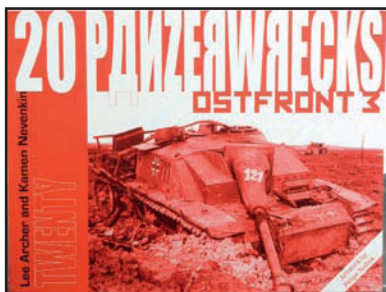
these Black Label kits don't seem to hit the heights of finesse present in other kits by Dragon (for example their Panzer III and IV based kits). The platform can be modelled in transport or firing positions with missiles included also. Even without the HEMTT tractor unit and radar station this is still a pretty expensive kit (no doubt down to the sheer size), the Trumpeter version (and the re-boxing by AFV Club which includes some extras) give this option so it may be just down to how you want to display your Patriot system and what you want to spend. Thanks to the Hobby Company, the UK importers of DML ranges.



Dragon 1:35 M60 'Patton'

In our last issue we looked at the 'next generation' M60A2 released from Dragon which although beautifully moulded carried some dimensional and positional errors, some of which have quite obviously been addressed here with the previous M60 MBT; well done Dragon. It looks like we have a full re-worked lower hull and amended upper hull to suit with corrections such as removing one of the fuel caps but a few unusual features such as losing the pivot hole for the driver's hatch and no protective cover on the

new commander's cupola. We do get a nice DS styrene mantlet cover and the same T97 tracks as the M60A2 which seem more applicable for an initial M60. The rear doors have been corrected where the snorkel fits in place and the turret looks good with its realistic cast texture. This release is certainly an improvement on the M60A2 and should look good assembled with some very nice detail but just has a feel of being polished-up in places and could struggle to match other potential releases from AFV Club.



Panzerwrecks 20, Ostfront 3

By Lee Archer and Kamen Nevenkin
Published by Panzerwrecks
Softback format, 96 pages
ISBN 9781 9080 32140
www.panzerwrecks.com

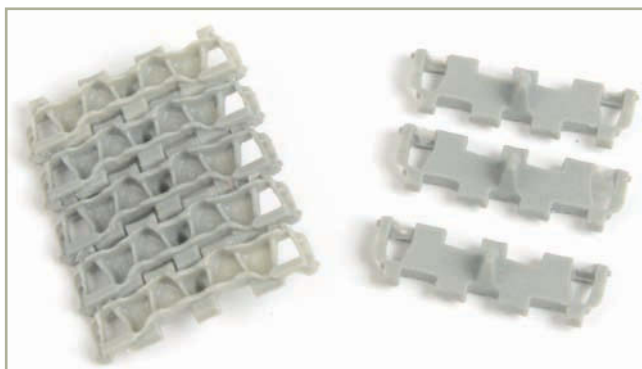


The Panzerwrecks guys continue to work relentlessly to bring us fresh images and information, this volume twenty is another in the series focussing on the Eastern Front. As usual we have a photographic-feast of lame and destroyed German armour, this time close to one hundred rare Russian archive images. By the authors admission, unlike the stunning quality usually associated with the series the shots are on the 'grainy' side, but at the large format the detail is perfectly legible as modelling reference,

fantastic for fans of late-war armour including rarities such as Möbelwagen. An introduction outlines the background to the images with information on new Russian ammunition being tested at the time and the tactics of the Sturmovik fighter-bombers; no firing ranges for the Russians with testing carried out on the battlefield! To add to the interest there are war-time sketches showing 'action' scenes and beautiful colour plates by Felipe Rodna. Another must-have Panzerwrecks, get them all!

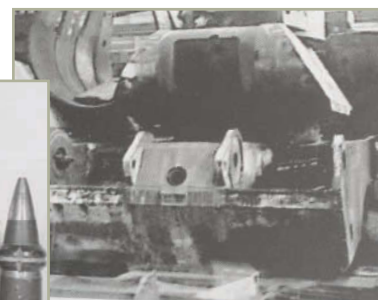
D-Day Miniature Studio

Poland's D-Day have an expanding portfolio of fine figures depicting some excellent little scenarios and some great characters. Two pairs of LRDG subjects could work very well together with a typical and interesting mix of attire and the officer doing the gentlemanly thing by offering the captured DAK guy a cigarette. The third set in a series of Volksturm and Hitlerjugend depicts two youthful subjects in relaxed walking poses and a WWI cold weather scene gets the imagination going with a pair of German guards particularly well wrapped-up against the elements. All of the figures are in 1:35 cast in high quality resin and beautifully sculpted. Take a look at the full range at www.ddayminiaturestudio.com



GTG Resin

Australian company GTG resin have sent us a couple of samples from their new range of 'Snap-Tracks' designed to click together with minimal clean-up and fuss. The resin used has a degree of flex to it (not feeling at all brittle) and the casting is superb with ultra-fine detail like the individual casting numbers making them a real improvement over the kit tracks in the case of the 38(t). The range offers so far tracks in both 1:35 and 1:16. In the 1:35 range are tracks for T-34, Tiger 1 early, T-55 and Luchs. In 1:16 there are tracks for the 38 (T) from Panda and the Luchs. where the finesse of detail in this larger scale really comes into it's own as you can see. Assembling tracks is never ever an enjoyable procedure but these are so quick and easy they really ease the pain of individual link tracks. On-line information and shopping is at www.gtg-resin.com



Wehrmacht 46 L'arsenal du Reich, Vol.1; Heer and Panzerwaffe

By Yann Mahé and Laurent Tirone

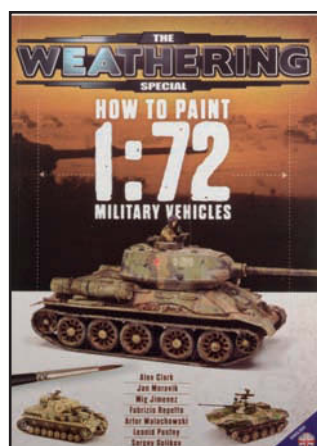
Published by Caraktère

Softback format, 160 pages, French text

ISBN 9782916403120

Our French friends at Caraktère have kindly sent a copy of this cracking new book focussing on very late-war and 'Paper-Panzer' German equipment and armour. Text is all in French but if your grasp of the language is as poor as mine, worry-not; the visual contents more than make up for the fact. Many topics are covered from infantry equipment, light field guns, heavy artillery, troop transport, recce vehicles and an excellent selection of armour including favourites like 'Maus', E-100, Panther F, 'Grilles' and the prototype Flakpanzers. The selection of images of these mythical

beasts certainly adds credibility to the facts of their development and existence with some superb 'what if' colour profiles for modelling inspiration. Many of the featured vehicles are available in kit-form (or conversions) but there are some which would make great cross-kitting or conversion projects with some degree of artistic licence. We've found this collection of images and information quite fascinating, highly recommended to fans of Paper-panzers and the last of the German designs to see combat.



How to Paint 1:72 Military Vehicles

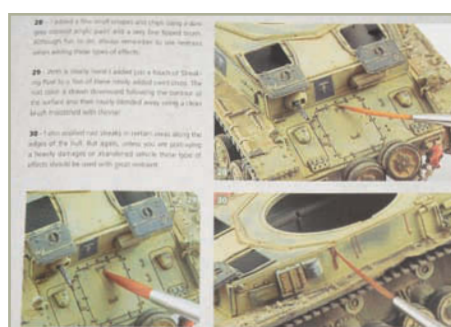
Published by AMMO of Mig Jimenez S.L.

Softback format, 120 pages

ISBN 97884 945130 60

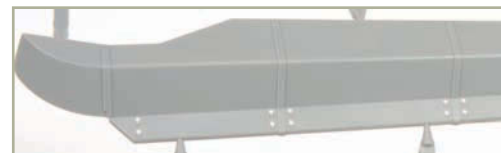
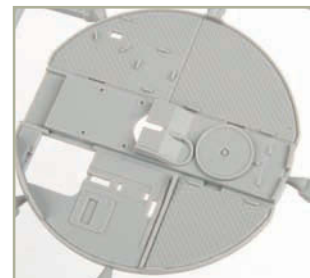
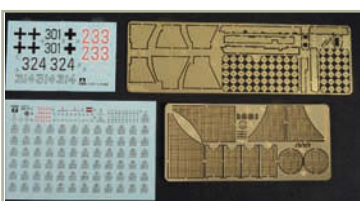
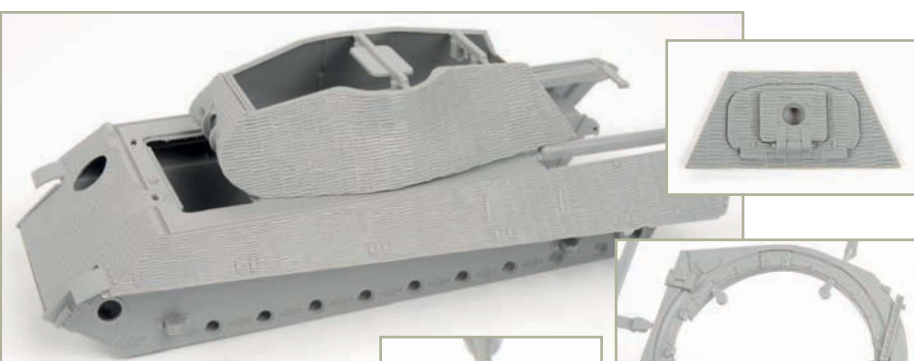
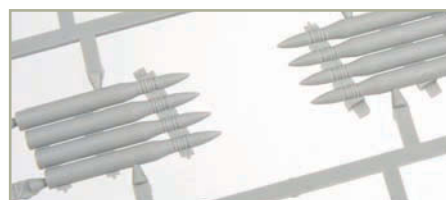
www.migjimenez.com

www.caraktère.com



Small-scale, braille-scale, seventy-second, whatever you refer 1:72 modelling as there's no denying it never seems to take as much of the spotlight as 1:35 (something we're often questioned about to be honest). Most of us will have cut our teeth as young modellers with 1:72 kits and 'moved-up' to 1:35 and even 1:16 but there are still a hard-core of modellers (with better eyesight!?) working in small-scale with some stunning results. This book looks to address the bias towards larger scales by showcasing some of the best 1:72 modelling artists including Mig, Sergey Golikov, Jan

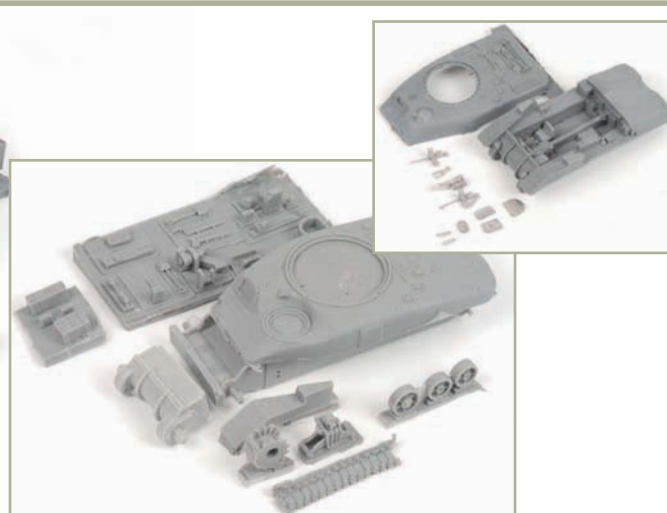
Moravik and our local lad Alex Clark amongst others. As the title suggests, painting and weathering are the focus throughout the eight projects with high quality layout and production befitting the skilful modelling displayed and some enlarged images which would have you guessing that the model wouldn't fit in the palm of your hand. A very nicely produced book packed with tips and a wide variety of excellent work.



Takom 1:35 King Tiger, Porsche Turret with zimmerit.

Having lived inside his 1:16 King Tiger project for around three years, the Editor is probably the best and the worst (for the manufacturer anyway!) person to look over a new kit of the subject. Takom have certainly pulled out the stops with their first King Tiger release including a full interior and zimmerited surfaces. There's a lot for your money packed into the deep box, a whole heap of state-of-the-art moulded pale grey sprues (around twenty), de-sprued individual track links, clear parts and a good pair of photo etched frets although if you're a stickler for etched details such as tool-clamps you'll need to source aftermarket versions. The lower hull is the starting point of construction with very comprehensive detail including all of the correct bracing, torsion bars gearbox and drives. A full two pages of the hefty instruction book cover the engine assembly which is a little kit in itself and would suit a diorama very nicely depicting an engine removal with fully featured engine bay, firewall, radiator units and fuel tanks. Other features of the hull interior are the full quota of ammo storage including the MG Gurtbags. Turret interior and gun

breech is really well rendered also and will need careful consideration of sub-assemblies regarding painting and to be fully accurate the co-axle MG ammo feed should be added. So what's not to like about this impressive package from Takom? Well, we're not entirely convinced by the zimmerit which looks a little heavy with around half the number of vertical 'ridges' shown in period images and there's some missing prominent conical bolt heads around the rear turret hatch. Still with the turret, the mantlet cast 'pot' looks out of shape and the turret cupola hatch is moulded so that it can only be modelled in the closed position. On the hull deck there is also some missing weld detail which will need to be added. The kit features a scale thickness of armour which should help anyone ambitious enough to tackle a cut-away display piece. An altogether excellent effort from Takom, not without a few niggles as most kits, but a brand new release offering such high levels of detail straight from the box and such a popular subject should prove a hit. Our thanks to Takom for samples of their latest releases.



Wee Friends 1:35 Canadian Ram MkII and 1:48 / 1:72 Ram Kangaroo conversions

If you can't face the challenge of correcting the Academy 1:35 Lee or Grant kit here's a neat little resin conversion using the running gear by Scotland's 'Wee Friends' (the production side of Friendship Models). Cast in resin and requiring the usual clean-up and removal of pouring blocks the conversion is pretty straightforward and nicely done offering Sherman fans something different to get their teeth into. If 1:48 is your scale there's a

kangaroo (APC) version of the Ram available as a full resin kit and not leaving out 1:72 (Friendship Models have a vast range of Allied subjects in small sale) is another conversion for Italeri / Esci kits to create the Kangaroo APC. eshop.friendshipmodels.org.uk has more details of the kits and secure shopping, or look for Friendship Models at one of the many model shows they attend.

The nice range of 48th-scale kits by Tamiya always keeps me busy. Sometimes they are side projects and sometimes they turn into dioramas. When I start these kits I don't have a special vehicle in mind. I just follow where the kit is carrying me. This time it took me to building this little vignette of a left-behind Wirbelwind somewhere in the Ardennes. While doing a bit of research I found

out that there was no snow during most of the Bulge fighting. So that was my starting point. These 48th-scale kits are not expensive, are easy to build within a weekend and perfect for trying new techniques or improving your existing ones. This time I wanted to try the Black and White technique mastered by my good friend Jose Luis Lopez from Spain.

the calm after the storm



Tamiya's Whirlwind
modelled by Gunnar Baeumer



The Wirbelwind (Whirlwind) was designated Sd.Kfz. 161/4 and weighed 22 tons. The turret had 9 angled sides made of 16mm rolled steel plates with an open top for better aerial observation, which in return made it vulnerable to foul weather and air raids. It could carry 3200 rounds of 20mm ammo in 90 magazines. The Flakvierling had a theoretical rate of fire of 1800

rounds per minute, with the range of fire being 4800m for ground targets. Some 87 (or 105, depending on the source) Wirbelwinds were built from May to November 1944, on retired or battle damaged Panzerkampfwagen IV (mainly Ausf. F/G) chassis/components returned from the front for major repairs.



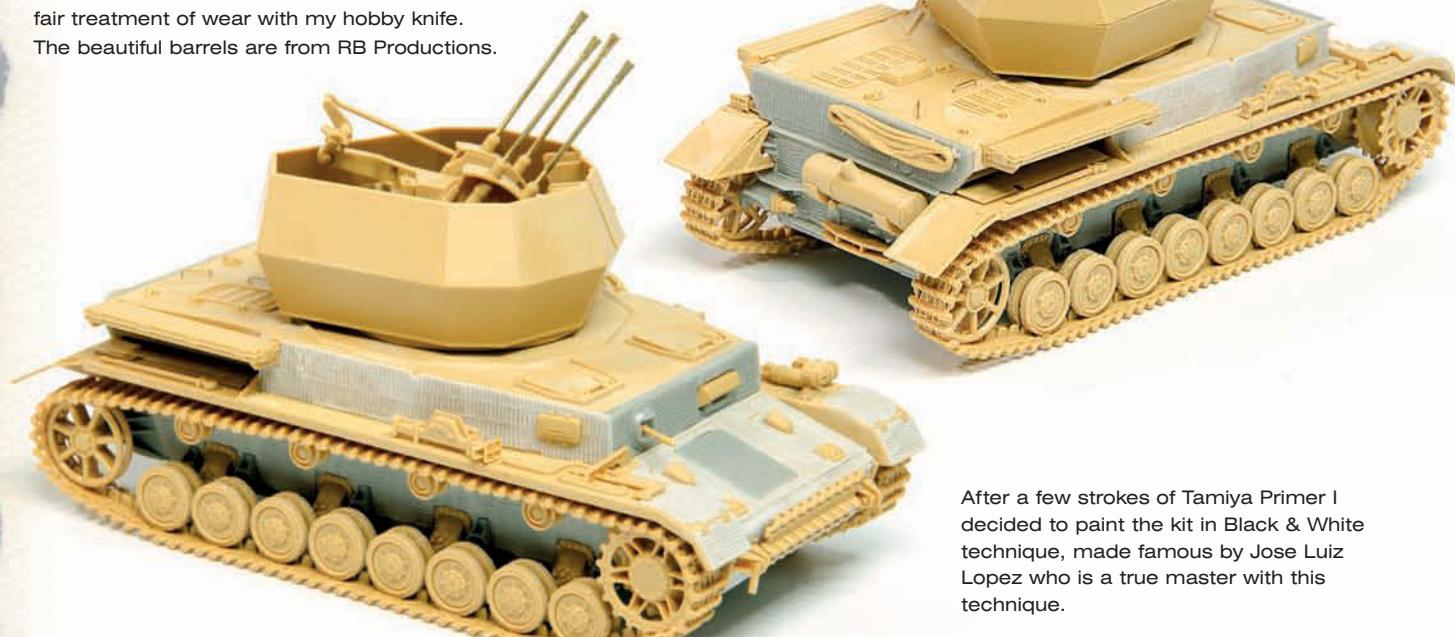
1:48

Typical Tamiya

The 48th-scale Tamiya Wirbelwind kit is a little gem based on the Pz.IV Ausf. J kit, including new sprues for the turret and the gun, plus the two barrel boxes over the air intake.

I also used Atak's Zimmeritt to further improve the look, as Zimmeritt was found on some vehicles. New grab handles were added from copper wire and the road wheels received a fair treatment of wear with my hobby knife.

The beautiful barrels are from RB Productions.



After a few strokes of Tamiya Primer I decided to paint the kit in Black & White technique, made famous by Jose Luiz Lopez who is a true master with this technique.



In the first step a classic preshading was carried out. With fast strokes close to the surface, thin lines were applied to perform the first step of pre-weathering.



This streaking was done with the lighter as well as the darker tones which needs building gradually, not to ruin the previous steps.



The first lighter grey tone is being applied to smooth the preshading and give a first impression of light. An even lighter shade is worked onto the upper surfaces and also raised detail.



With pure white the lighting effect was intensified and white streaks were added to vertical surfaces, such as the inside walls of the turret.



Another interesting feature of this technique is the pre-chipping, carried out both with a sponge and a fine pointed brush. In this case one can use black as well as white chips, these will look totally different underneath the camouflage colours.



The inner turret received a few coats of rather thin paint, so the preshading effects show through. Afterwards this was sealed with Tamiya's clear thinned with their acrylic thinner. This is essential as the acrylic clear will protect your paintwork from the harsh oil based weathering steps to come.

The AA gun was primed, base painted with Tamiya XF63 German Grey and sealed. It then received a few thin coats of Absolute Chipping from Mig Productions. Tamiya's XF60 Dark Yellow was highlighted with some white to add some colour variation and interest to it. In this step I usually thin my Tamiya paints with pure tap water to ease the removal of this coat.

After only a few minutes I started removing the top layer in places of heavy wear and where it would be scuffed, using warm water and different paint brushes plus a toothpick.





Detail painting was an easy task with the big range provided by so many manufacturers. The reason I used two Blacks is, that Ammo's paints dry more semi gloss while Vallejo's perform dead matt.



After finishing off the inner turret, the two halves were mated and then masked off. The turret's outside received a stronger treatment with the Black and White technique, as its larger surface of thin sheet metal is more prone to paint irritations and chips.



Another difference with this technique is that the camo paints are not layered over each other but rather next to each other with highly diluted paints. Otherwise all the Black and White effects would get lost. To aid me finding the right places for each color, I colored the painting instructions in advance.



Again Tamiya Clear was thinned with X-20A, their Acrylic thinner. Applied in several thin coats to accomplish a semi gloss rather than a high glossy finish. On the lower hull and the running gear with tracks a first mud colour was applied using Tamiya's XF-72, which doesn't have this distinct reddish tint as XF-52 Flat earth.



Steel parts were primed using Vallejo's phantastic German Cam. Black Brown, which represents best imho. Wash Brown plus some Shadow Brown from 502 Abteilung was mixed with Odourless Thinner to the consistency of a Wash and applied as a Pinwash.



On the engine deck and the rear plate I used a darker Wash. This being Vandyck brown which is almost a black tone.



Taking the hatches as an example, one can clearly see the advantages of a wash. I didn't apply any wash to the Zimmerit tough, as the refraction of the Zimmerit darkens the surface by itself. Otherwise these parts would look way too dark.



Rubber parts were brush painted with Ammo's Rubber & Tire which works just fine. I didn't pay too much attention to any black spots on the dark yellow roadwheels, as this would eventually get covered by mud and earth effects.



When it comes to rusted parts, the Lifecolor Rust Set is my favoured tool. These colours are brilliant when layered sparingly over each other with a sponge and a fine brush.



I wanted to give the new Dust & Dirt Deposits by AK a shot and tried them out on parts of the upper hull where dirt would normally accumulate. The results were very pleasing. After a few minutes I came back and drew lines, streaks and scuffs into the dust with those very helpful Tamiya cotton swabs. Some real dirt salvaged from the backyard was placed on the fenders, around the turret splash guard and parts of the bow and fixed permanently with Sand & Gravel Glue. Fresh mud was splattered on from a loaded brush. This has to be done little by little to gradually build up the effects rather than covering the whole vehicle. Ammo's Nature Effects were mixed with plaster and sifted sand to add some volume. I thought the metal surfaces still to be too boring and added some Speckling Effects from the Wilder range. Adam used this technique extensively on his Grille and I loved it and have used it ever since. For this task I used Brown Rust.





Ammo's Light Rust Wash made each colour even more vivid when applied in thin layers.

Afterwards I needed to remove the out-of-scale dots with a brush moistened with white spirit. This is essential as these would ruin the overall appearance.

Those antennas from Aber of Poland look fantastic once glued in place. They even come with the tiny wing nut on the antenna base.

They were painted a late Dunkelgelb after being primed with Gunze Sanyo's Mr. Metal Cote.

I am very satisfied with the final result and my approach to this technique. I am very thankful that Jose showed me a new way to painting and finishing kits in a weekend seminar.



The rear end of the Pz.IV chassis looks quite dirty and worn. Something I was looking for, depicting a vehicle from the Bulge.

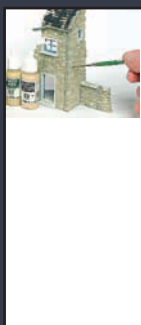
Creating a little bit of the Bulge



I found this pretty large house ruin from Royal Model while looking at wartime photographs of Belgian towns. At about €50, it's on the expensive side but I couldn't resist it. Cleanup is limited to a minimum and seams were filled with Perfect Plastic Putty. The ruin was primed with Tamiya's Surface Primer after it took a relaxing bath in lukewarm soapy water.



All these colours were used to prime the stones and timberwork. I've also included some faint streaks with darker shades. Different shades from the Vallejo range were used to paint all the details like window curbs and the roof shingles.



I made varying shades of four Vallejo colours and brush painted every stone in a different shade, which helped bring the stone wall to life. Window frames and the door were painted a blue/grey colour. Due to the lack of coloured period photos I was inspired by the box art.



A general wash was carried out with a mix of Wash Brown and Payne's Grey oil colours, while the drain pipe and gutter received a base coat of a greyish tone. Here, some lighter shades are being applied in a fading fashion, which is not so easy to do. Apply some paint dots and remove them immediately with AK's



Perfect Cleaner. The lowest part of the drain pipe was painted with Vallejo's Burnt Umber. For mossy areas, AK's Slimy Grime would be your best pick. Gradually building them up from light to dark, I achieved the effect of some wet areas that turned mossy over time.



To bring out more of the nice woodgrain imparted by Royal Model to all of the wooden parts of the house, these parts were drybrushed with different shades of buff, this time using white to highlight it. The house ruin was glued to a Styrofoam base, which was cut to fit the oval shape of the wooden base. Cat litter made up the rubble and a tiny root was used for a tree in the backyard. Balsa wood, real stones and different grass fibres were lightly pressed into the wet groundwork.



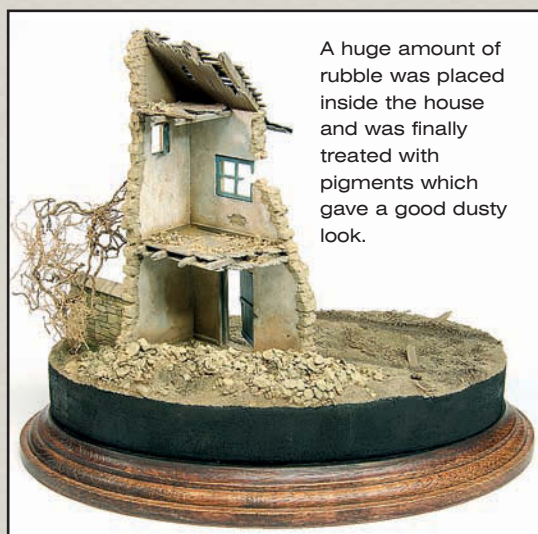
Once dry, the whole groundwork was painted with the same colour as the tank's running gear - XF-72 JGSDF Brown. This way the tank will blend into the muddy road.





Stones along the road were painted with grey tones sometimes highlighted with white and then with Pale Sand.

To enhance the feeling of a wet and now muddy road, I gave the track imprints a dark wash using Sepia oil paint. After that dried, they were treated with some gloss varnish for a wet look.



A huge amount of rubble was placed inside the house and was finally treated with pigments which gave a good dusty look.



The finished base ready to receive the Wirbelwind. The pink Styrofoam has disappeared under a coat of water soluble black paint.



German Flakpanzer IV Wirbelwind No.32544
 Royal Model House ruin (Ardenne) No.694
 The Bodi US Tank Crewman No.TB-48002
 Atak Zimmerit for Pz.Kpfw.IV Ausf.H No.4803
 RB Models 2cm Flakvierling 38 No.48B23

The finished Vignette has the addition of a US tankerman in warm winter clothing from The Bodi. A fantastic little figure which I stole from another Vignette with an M10 on it. Modern recycling.





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GT45 Mr. Brush Stand

- Ideal for when you want to keep in-use paint brushes off your work surface.
- Comfortably holds between 3-5 hobby style brushes – adjustable angle arm.



D174 Mr. Paint Tray - 10 per pack

- 10 circular stainless steel paint mixing trays (5 cms width)

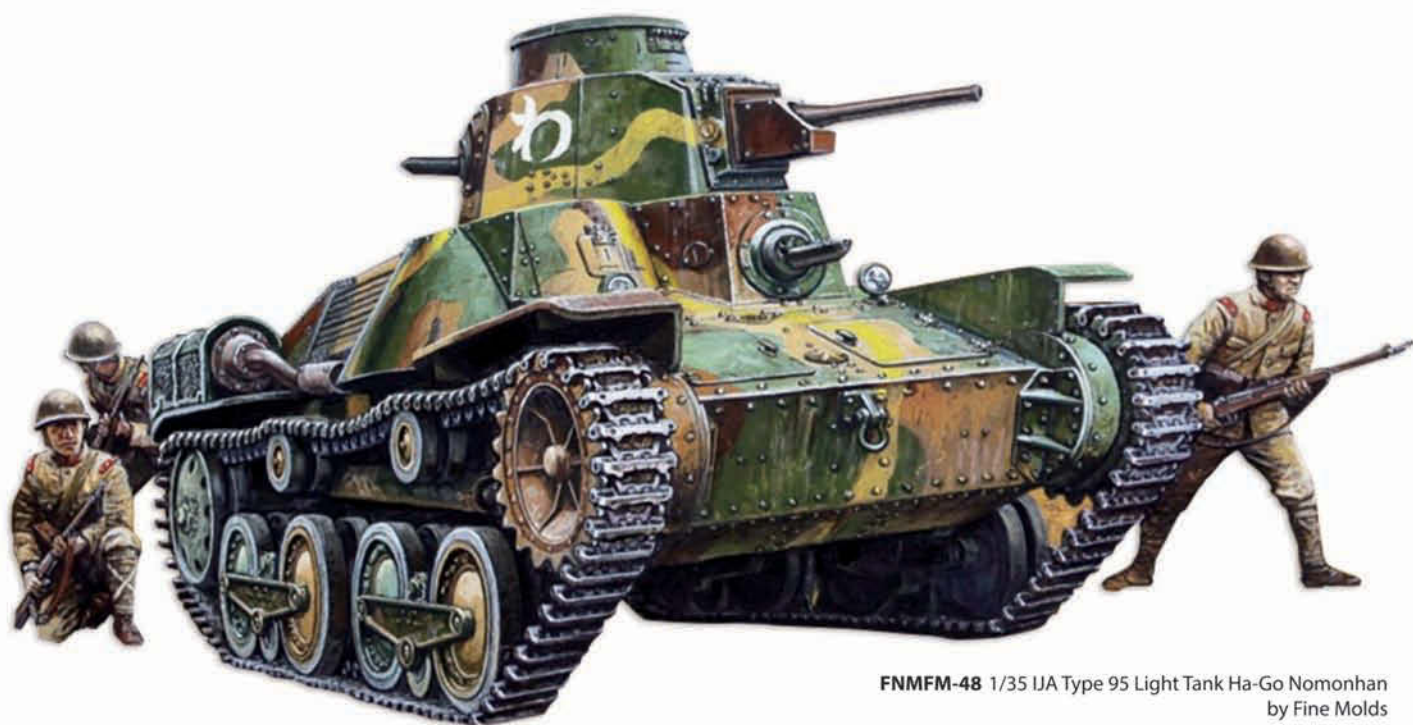




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