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LANDSHIP

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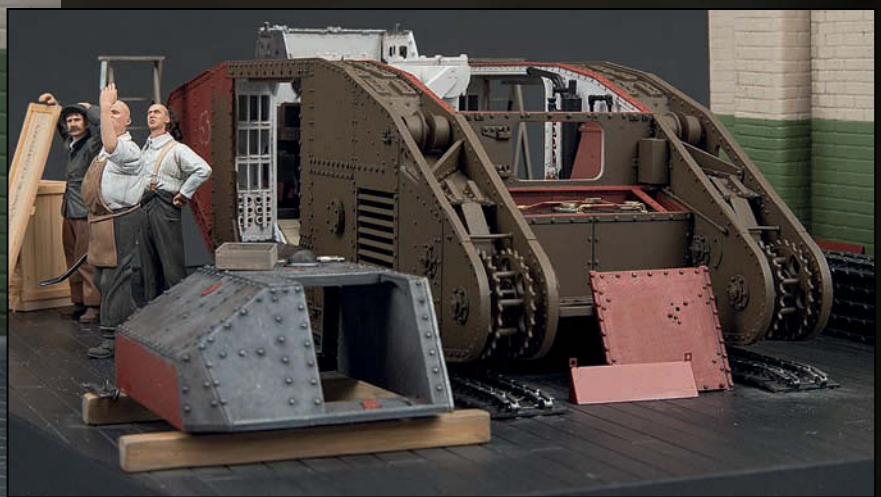
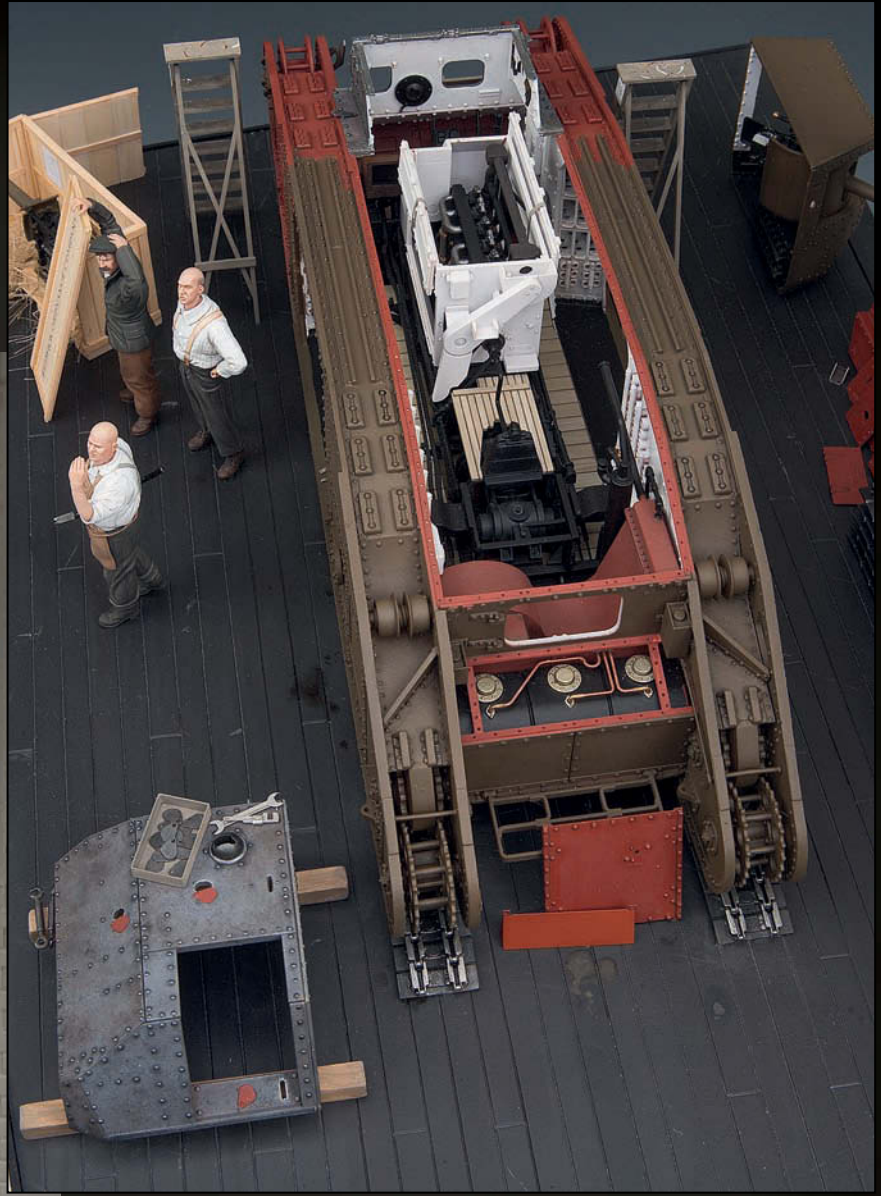
LANDSHIP

MENG MODELS BRITISH HEAVY TANK MK.V MALE
MODELLED BY DAVID PARKER



When Meng released the Mark V with its fully detailed interior I pondered on how best to build the kit and show off all the fabulous internal detail. Even with every hatch open there would be a limited view of the inside and I considered those well known images of disemboweled blown up vehicle on the battlefield. In the process of searching for images I came across pictures of these tanks on factory assembly lines. The pictures showed rows

of vehicles all apparently painted but with their hull roofs and sponsons yet to be fitted allowing an unrestricted view into the vehicle. Another image showed tanks with separate sponsons standing in rows. I immediately saw the potential of replicating the assembly line to allow the interior to be viewed in the best possible way as well as offering the potential to show different finishes, but first the Mark V needed to be assembled!

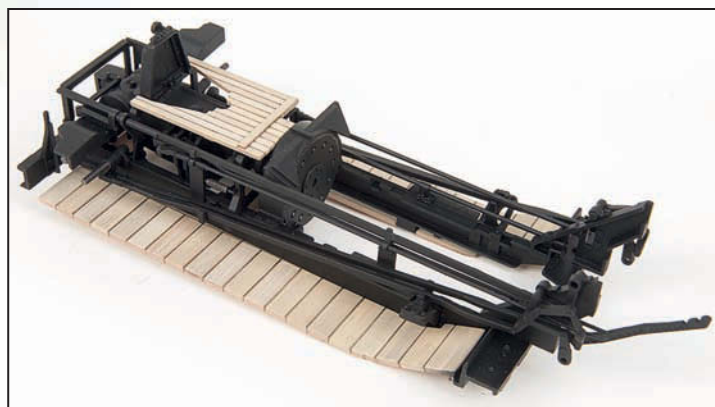
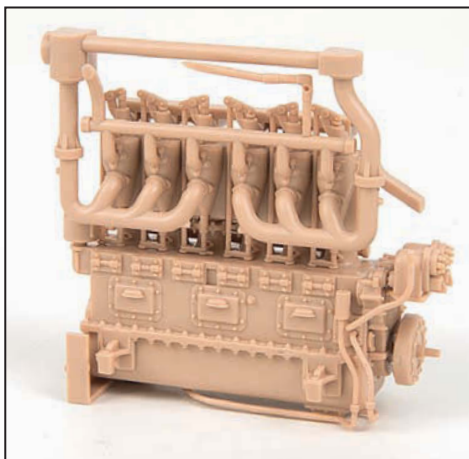
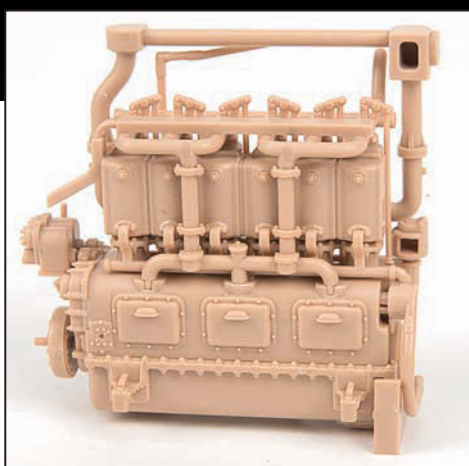
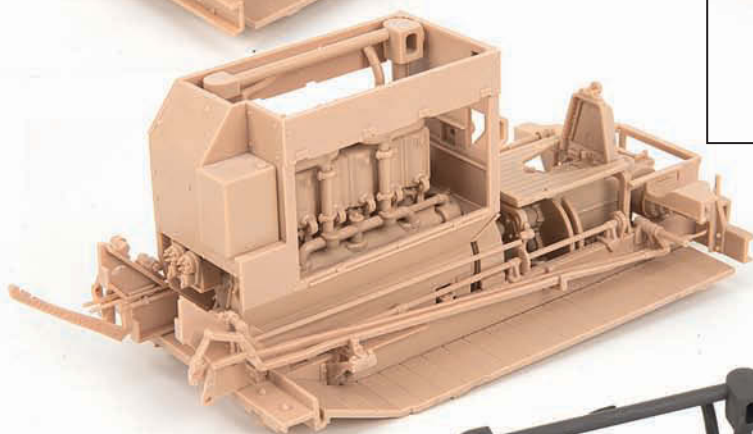
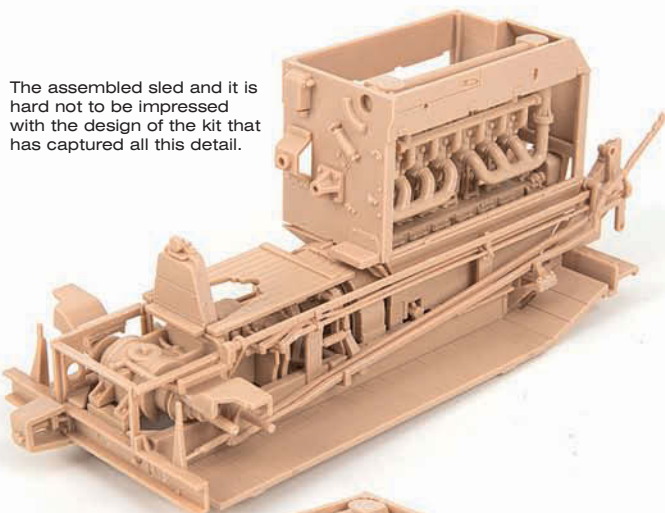


LANDSHIP



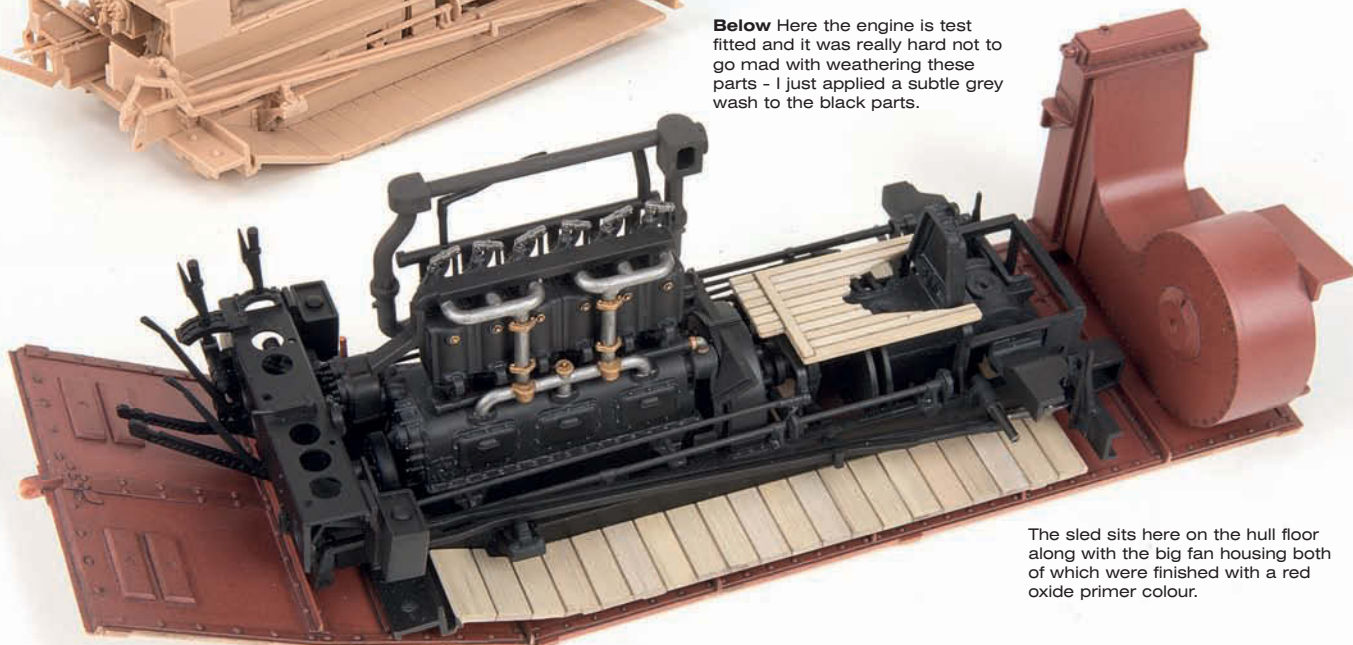
Construction begins with the interior and the heart of the vehicle, the engine. This complex-looking piece of machinery has been cleverly replicated with some clever design touches like the one piece push rod moulding allowing them all to be positioned in one go before you trim off the carrier sprue. The engine is then build into what I called the 'sled' which carries the control linkages and gearbox as well the wooden walk ways down each side. Some careful study of the instructions was needed to locate some of the elements of this complex assembly but it all fitted together and with care I was able to leave the engine, the engine housing and the sled as separate parts to assist in painting them.

The assembled sled and it is hard not to be impressed with the design of the kit that has captured all this detail.



Above Breaking down the parts helps with painting and I finished the frame with Vallejo Air Black which dries with a lovely satin finish, perfect for these parts. I wanted the floorboards to be shown as freshly installed unpainted wood - probably something hard-wearing like oak. A mixture of tones were used to break up the uniform finish of the planks.

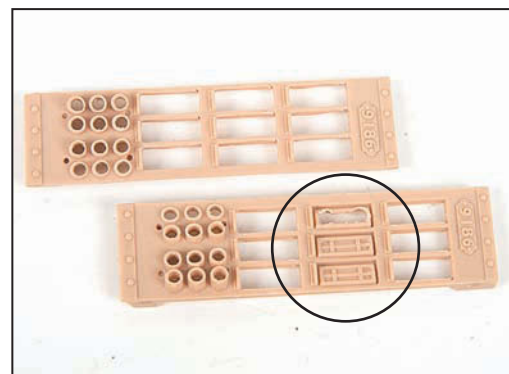
Below Here the engine is test fitted and it was really hard not to go mad with weathering these parts - I just applied a subtle grey wash to the black parts.



The sled sits here on the hull floor along with the big fan housing both of which were finished with a red oxide primer colour.

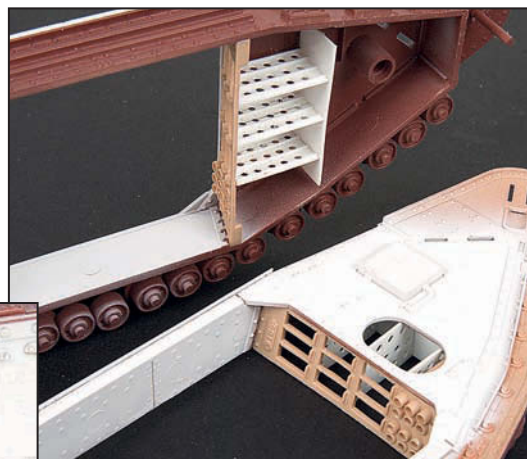


More work on the sled with the engine housing installed. I modified the concertina door panels so that they could be shown folded up to allow the engine to be seen. Details on the white areas were just defined with a subtle grey pin wash. In front of the engine housing the pair of crew seats have also been added.

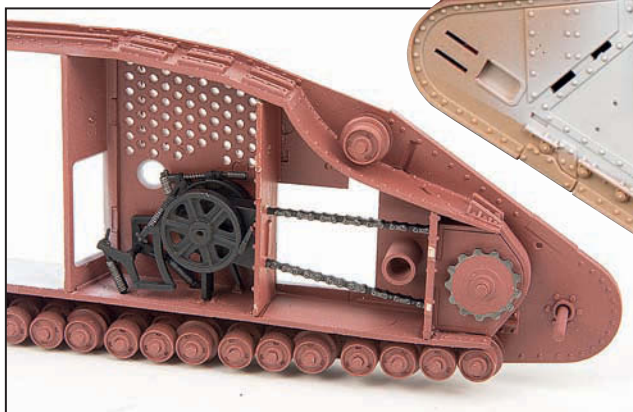


The main modification I had to make to the kit to depict the assembly line was the removal of all the stowed ammunition which would not have been loaded until the vehicle was in service. The 6pdr shells were removed by drilling each of them out with a 2mm drill from the reverse face. Happily each location had a rebated hole to locate the drill but even so there are many it the whole process was quite time-consuming. Likewise parts M9 and M10 were drilled out and the rows of MG ammunition boxes were also cut away. I then had to construct the perforated shelves which hold the ammunition boxes and which were now going to be visible. Drilling the perforations in the shelves was another slow process and I added strips of plastic to make the rails on each shelf. Before joining the two sets of side armour both were sprayed with primer red for the internal parts and running gear and the interior parts with white with a satin varnish finish. Again a very subtle pale grey pin wash was used to define the details and resisting the urge to chip or weather the finish in any way.

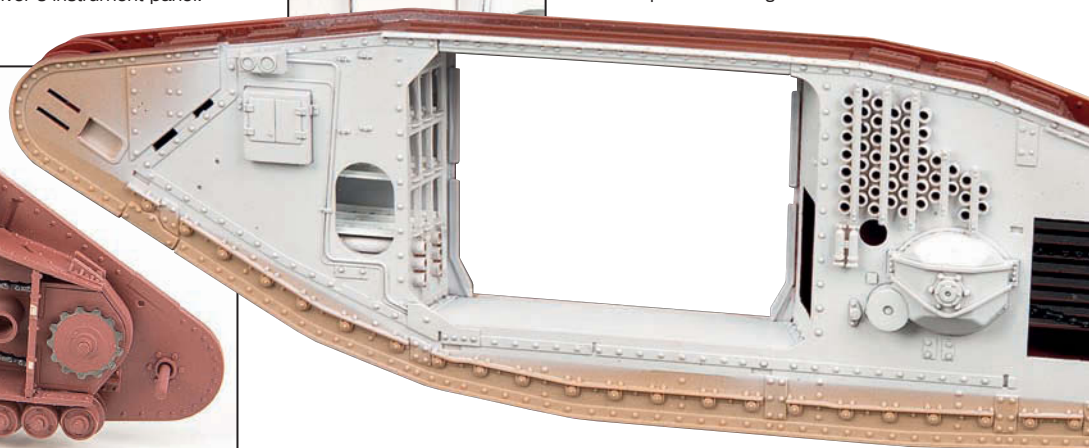
Right I added a pair of spare instrument dials from an Archer Fine Transfers set to dress the driver's instrument panel.



Above Fitting the new ammo box shelves inside the sponsons along with a new front bulkhead.



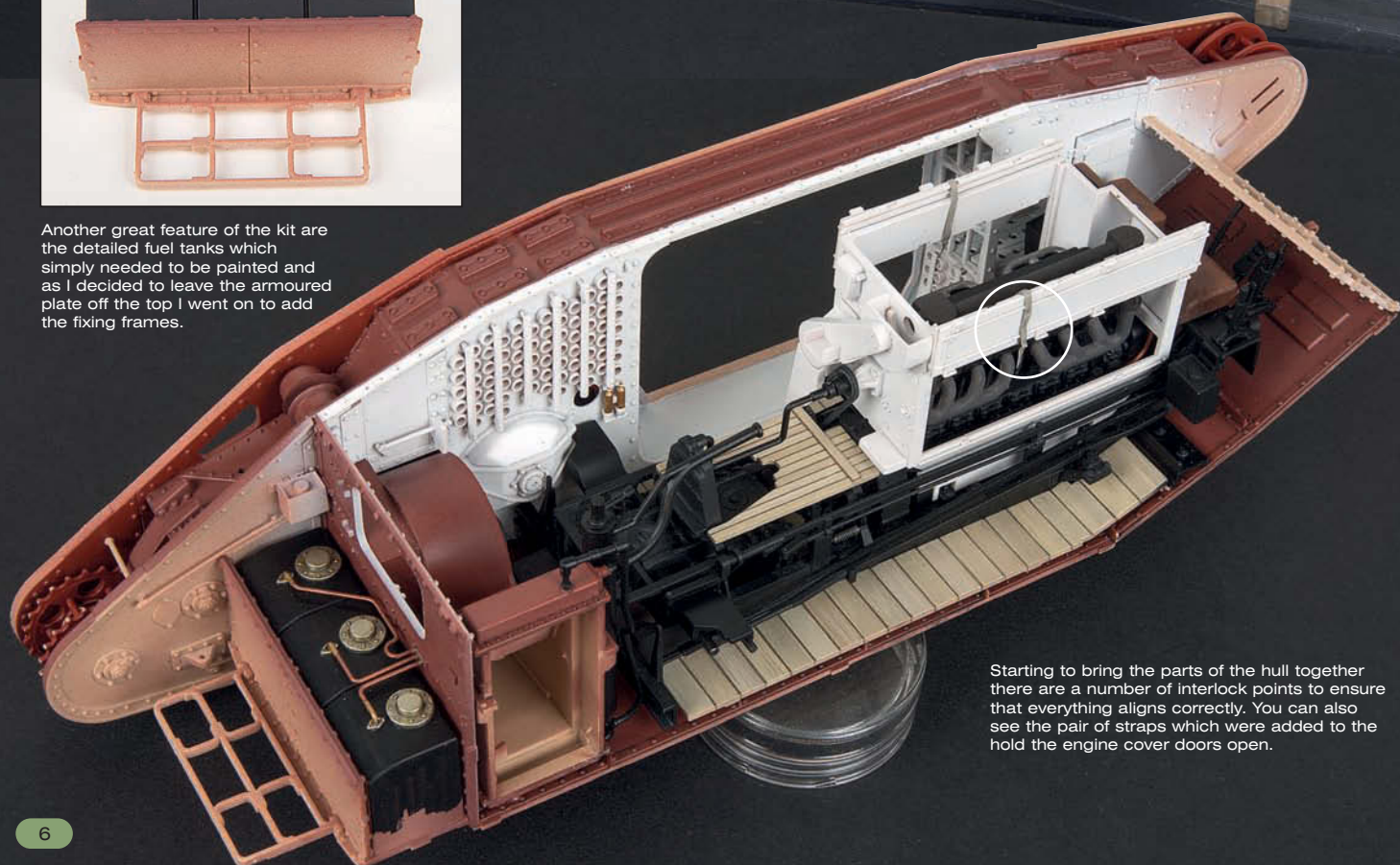
I decided to leave the inspection hatch off so I painted the drive train components that would be visible through the open cover.



The assembled hull sidewall showing the empty shell tubes as well as the MG ammunition box shelves in the bow. Quite a lot of work to reverse the stowed ammunition configuration but I was pleased with the results.



Another great feature of the kit are the detailed fuel tanks which simply needed to be painted and as I decided to leave the armoured plate off the top I went on to add the fixing frames.



Starting to bring the parts of the hull together there are a number of interlock points to ensure that everything aligns correctly. You can also see the pair of straps which were added to the hold the engine cover doors open.

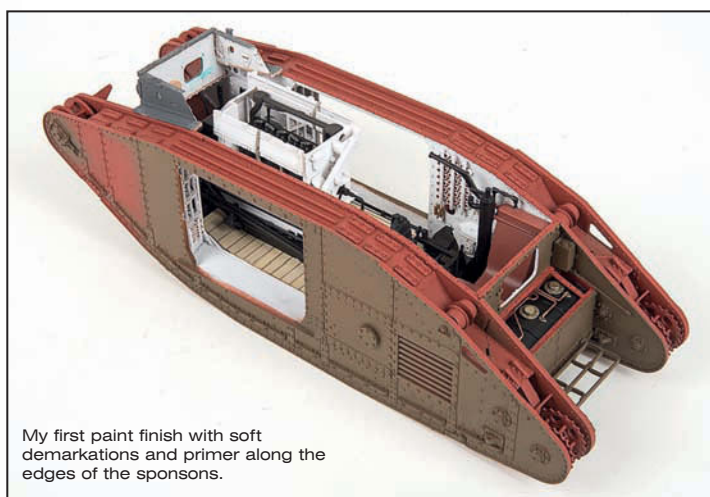


Both sides of the hull are fitted to form a remarkably strong unit. Because the roof panels would not be fitted I added drilled strips of plastic around the edges of the hull where the roof would be rivetted in place.

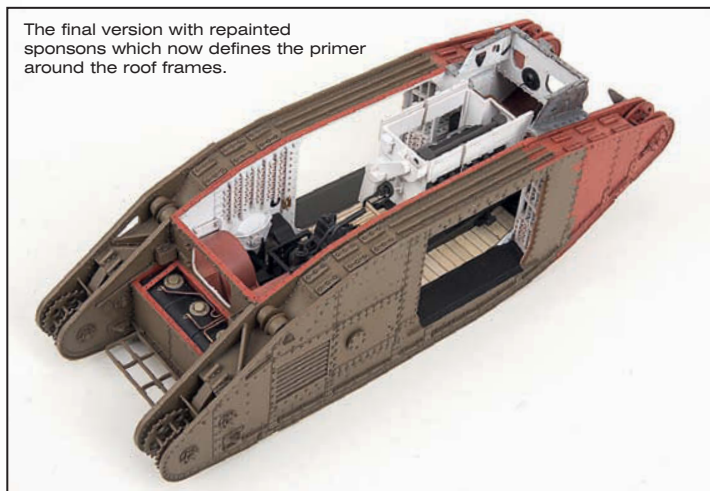


The driver's cab was partially assembled to show it under construction and the gun sponsons were also assembled and the interior parts were masked in preparation for painting.

With the internal parts painted I was able to proceed with the final assembly of the hull, gluing the hull floor, fuel tanks and sled to one of the hull sides and allowing this to dry before fixing the opposing side. This is where thin liquid cement - Mr Cement S in this case - works so well and hardens really quickly. I added the roof frames around the edge of the hull from drilled strips of 20 thou plastic and around the edges of the fuel tank compartment and driver's cab. The model was masked and Vallejo Cavalry Red was sprayed over the unpainted areas of the hull. The final camouflage green was sprayed using an equal mix of AK Interactive WW1 British Khaki Brown Base and WW1 British Khaki Brown Shadow. I had two attempts at the camouflage colour as at first I left the running gear areas of the sponsons in primer and I had a sprayed soft demarcation where the camouflage overlapped the primer. I was not completely happy with this look so I re-masked the model and sprayed over the edges of the sponsons and I changed the demarcation between the colours to a hard-edged brush painted look. Even though the airbrush was in vented in the 1878 I felt that a brush painted finish was more appropriate.



My first paint finish with soft demarcations and primer along the edges of the sponsons.



The final version with repainted sponsons which now defines the primer around the roof frames.



Having sprayed a mid grey base with a hint of purple over the unpainted sections I began to sponge a darker shade of grey over it.



This was followed by further sponged layers using more purple and darker brown/grey mixes to give this irregular finish.



The inside of the gun sponson was also treated in the same way.



I added red oxide primer over the rivets and other fitting inside the sponson.



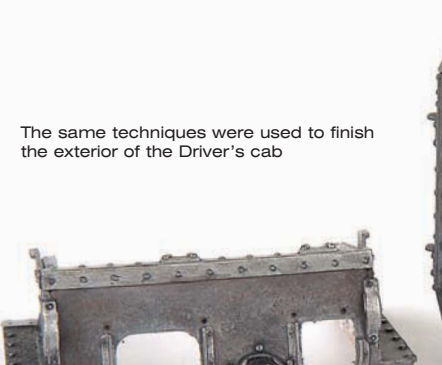
The vision port covers were also painted in primer and the rivet heads were all painted in a steel.



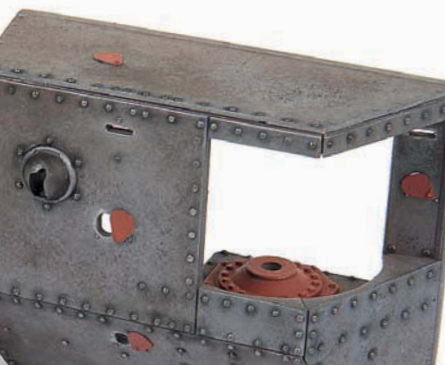
I used Uschi van der Rosten Steel polishing powder to apply a polished finish to the rivet heads and to polish areas that had been worked on like the panel edges and vision slots.



Mig Productions Burnt Steel pigments (an extremely dark blue/black) was applied with a brush over each rivet head to create the heat damage from the rivetting process.



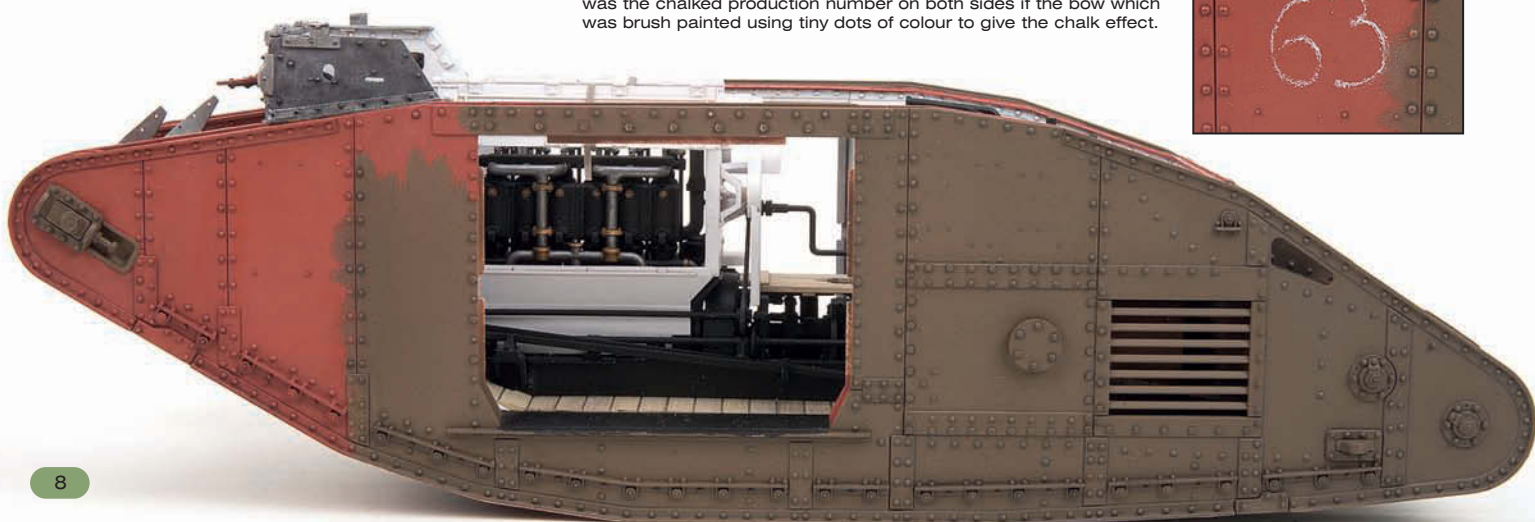
The same techniques were used to finish the exterior of the Driver's cab

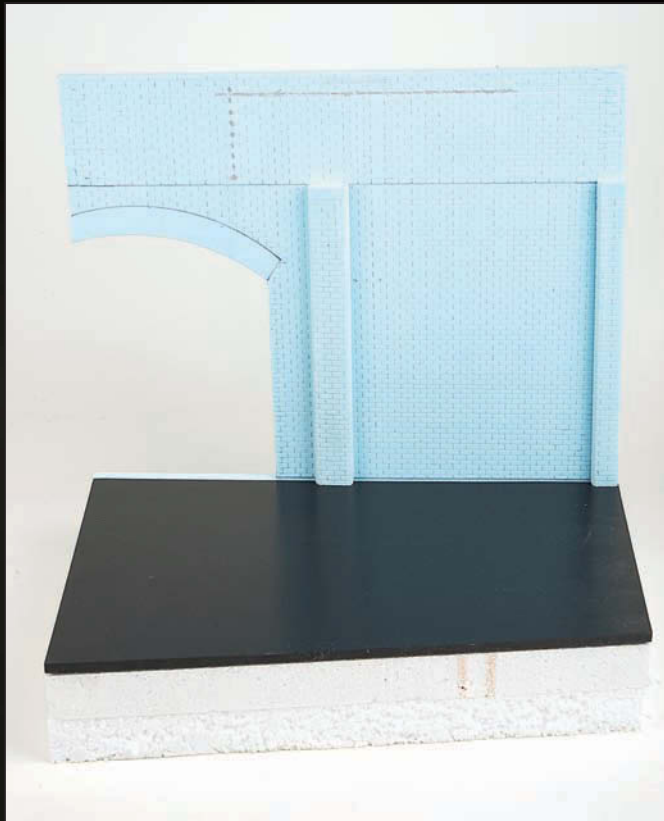


To add to the variety of finishes on the partly completed vehicle I wanted to add some parts in unpainted armoured plate. I had not tried to replicate this kind of finish before but I used Lifecolor acrylics for the base colours with the techniques explained above.

With the components of the vehicle almost complete I turned my attention to the base and figures. Using the original pictures of the assembly lines as a guide I set about planning a simple factory backdrop for the scene. The factory wall was marked out onto a

To define the surface details on the hull I applied a dark green and dark red pin wash to the respective coloured areas. A final touch was the chalked production number on both sides of the bow which was brush painted using tiny dots of colour to give the chalk effect.





piece of blue foam board. The rows of bricks were scribed into the board, another time-consuming process but well worth it for the finished effect the brick pillars were made separately and the glued onto the wall. The floor was made from a piece of black foamex display board with the floorboards engraved into it. I was surprised to see floorboards in the archive image but they are clearly visible. The wall mounted girder was constructed from plastic card and glued in place once it was painted. I tried to select period appropriate colours to finish the factory walls and they were gently weathered with a pin wash and by airbrushing transparent smoke into the recesses. The 6 Pounder Hotchkiss guns for the Mark V were manufactured under licence in

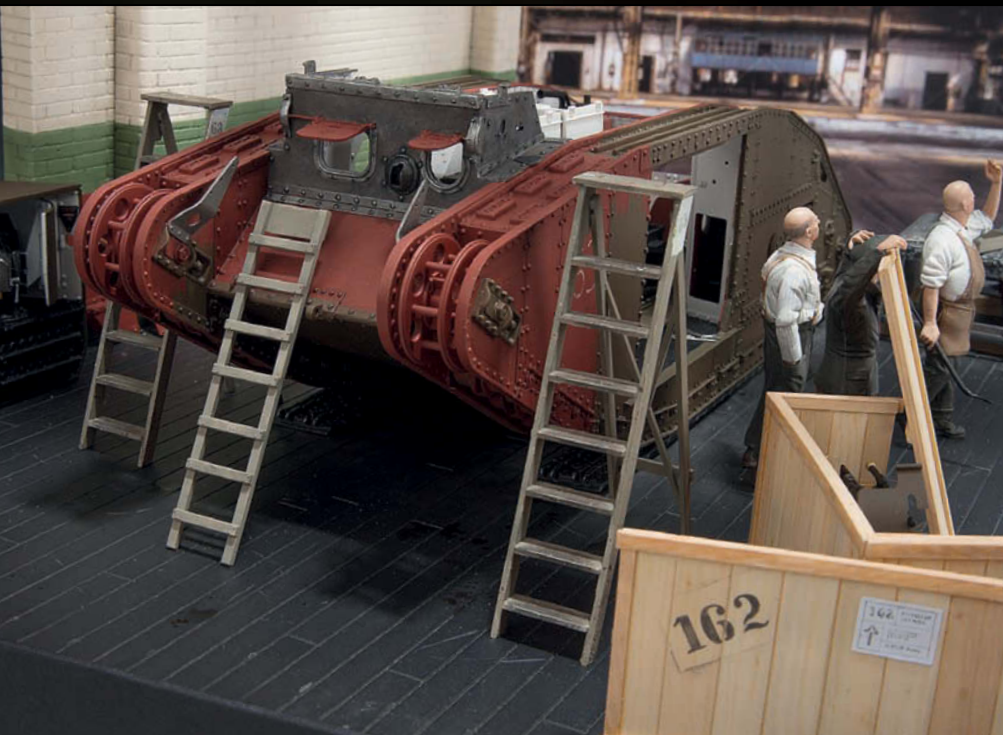


Newcastle upon Tyne by the Elswick Ordnance Company which was part of the Armstrong Whitworth group which later built the Valentine and eventually the Challenger tanks. I was keen to include this local North East England connection so I constructed a packing case in which the weapon was delivered to the assembly line in the midlands. The crate was simply constructed from plastic card and the panel lines scribed into the surfaces. The crate was base coated in pale Lifecolor blonde wood tones and then oil colours were washed over these to add the woodgrain and knots. The company logo and stencilled number were brush painted in oil colours and I made packing labels from pieces of paper with pencil drawn lettering.



Figures were simply adapted with a peak for the cap of the chap with box lid and new raised arm to hold the lid. The big fellow, originally a barman was given a new Hornet head, his arm was modified and his apron extended. The final figure also had a mature hornet head and a completely new arm. They were painted using Lifecolor acrylics and I took the trouble to polish the bald head of the big chap with a soft cloth for a realistic sheen!





Selecting figures for the scene was the most difficult aspect of the project as I did not want the inevitable man with paintbrush in hand or man with spanner. I needed civilian figures with a period feel and dress that was appropriate so I turned to figures from MK35 Editions. They have an extensive range of civilian figures and some simple adaptations gave me the look I needed and I managed to connect them as they look down the assembly hall to summon a hoist to lift the freshly unpacked weapon from its crate.

Composing so many different elements on the base was not easy but I focussed the action around the unpacked gun with the other elements placed to balanced this. The completed gun sponson stands behind the hull in the archway whilst the unfinished example lies on wooden chocks. Spare panels and hatches from the kit were finished in red primer and stacked against the wall along with pre-assembled lengths of track which are also seen in the period photos.





A tray containing unfinished vision port covers sits on the sponson along with some spanners taken from an Inside the Armour tool set.



The step ladders were supplied with a Wingnut Wings aircraft kit and were finished with a paint splashed look and work station numbers painted on the legs.

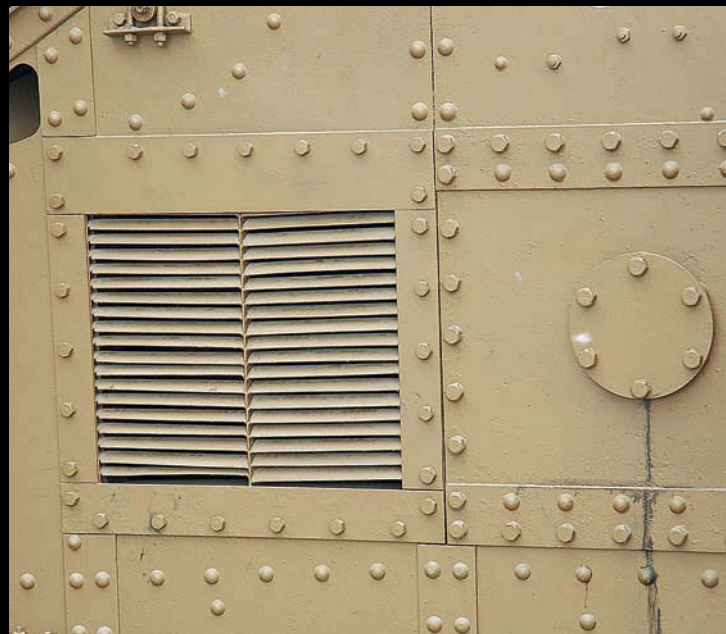
Another element I had to consider was the general appearance of the factory floor which appeared remarkably clean and tidy in the period photos. I added assorted scuff marks as well as distressing the surface with a small hammer prior to painting. I also added selected oil spills around the vehicle but as these were new parts being assembled I avoided anything too messy. I used pigments to add some dust around some of the more long term elements like the crates standing against the wall.

I think that the finished model achieves exactly what I wanted in allowing all the glorious interior detail to be shown off. It is impossible not to be impressed with the levels of detail the kit provides and it was a real change to model a factory fresh vehicle

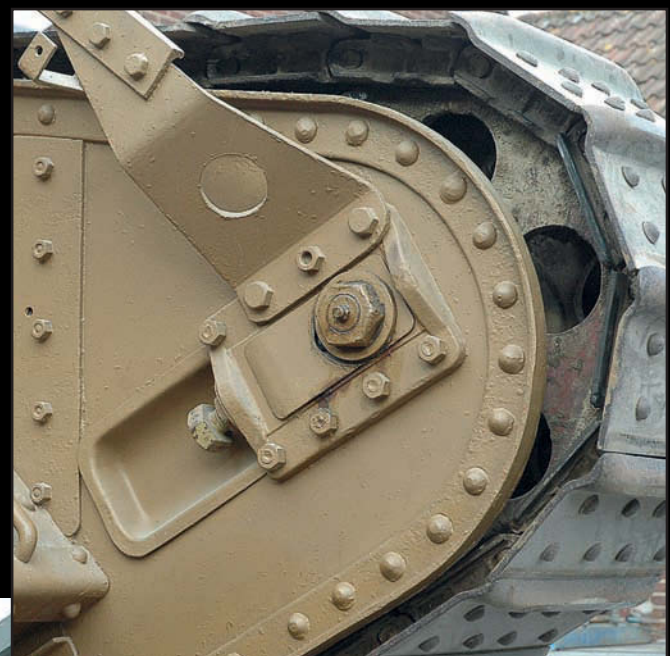


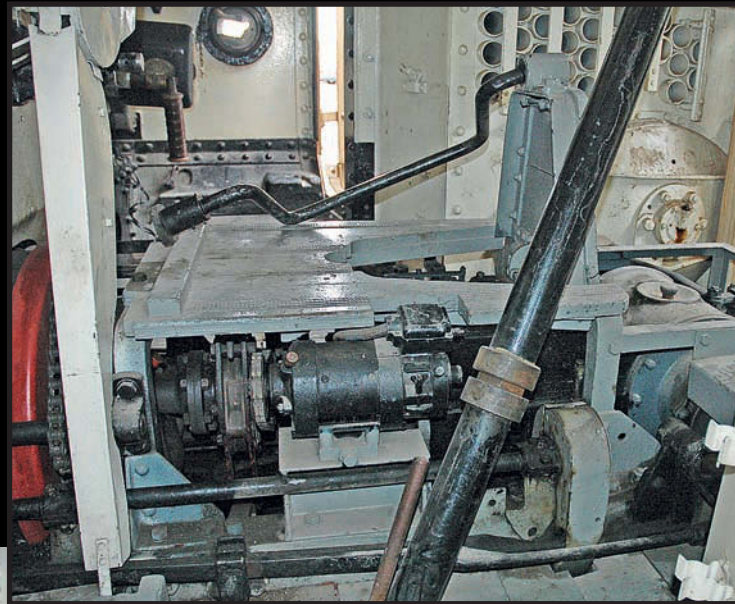
Mk.V MALE IN DETAIL

Photos by Ian Young









Panzerkampfwagen

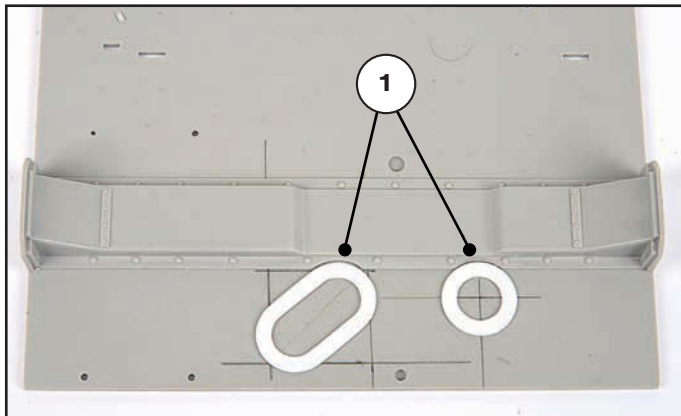
David Parker builds Trumpeter's 1:16 kit

W

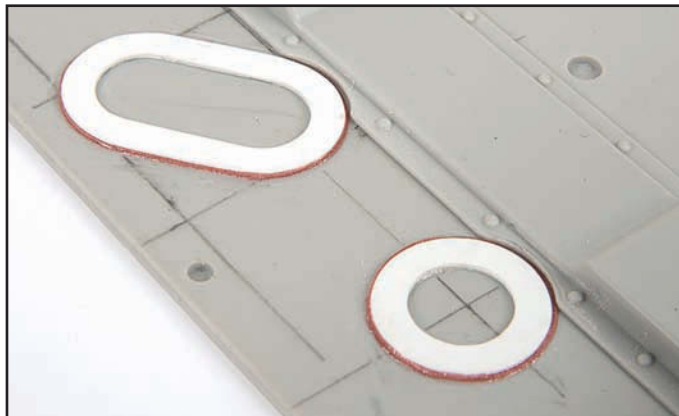
Part Six

Part six sees the first anniversary of the start of the project and it was good to be able to be working on the rear of the hull after so many months concentrating on the bow. With the completion of the auxiliary generator in part five I was able to tackle the rest of the fixtures in the engine bay as well as working on the firewall

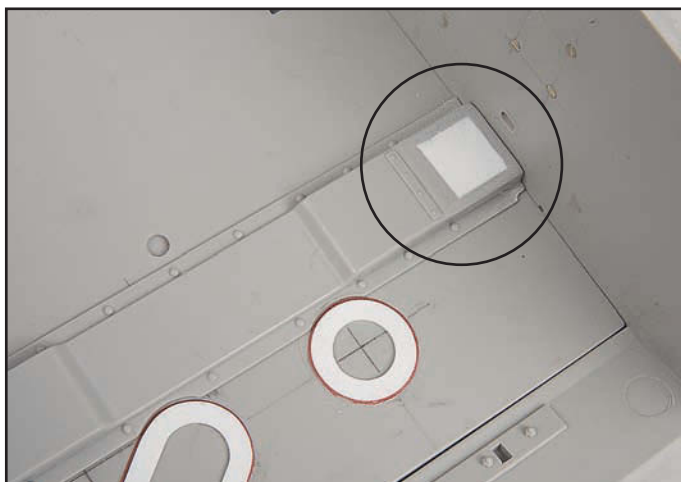
separating the engine bay from the fighting compartment. Problems with the natural distortion of the big hull moulding forced me to abandon attempts to make a new firewall and also had a lot of work to do to the air intake vents on each side of the engine bay. Plenty to keep me busy as usual!



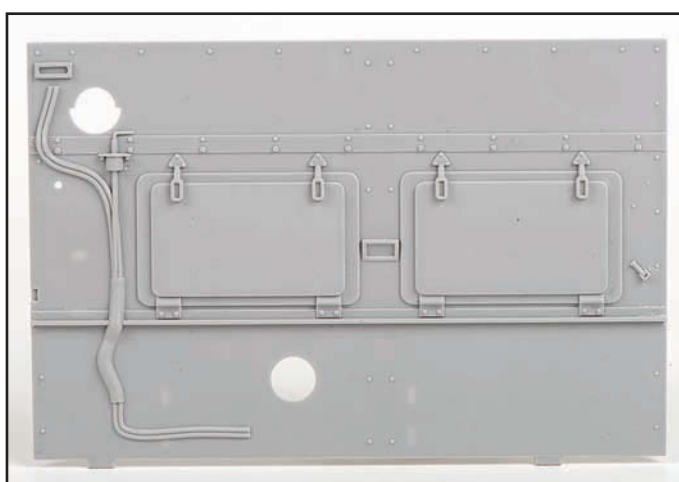
Work begins on the engine bay floor by adding the fixing flanges for the inspection covers which are present on the outside of the kit but not inside. The flanges were located using the outside covers as guide and small sections of the crossbeam 1 were cut away to accommodate them.



I used fine plastic rod to add the weld beads around the flanges with several applications of liquid glue giving the rod a realistic weld bead texture.



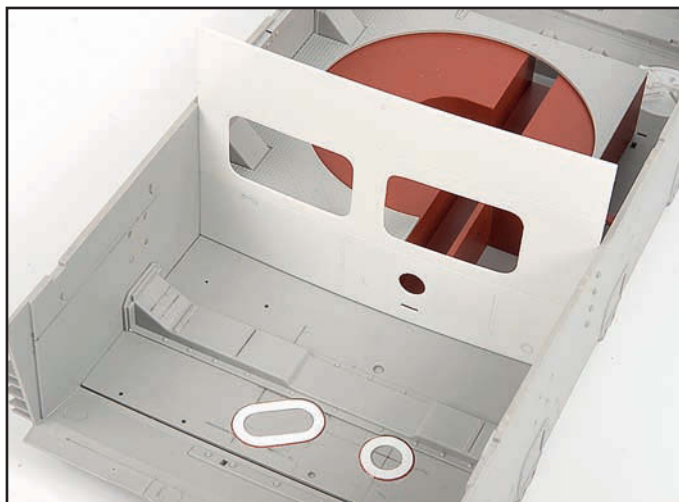
The right hand end of the crossbeam was cut away and plated over to a flat configuration, a modification that I assume was to accommodate the big engine air filter box which sits over the cross beam here.



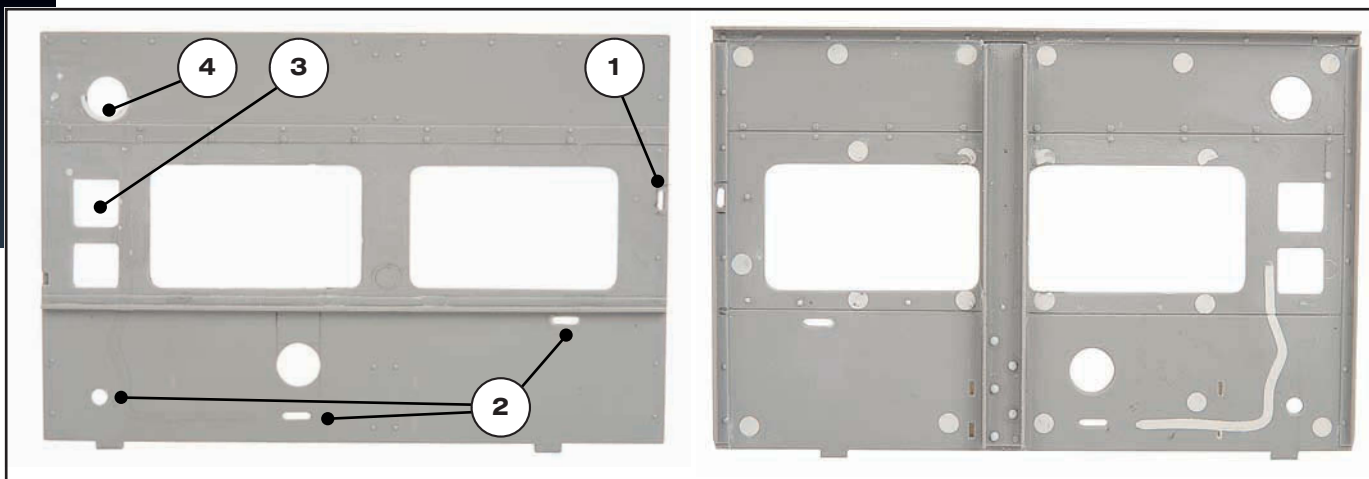
The kit firewall bulkhead seen here from the crew side features moulded on cable details and inaccurate stepped access cover panels.



On the engine bay side there are hollowed areas for the cables and a myriad of pin marks to be filled.



I investigated making a completely new firewall from a more scale thickness card but the natural tendency of the hull walls to lean inwards resulted in warping of the firewall. As a result I returned to the kit part which is much stronger and worth compromising on the thickness.

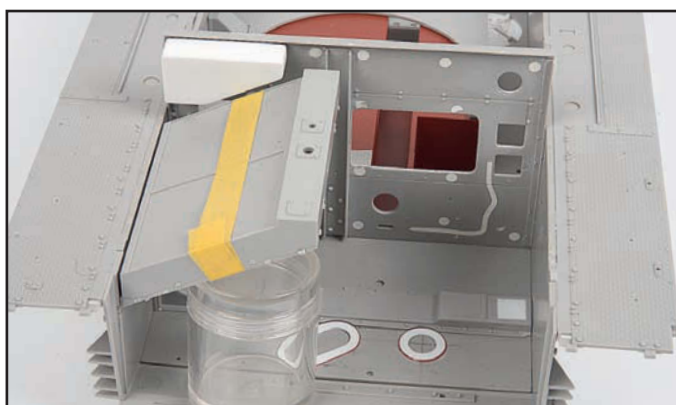


Not much to see here but the reworked firewall took quite some time to achieve with the pin marks and cable recesses filled with white Milliput and the inspection covers cut open. New holes were opened for the throttle

linkages **1**, cable feed slots **2**, and ventilator system **3**. The crew heater duct was part filled in preparation for a new duct to be installed **4**.



Mounted on the firewall is the fuel tank to supply the auxiliary generator, something the kit does not provide. The shape of the tank was roughed in with plastic card using photos of the real thing to judge the size.



With some guess work required for the size it is important to test fit the tank alongside the pair of radiators which fill the top of the engine bay on this side.



It was also important to check the alignment of the tank with the fuel filler cover **2** on the engine deck. The corners of the tank have now been sanded to a rounded shape.



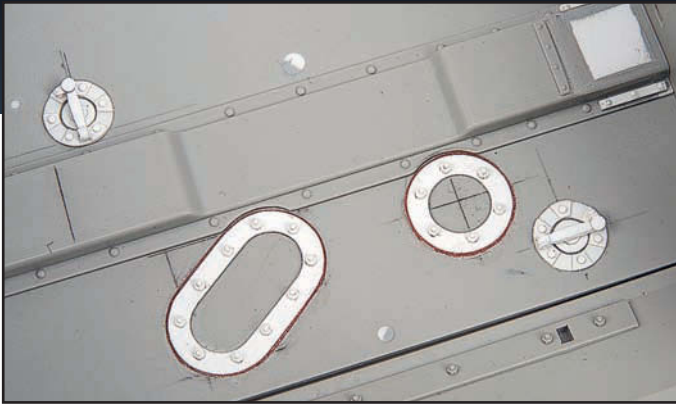
To make the lip around the edge of the tank I cut a strip of pewter foil which I wrapped around the plastic parts, hiding the joint seam on the top edge.



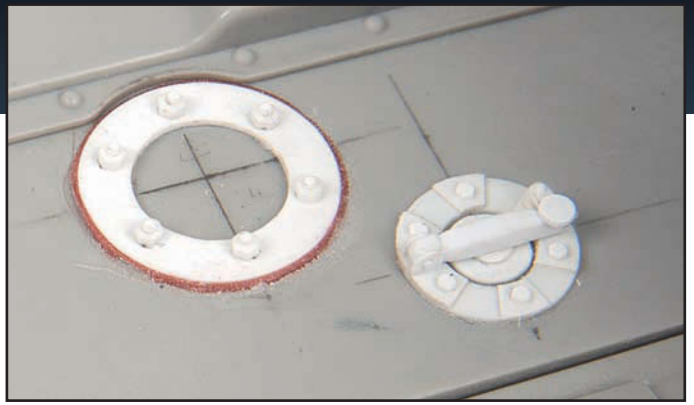
I brush painted Mr surfacer to fill the small gaps where the pewter joins the plastic and then constructed the fuel filler port. As I did not have the appropriate diameter plastic rod (5mm) I used Albion Alloys brass tube to make this.



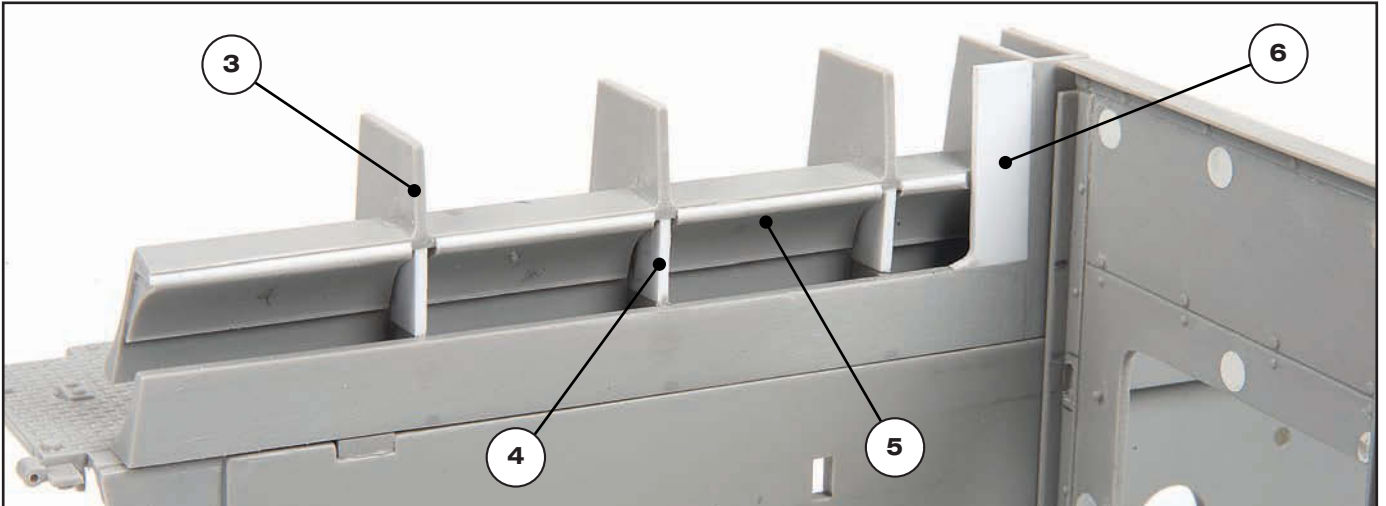
The brass was cut using an abrasive disc in my motor tool with another strip of pewter at the neck and a plastic disc for the cap. The finished tank is test fitted into the hull to check the alignment of the filler point with the access cover on the deck above.



Nipping back to the floor again I added the bolt head detail to the big inspection covers using the excellent RP Toolz hex punch and die set to make the bolts.



I also added the pair of drain plugs - there is another in the front of the hull just in front of the Driver's seat which I used as a guide for sizes. I was pleased not to have to face making any more of these drain plugs!



The air intakes on each side of the engine bay also required some additional work to make them accurate. The top vertical ribs **3** were trimmed back to give the correct angled appearance and new lower ribs were made **4**. The curved deflectors **5** which are wooden parts on the real vehicle were

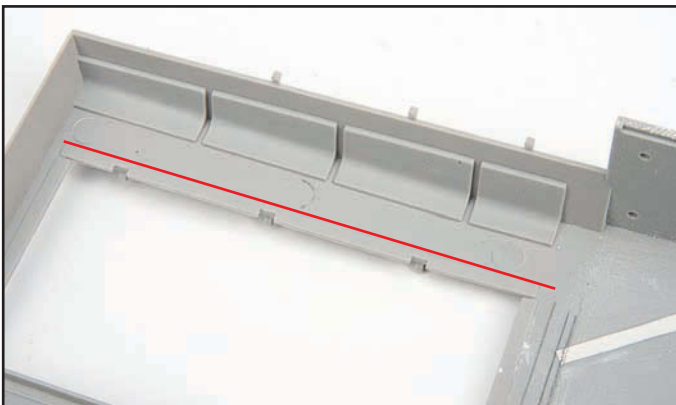
moulded as one solid piece. These were cut down into individual sections and glued with the leading edge standing slightly proud. Some quarter round strip was glued onto this lip to give a rounded profile. The missing section of wall **6** was added to front end of the assembly.



Test fitting the hull roof over the vents and this shows the new reclined angle of the top vertical fins.



The same area on the real vehicle viewed through the firewall. As well as the wooden deflectors you can see the catch to latch open the engine deck cover.



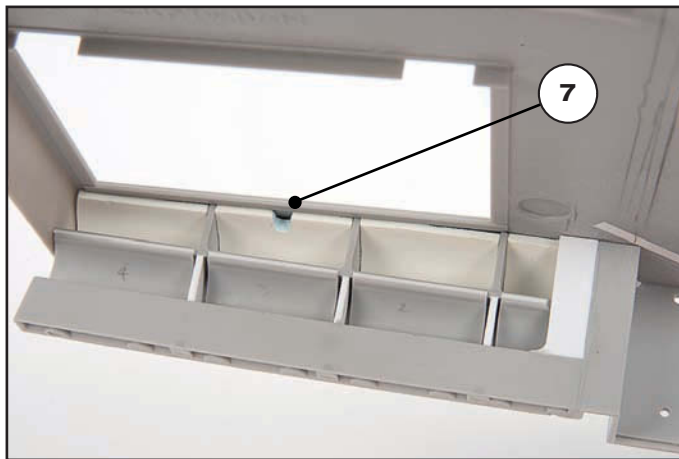
The top deflectors on the kit don't extend to the front of the intakes indicated by the red line so new ones would be required.



Creating the curved shape was not easy so I decided to use blue foamboard as it is easy to shape and sand. I shaped two complete sections, one for each side which would be cut down into smaller sections later.



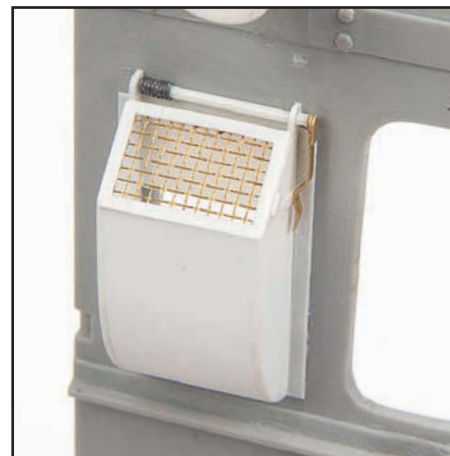
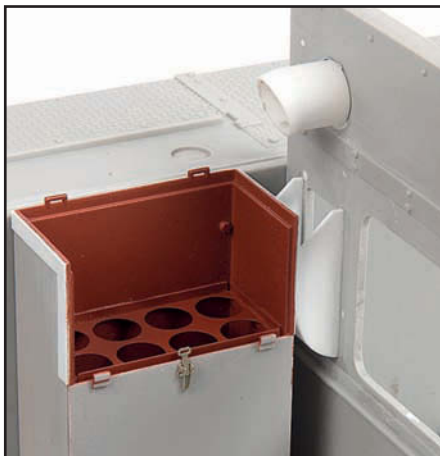
The foamboard was sprayed with a dedicated aerosol primer and sanded smooth. The new deflectors were cut to size and glued in place with CA glue.



The completed intakes are a big improvement over the kit parts and allowed me to cut out the location point for the hatch hook 7.



Returning to the firewall I started work on the vents on the crew side. The lower vent sits tight against one of the ammunition racks so this allowed me to establish the size of it. Plastic tube was used to create the crew heater vent at the top of the firewall.



Further details were then added to the lower vent with an Aber photoetched grille mounted on a plastic frame. Spare photoetch fret was used to make the control lever which opens and closes the internal flap.



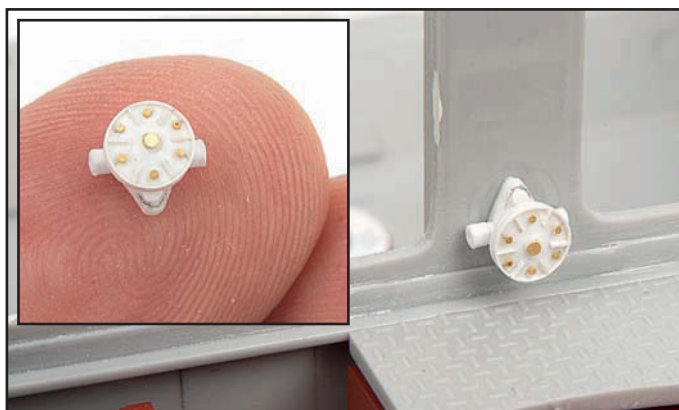
On the other side of the firewall the heater vent is extended to connect with the hinged fan housing on the underside of the engine cover. I used one of the discs of plastic left over from cutting the outer ring to add the internal control flap.



The small vane was fixed across the opening on the crew side.



In the engine bay I started to construct the control rods for the throttles. I used Albion Alloy's brass tube to make the rods in order to avoid any possible warping that might occur with plastic.

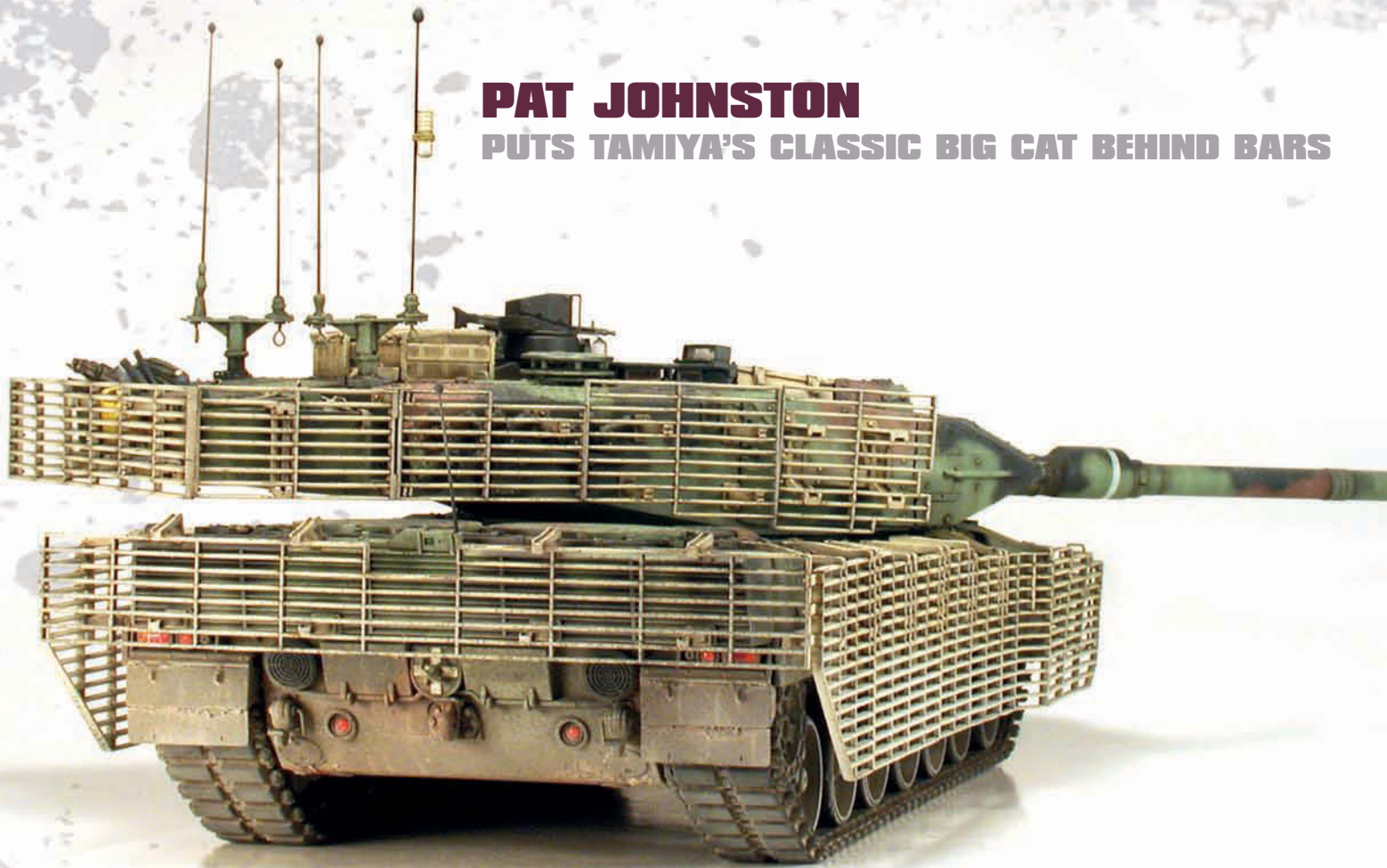


Also on the crew side of the firewall this small valve arrangement is positioned centrally and close the floor. The bulged centre of the valve was embossed into a disc of plastic and then laminated onto another disc. The pair of feed points on either side are pre-drilled ready to have connecting pipework fitted. The small central control lever will be added later.

The project continues in the next issue

PAT JOHNSTON

PUTS TAMIYA'S CLASSIC BIG CAT BEHIND BARS



Canadian Leopard 2

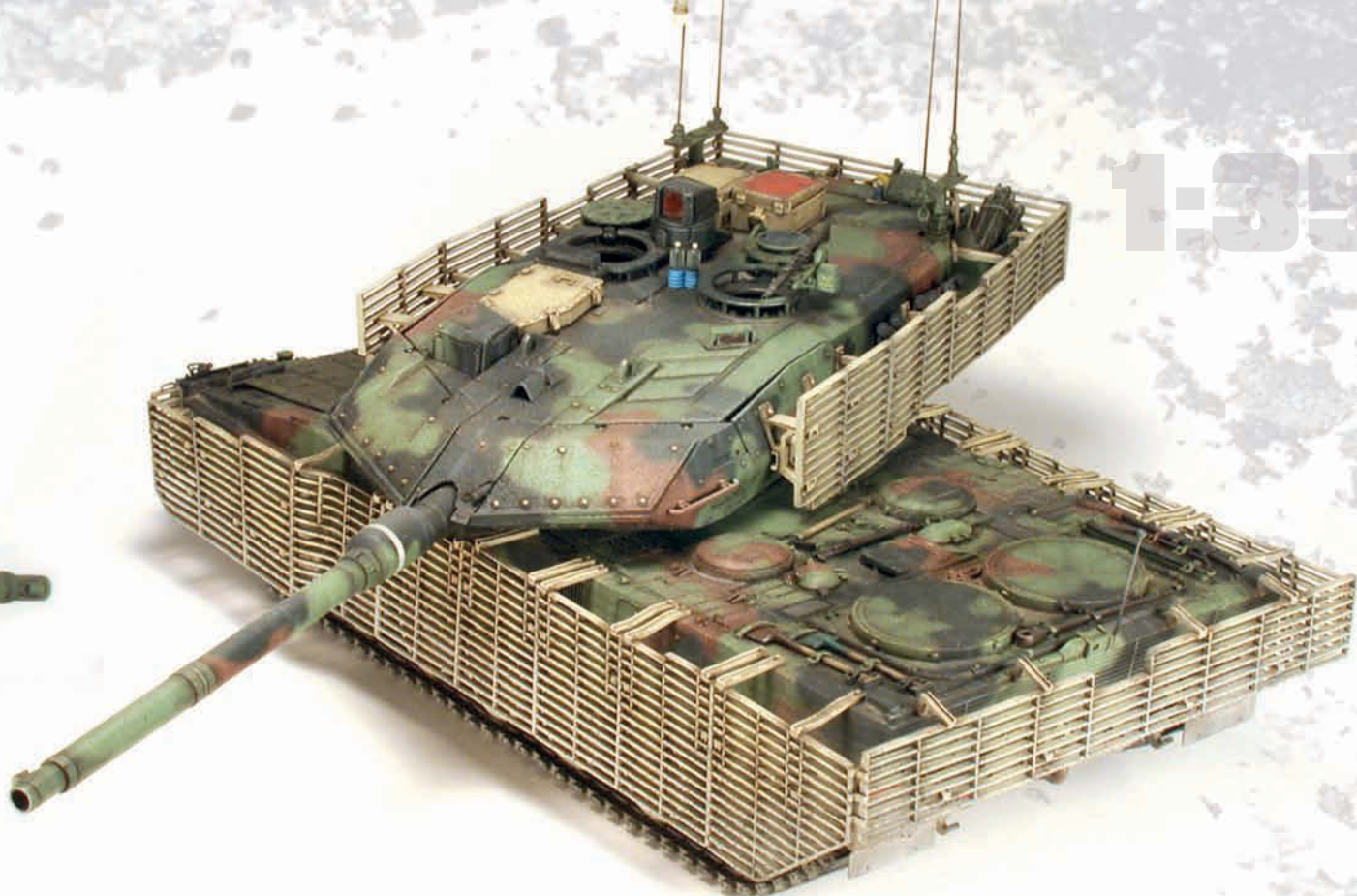
A6M

During combat operations in Afghanistan, the Canadian forces (CF) realized that the ageing fleet of Leopard C2's was becoming more and more susceptible to the ever-growing threat of larger IED's (improvised explosive devices). In response to this threat, the Canadian government leased, and later purchased several Leopard II A6M's from a close European Ally. Before entering combat, however, several modifications were made to the tanks to bring up to what the Canadian crews needed in theatre.

Additional armour was added to both the glacis and the under belly of the hull, Canadian radios were installed, along with their antennae, the turret roof received armoured Electronic Counter Measure and Air Conditioning boxes, the crews asked for another armoured box in which to stow their personal

weapons, as space inside the turret is at a premium. Finally, the hull and turret received a full array of slat, or bar armour, surrounding the entire sides and rear of the tank. This slat armour is designed to defeat the shaped charged warhead of most hand-held rocket propelled grenade type weapons. The final modification added by the Canadians was the Barracuda IR/heat protective camouflage netting. This was a modification added after the time frame of my model, however, and I did not add it, I wanted to showcase the interesting colours at play on a tank in full NATO camouflage, with all the additional modifications done in sand camouflage. This did complicate the finishing somewhat, but I was keen to give this my best effort, as both a proud Canadian myself, and as a kind of tribute to several of my friends whom have served in "the Sandbox".

1:35



OK, lets go...

To start, I used the excellent Tamiya kit of the Leopard 2A6, but knew I'd need several aftermarket sets to make an accurate Canadian A6M, so I sourced the Storm Miniatures resin set for the belly/glacis armour, as well as the turret ECM/AC boxes, and the distinctive Canadian radio masts. I also used the Lion Roar etch set for the Leopard II, which was very comprehensive, and I purchased a turned aluminium 120mm gun tube for the Leopard IIA6 from The Barrel Depot. Headlamp and taillight lenses from SKP Models were sourced, and the excellent decal set from Echelon Fine Details made specifically for the Canadian Leopard 2A6M rounded out what I'd need to get started. I toyed with purchasing one of the

etch sets around for the hull/turret slat armour, but after inspecting one, I quickly decided to buy the HobbyBoss Leopard 2A6M. The HobbyBoss model is adequate, but I only needed the injection moulded slat sprues, I only kept the rest of the model as spares in case I damaged or ruined something. To me, this was the only compromise I was going to make on this model, and that was only for the sake of how much time it would take to assemble all the etch; a step I wanted to avoid. This project quickly became a very large and complex undertaking, staying on my workbench for no less than fourteen months. That being said, I thoroughly enjoyed the project, as the Canadian tanks have such a unique "look", and I hope I've

captured that look with my model.

The following series of pictures will, I hope, clearly show the reader how I built and finished my Canadian Leopard IIA6M. The model was not overly difficult to finish, but many steps had to be carefully planned in advance, mostly due to the fact that I was following roughly three different sets of instructions at any given time. Also, the painting stages were no less complex, as there were many sub-assemblies to deal with, as well as lots of masking for the many different colours of the various components. Follow along, and we'll build a Canadian Cat in the Sandbox.



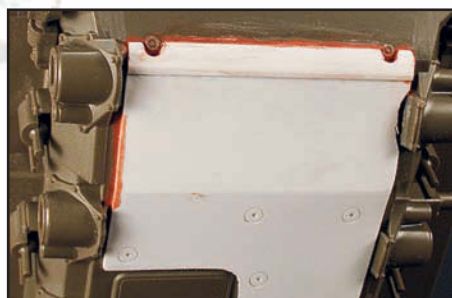
The first step in this build was to clean up & assemble all the road wheels, as well as the drive and idler wheels.



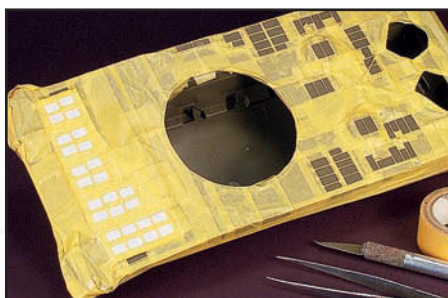
I distressed the "rubber" portion of the wheels with a number 11 blade in the Xacto knife. Coarse sandpaper was used to roughen the surface of the tyre.



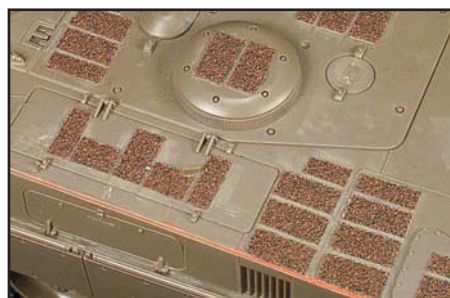
Here we have the resin glacis plate armour from the Storm Miniatures set. It was a direct drop-in fit on the Tamiya hull.



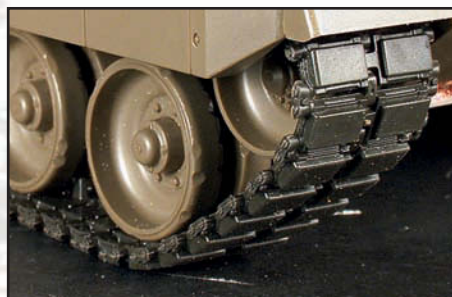
Storm Miniatures also provide the resin insert for the belly armour as well. Again, the fit was good.



I decided to add the hull's anti-slip texture using an aerosol spray product from my local home improvement store. This did, however, require extensive masking with Tamiya tape.



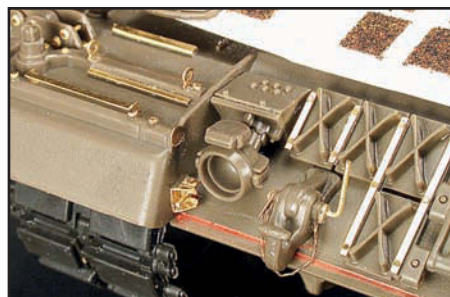
I used Rust-Oleum textured spray paint. After the masking was removed, the texture looked excellent, and "in scale".



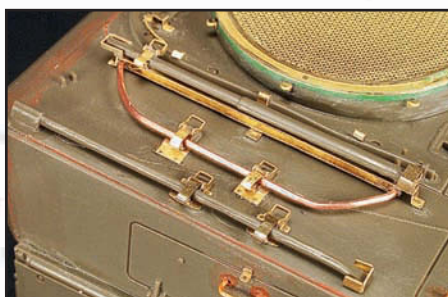
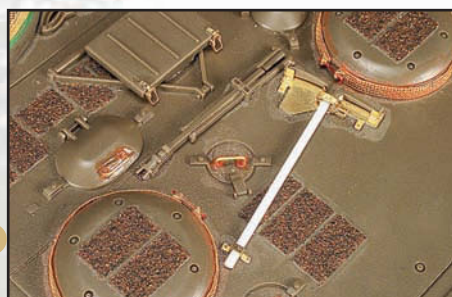
I decided to use the Tamiya kit's one-piece vinyl tracks as the armoured skirting and the slats would cover most of the tracks. An expensive aftermarket set would be mostly wasted on this kit.



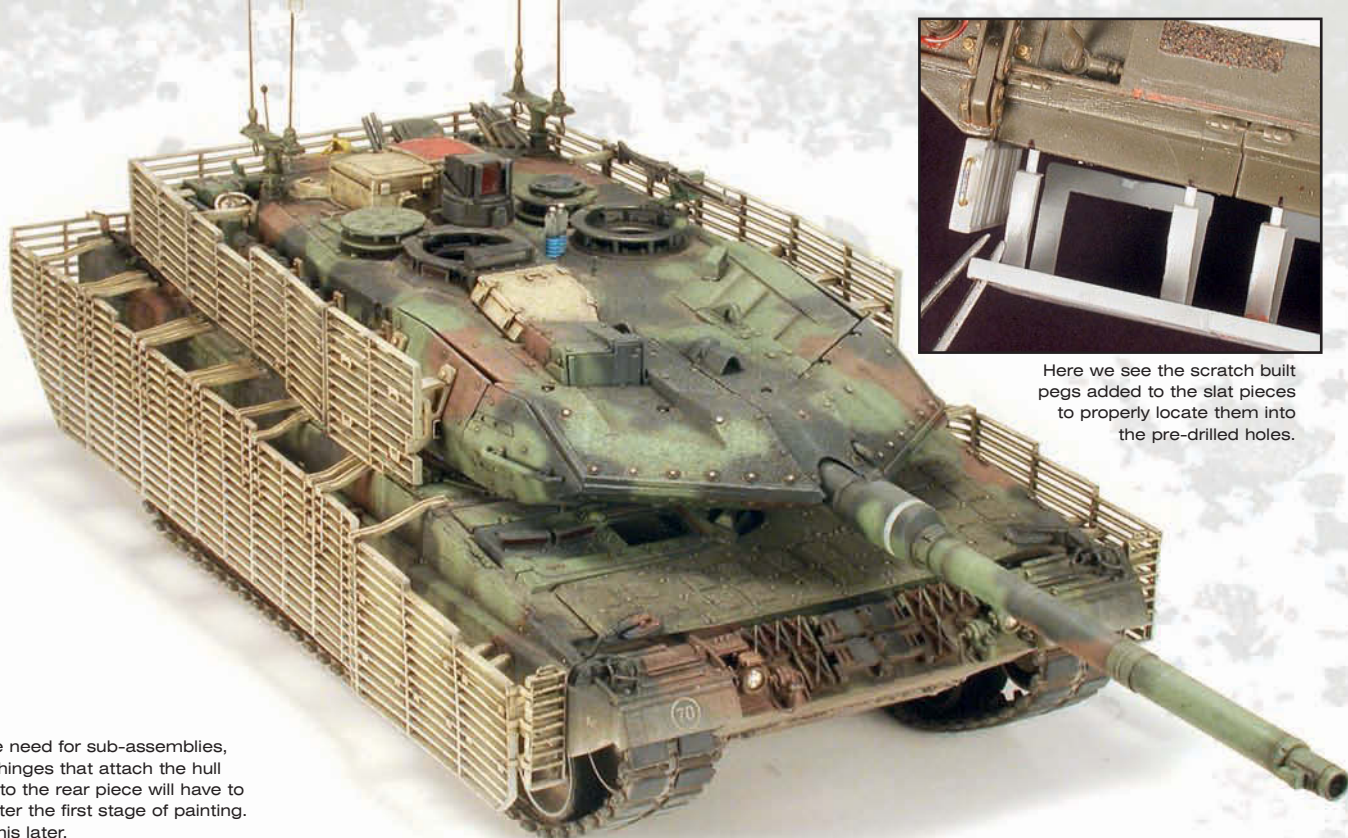
Here we have some of the obvious improvement to the Tamiya kit with the Lion Roar etched additions.



More of the Lion Roar etch around the hull nose.

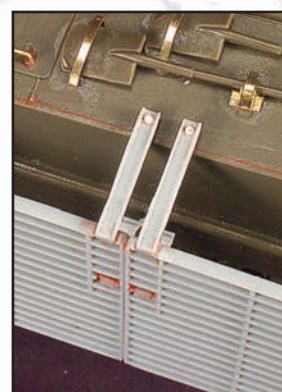
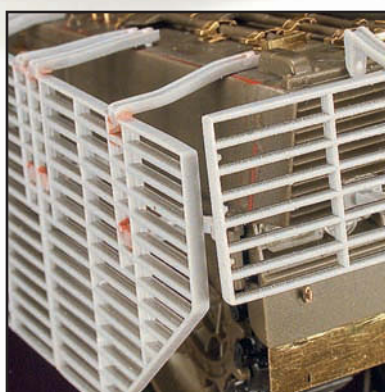
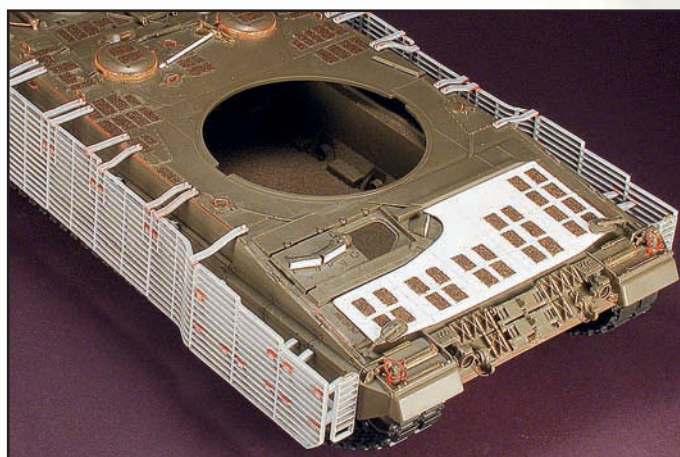


The etched set includes all the clasps for the on-board pioneer tools. The detail improvement is clear to see. The set also includes the huge engine deck intake fans seen here, a distinctive feature of the Leopard II family.

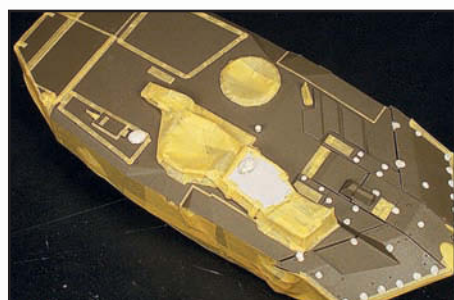


Here we see the scratch built pegs added to the slat pieces to properly locate them into the pre-drilled holes.

Due to the need for sub-assemblies, the small hinges that attach the hull side slats to the rear piece will have to be built after the first stage of painting. More on this later.



With the hull complete, I am now beginning to test-fit the HobbyBoss slats to the Tamiya kit. The fit needs to be perfect before I begin the painting.



More masking, this time on the turret roof, as this area was mostly covered in anti-slip as well.



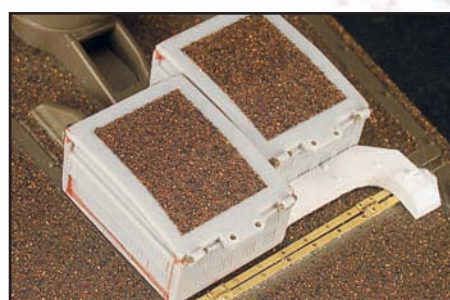
Several hours of careful masking was followed by several seconds of spraying. The final look was worth it, though. This method does provide a very nice, a very "in scale" look with minimal trouble. I had to remember to cover the top of the crew's stowage box as well. Period photos show that this was covered.



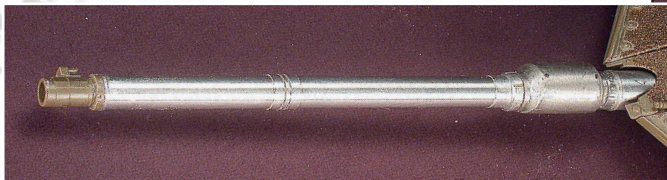
While assembling the Lion Roar etched pieces for the commander's CITV sight, I sandwiched a small piece of 35mm negative in between to simulate the lens of the sight.



To make this piece of armoured glass directly ahead of the commander's hatch, I used a piece of pre-cut, thick clear styrene. The etched piece was simply wrapped around it.

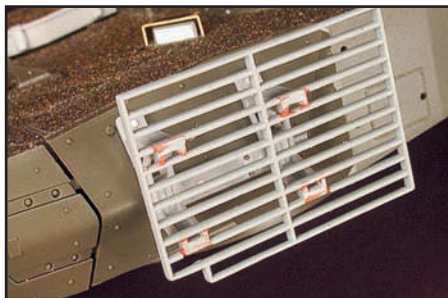


I almost forgot to add the anti-slip texture to the tops of the turret-mounted AC/ECM boxes....Oops! They were duly masked, sprayed, and then added in their place on the turret roof.

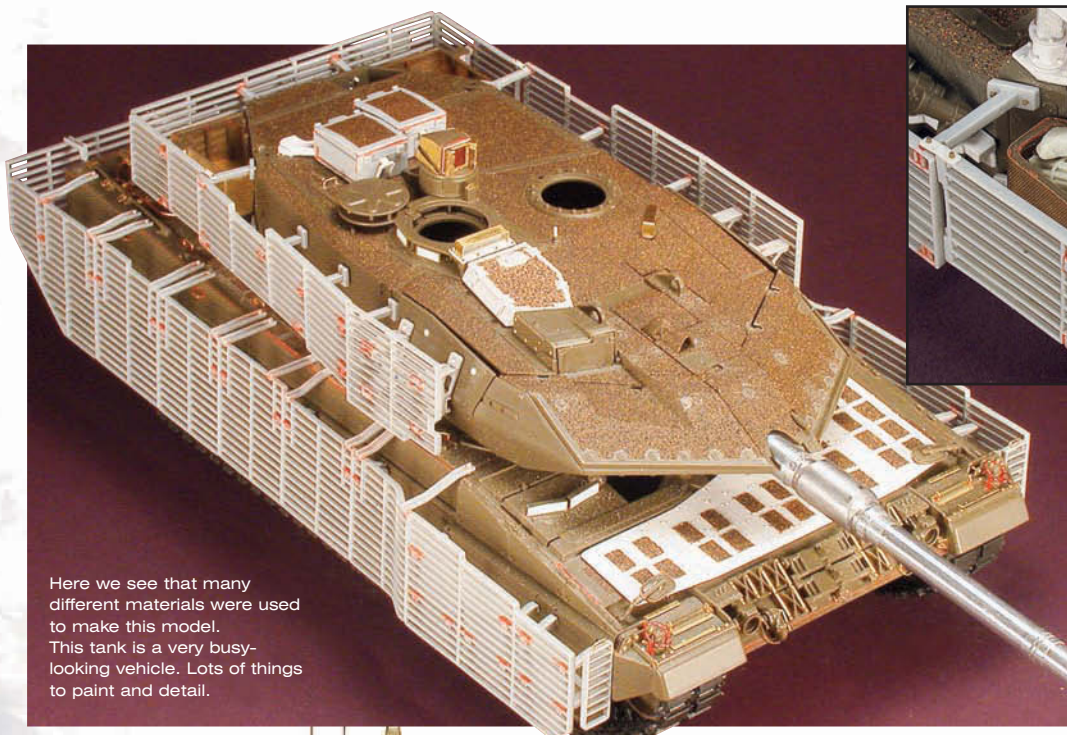


This is the gorgeous turned aluminium gun tube from the Barrel Depot. It was a nice drop- in fit to the Tamiya kit.

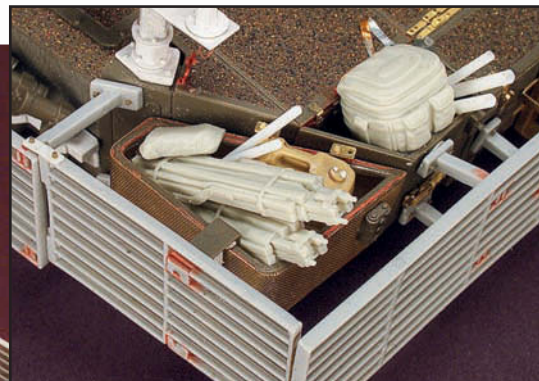
In this photo, you can just see all the holes that were drilled in the turret's sides to accommodate the HobbyBoss pre-assembled slat sections. Here, I have laid out all the pre-assembled slat sections, each had locating pegs added to them for ease of assembly after painting.



All the fabricated pegs will hopefully line up with their holes, and fit like a glove. All these fit together perfectly, and can all be removed for easy painting later.



Here we see that many different materials were used to make this model. This tank is a very busy-looking vehicle. Lots of things to paint and detail.



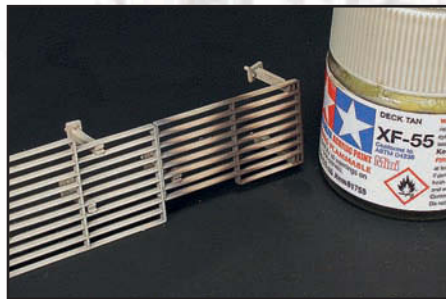
I added electrical conduits to the radio mast mounts, as these can be seen on the actual vehicle. I used some stowage items from the Legends resin set for the Leopard C2. In addition to adding stowage, I added several bits of loose strapping, made using strips of lead foil.

Time for paint...

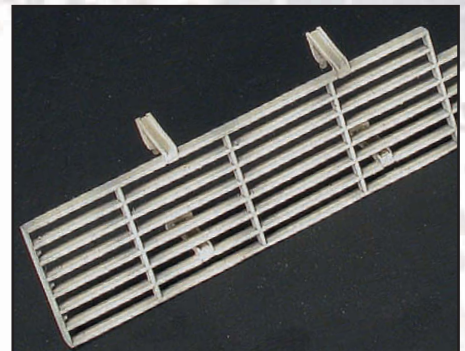




The painting finally begins. I started by priming all the slat sub-assemblies using Tamiya XF-57 Buff. To start some pre-shading, I mixed a very dark brown using an equal mix of Tamiya XF-1 Flat Black and XF-72 Brown (JGSDf). This was sprayed on the sections' joints and corners.



Once completed, this was then over sprayed with a very thin coat of Tamiya XF-55 Deck Tan. This was done delicately in order to let some of the pre-shade show through.



Once complete, we can just see some of the pre-shade showing through



Knowing that my weathering steps always darken my models, I decided to try a base green that was deliberately too light. It was suggested I try Tamiya XF-71 Cockpit Green. Although skeptical, I tried it.



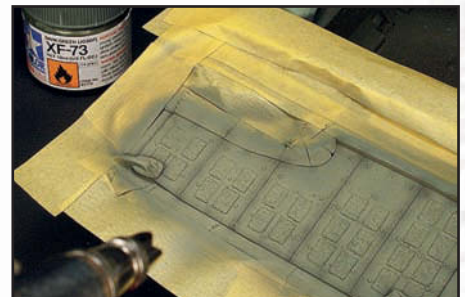
I mixed a suitable red-brown for the NATO camouflage using a mixture of XF-9 Hull Red, XF-57 Buff, and XF-68 Brown (JGSDf). The placement was crucial, as these tanks are painted by a computer pattern, so they are all roughly the same.



XF-69 NATO Black, I completed the basic camouflage pattern.



Although considered an outmoded method nowadays, I still use this trick often. Using heavily-thinned Tamiya X-1 Black, I added a dark shadow to all the recesses, and around all the edges and panel lines to add relief and a bit of post-shading. This gives the suggestion of slight grime and filth on the model. It also breaks up a boring, two-dimensional surface. In addition to the post-shading, I used Tamiya XF-57 Buff, heavily-thinned, to add a slight, sun-bleached, faded look to the brown areas. I also used thinned XF-24 Dark Grey to add the same faded look to the black areas.



The glacis-mounted armoured plate needed to be masked as it will be painted in a slightly different green. I am using XF-73 Dark Green (JGSDf). The use of a slightly different green also adds visual interest to the model.



The top of the AC box was then masked and sprayed in a faded red. This served as a recognition panel for friendly aircraft.



The next step was to pick out the various stowage items in their base colours, and to mask & spray the turret's add-on its, like the ECM/AC boxes, the stowage box, and the hull's bow pieces of slat armour.



The next step in this model is to prepare for the decals. I am using the excellent set from Echelon Fine Details, made specifically for this application.



Before any decals can be placed, the model needs a good, protective gloss coat. I prefer to use Future brand floor wax. It dries to a smooth, durable finish. This is marketed in the UK as 'Klear'.

Here are my weapons of choice for decal application. Gunze Sangyo's excellent Mr. Mark Softer works incredibly well for any decals. The Mr. Mark Softer, combined with the excellent Echelon decals, make the carrier film disappear, making the decals looked like they were painted on the model.



A welcome addition to the Echelon sheet was the distinctively Canadian "Ladder Dudes". I was tickled to see that this was not forgotten. The Echelon decals went down flawlessly, giving a very good look.



All the necessary stenciling was included on the Echelon sheet. All had perfect clarity as well.



After many experiments, I have found that I get the best acrylic flat clear using these products; a mix of Vallejo's 70.520 Matt Varnish, with 70.540 Matt Medium added, thinned with Vallejo's 71.361 Airbrush thinner.

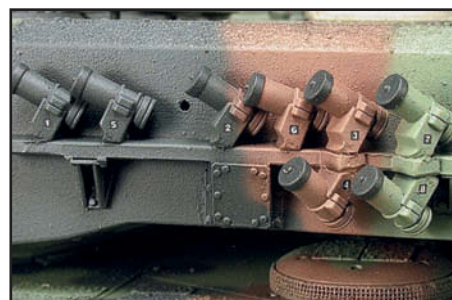
With this mixture prepared, I also added a few drops of Vallejo 70.988 Khaki. This was to help the spray to "soften" the somewhat harsh appearance of the camouflage colours.



Several thin, misted coatings of this mixture, returned the model to a warm, matt finish. There were no problems with the decals silvering, this I credit to the excellent quality of the Echelon sheet.



To represent a tank from 1 troop, I masked and sprayed a single white band around the gun's bore evacuator. This number 70 in the circle represents the tank's bridging weight in tonnes. This was added to all Canadian Leopards.



A good friend of mine, who is a serving member of the CF, kindly provided me with a photo to show me how to apply the peculiar numbering of the smoke grenade launchers.



With the masking removed, the effect of the thick piece of clear styrene is quite convincing.



The 35mm film negative I added to the commander's CITV sight also looks good, although I see some paint touch-ups will be needed.

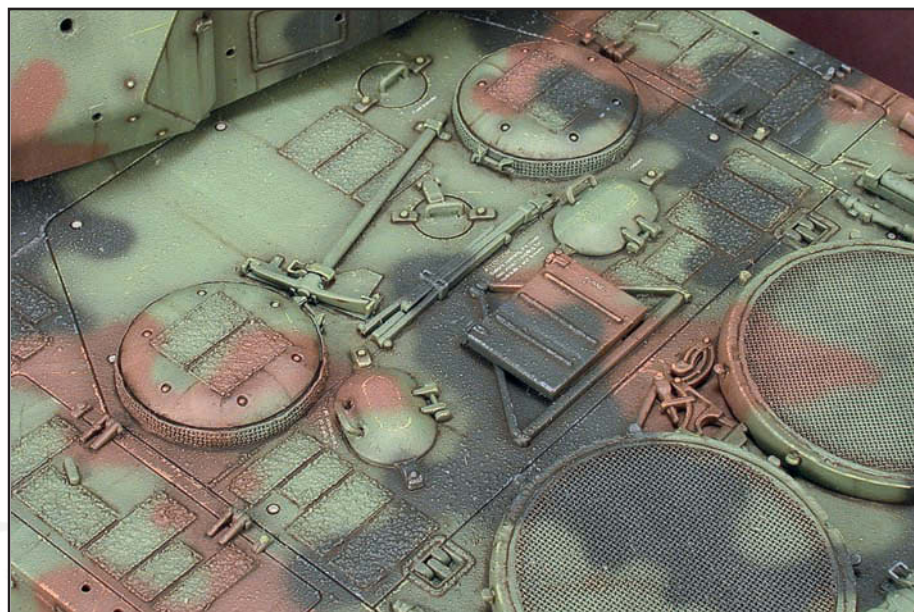


I now began oil paint washes and shading. The shading was deliberately done heavily on the hull and turret sides, as they will be covered later by the slats, and I wanted some of the weathering to remain visible.



The oil work is starting to make the colours pop. This will be a colourful model once completed. I mixed some oil colours to simulate what I call "negative chipping". This is to simulate slight damage to the paint, but not scoring deep enough to reveal the bare metal.

In this view we see the "negative chipping" added to all three of the NATO colours. This treatment was carried over the entire model, remembering to add more or less, depending on the area's susceptibility to wear & tear during combat and/or maintenance. The chipping was added more heavily to the grev hatch areas, as these areas would receive more abuse to the paint.





Another round of chipping was done, using straight lamp Black oil. This "positive chipping" was done to show some more heavily scored areas, with damage reaching under the paint to the metal.



The effect is harsh and un-realistic now, but subsequent weathering steps will mute it.



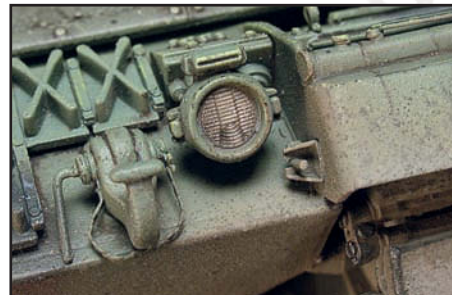
Different colours of pigments are being used to simulate fresher, or darker, earth accumulated over older, or drier, dust.



I purchased the SKP Models resin headlamp and tail-light/reflectors set made for the Tamiya Leopard IIA6 kit. They are of a very high quality. Once installed, with a little pigment "mud" added, they look gorgeously realistic.



I applied lacquer thinner to a cotton bud, and used it to "wipe" away some of the dust covering the CFR (Canadian Forces Registration) number. The hope is that it will appear the crew has attempted to clean it.



The SKP headlamp lens is just as good as the tail-lamp and reflector.



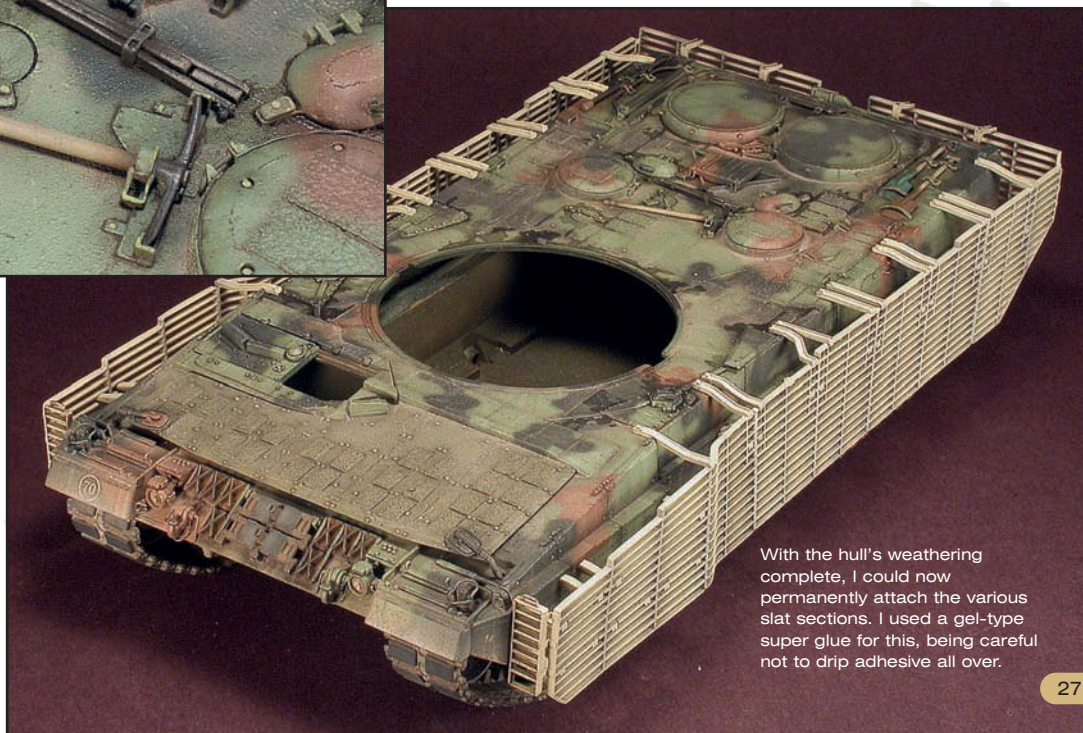
The road wheels are seen here complete. I picked out the rubber area using Humbrol enamel #67 Matte Tank Grey and I used a silver Prisma-Color pencil to recreate the bare steel along the wheels' edges. Pigments and powdered graphite were used to finish the tracks. I also picked out the bare rubber track pads using the same Humbrol #67 Tank Grey. (I never use straight black for rubber, it almost never looks realistic. I always use some version of dark grey).



Dry pigments were added to the hull's top deck, and then I added some drops of heavily-thinned Tamiya X-1 Black to simulate fresh wet marks, or spills. The pigment absorbs the wetness of the paint, perfectly mimicking



Humbrol enamels were used to pick out all the on-board tools. Dry pigments were used to weather them to match the rest of the model. Powdered graphite was used to simulate any bits of bare metal. I have found that the graphite is much more convincing than any metallic paint. The graphite also makes the bare metal tools stand out more, giving the model more variety to the finish.



With the hull's weathering complete, I could now permanently attach the various slat sections. I used a gel-type super glue for this, being careful not to drip adhesive all over.



The small hinges were now fabricated from styrene and added. This did, however, necessitate some masking and paint touch-ups. This needed to be done to the rear sections as well. This step required careful masking & spraying.



Basic oil shading has begun on the hull rear slat section. Although not complete yet, the effect is starting to show.



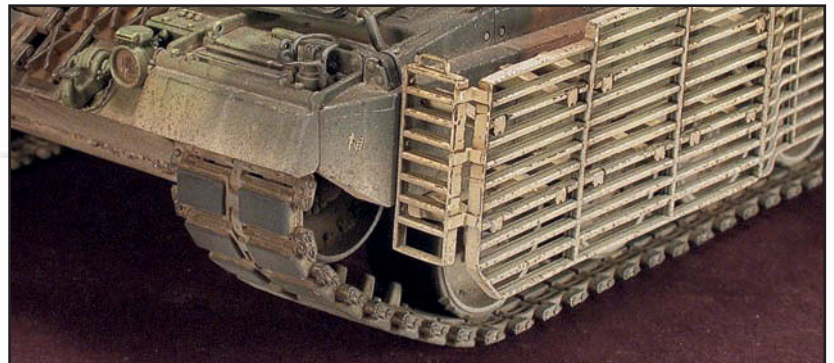
Here is a close-up shot of the hull slats. These pieces look alright, though they are a little over-scale. This is due to the limitations on injection moulding styrene.



The basic oil shading is here shown complete. There are more steps to come... The key to this step is to seamlessly blend the slat sections into the rest of the weathering.



To fabricate the small antenna for the rearward-facing camera, I used a 1/48 scale 1.4 metre antenna from RB Models. I added a small ball on the top from two-part epoxy. To simulate the glass of the optical lenses, I again used small strips of scrap 35mm film negative.



Here I have started to weather the slat sections, by adding some "negative" and "positive" chipping. Oil paints were used to do this step, due mainly to the long drying time of the oils, I have ample time to make any corrections and finally call my big cat complete.

And finally...

Once completed, I sadly realized that much of the intricate camouflage applied earlier has been rendered almost invisible! Never mind...

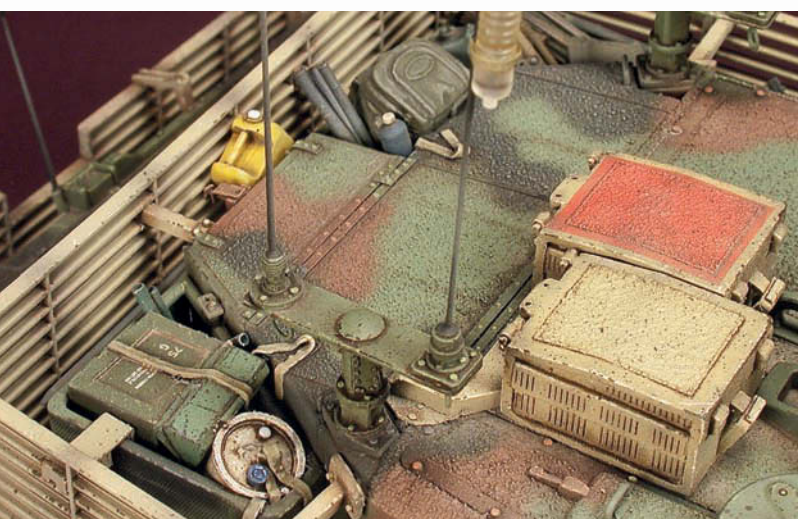




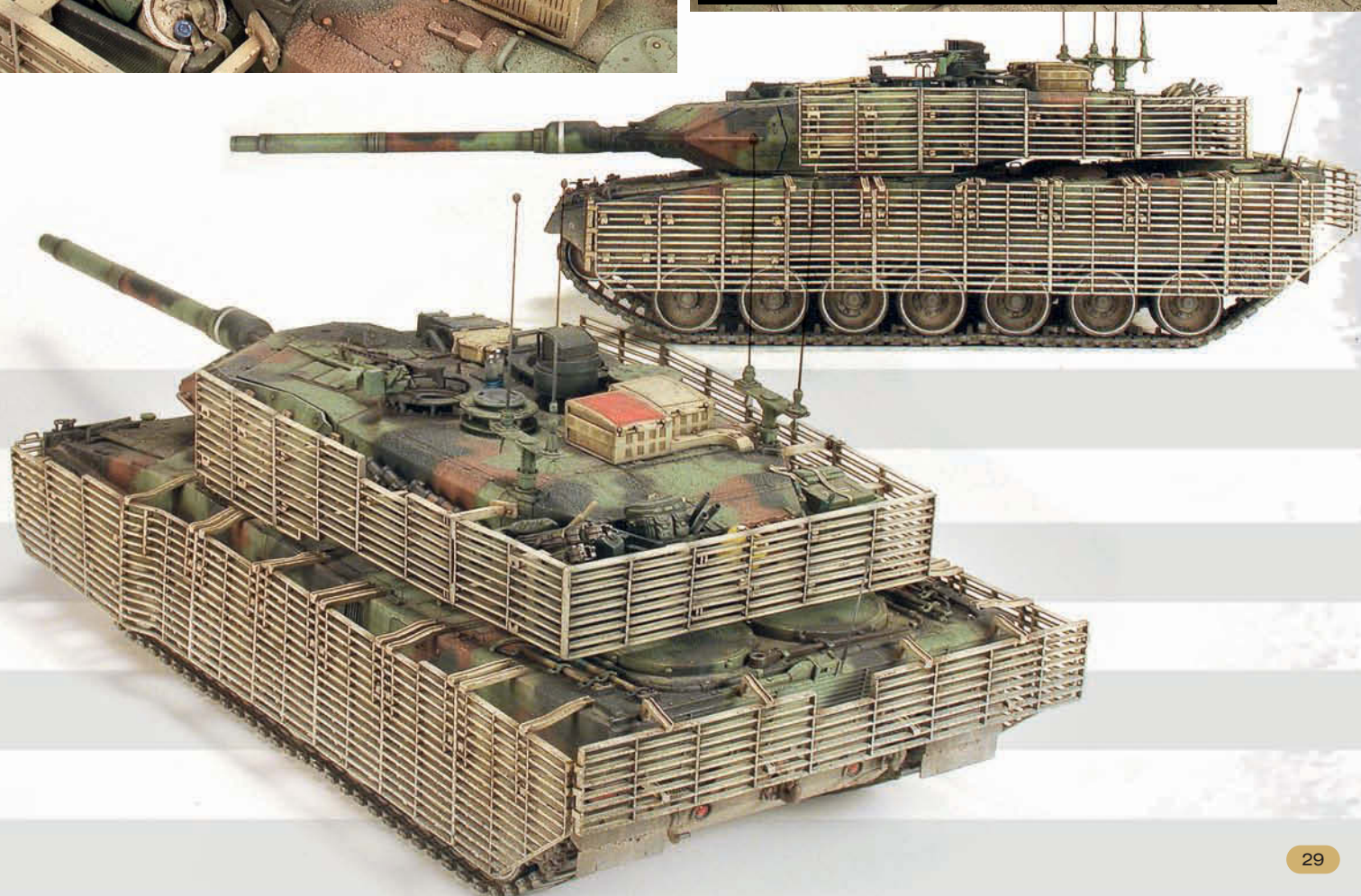
The completed model has lots of colours on the turret roof. This was planned to give the viewer something to hold the eye.



In the haste to get the tanks in theatre quickly, some have retained the German-made MG3 light machine gun. This is just the Tamiya piece.



The driver's hatch is usually covered by the huge overhang of the turret.



BA-10

Armoured Car



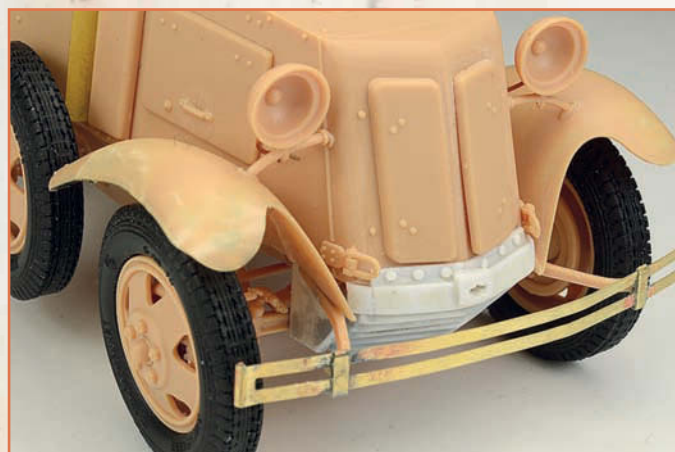
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Inspired by his visit, **Jari Hemila**
models the BA-10M at Parola Armour Museum



Start to Finnish



The BA-10M I modelled is as I saw it at Parola museum, Finland in November 2014. The model is based on pictures I took during my visit but there are also good pictures on the internet of the same vehicle. The kit I used is from Hobbyboss, a great production of the BA-10 to which I've made some modifications. The Hobbyboss kit is in fact BA-10M, easily recognized by fuel tanks on rear fenders. The Finns made some changes, the most visible is chin armour under the radiator, it was made of steel plate strips welded together. Technically, the most important 'beef-up' was that original 50 bhp engines were changed to 95 bhp Ford V8 engines starting in autumn 1943 onwards and common to all BA-10s serving in the Finnish army.

The real vehicle is now stored inside the museum, but it was kept outside until 1983. The batteries were installed and the

engine started after a few decades being unused! There are pictures taken from when the vehicle was driven indoors so it's in driving condition but the appearance is rusty due to its extended outdoor storage, making it a perfect subject for some extreme weathering!

The construction was simple following the instructions and parts went together easily. The kit itself is well detailed complete with a full engine, auxiliaries and suspension. There are also basic interior cab parts but not for the rear and turret. The suspension is very delicate and made of lots of tiny parts but the fit is very good and it helps to get all ten wheels hitting your cutting mat! I thinned all the fenders with my Proxxon motor tool to produce some dents and damage seen in real vehicle.

The Finnish modifications were made from styrene. I drew the shape of the front end, using the upper hull as template, on 1 mm

plasticard and made five pieces to laminate together. This block was then trimmed to fit under upper hull and in front of the axle. The seam was covered by plastic strip wrapped around. The detailing was made by drilling a hole for the starter crank and adding some bolt heads. The fire extinguisher rack, or remains of it, was made with styrene strips, as well as tow-cable holders and other minor details. I also added two pairs of handles made of copper wire on the roof of both hull and turret.

I made wiring for the head lamps by using copper wire super glued in holes drilled behind the lamp and side of upper hull. This detail also gives lot of extra strength to the light attachment!

Engine hatches, parts S9 and S10, need to be attached to the opposite sides shown in the instructions. I made the lock mechanism working from my photographs.



now the fun starts...

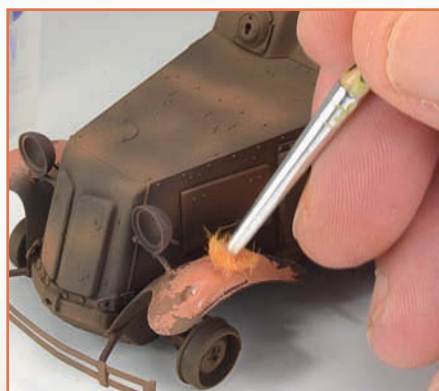
The model was washed with detergent and then rinsed with warm tap water. I primer painted model with Mr Surfacer 1200 diluted with Tamiya Lacquer thinner. This combo works perfectly, it seals everything and gives very strong base for severe weathering.

I started painting by mixing a dark rust brown base colour diluted with Tamiya's 'Yellow cap' and airbrushed overall. My next step was to add more yellow and red to the mixture to get some variety to the base colour. With this new brighter rusty tone I added some clouds randomly all

over the model.

There is some red primer paint visible under the green paintwork, mainly on the fenders, so this needed to be done now also. I airbrushed a couple of thin layers of Ammo's 'Scratches Effects' chipping fluid and after it dried, fenders were painted with Ammo's Primer red lightened with some drops of light DG III. After the airbrush was cleaned, surfaces were moistened with warm tap water and scrubbed with an old brush to reveal the bare oxidised metal colour.

After couple of matt varnish layers to seal chipping, two thin coats of chipping fluid was airbrushed over entire model again. The basic pale green colour was mixed from Ammo's range, diluted lightly with their thinner and then airbrushed. After the paint was dry, chipping was done again with a stiff paintbrush moistened with warm tap water.





After the chipping was dry, I sealed everything with Mr Hobby Flat clear diluted with Tamiya yellow cap. I wanted to add some more controlled damage and this was done by traditional methods, a fine paintbrush and Vallejo's legendary "822" Black brown, supported by a new Mig



Ammo substitute. Both colours were used just to add more shades and interest of rust. Always when chipping by paintbrush, remember to use a tapping motion and to keep your paint brush perpendicular to the surface.

After chipping, I added some remains of



the winter camo, this time using Ammo's new washable white. I used it straight from bottle, spread it with paintbrush, and right away started to remove it with a paintbrush moistened with water. This was repeated a few times until I was happy with results.



Vehicle markings consist only of white registration numbers up front and overpainted markings on front top-plate and turret. Registration numbers have been painted recently with a modern look so I used Echelon's Finnish T-72 sheet. The rest of markings were over-painted with different greens and grey following my reference pictures.

A lot of dust and dry mud were added to the undersides. I used Ammo's dusty washes and pigments, both mixed and individually to produce the effects. After general dusting, I continued with rusty



tones, concentrating on the brake drums. The last step was to add lot of oil and grease stains and leaks to appropriate parts. For old dry grease, Wilder's Old grease pigment is the perfect match. Some fresh oil came from Ammo range, this was used both thinned and directly from the jar. It's a pity that these lovely details are under the vehicle and so they are invisible to viewer.

I added pin-washes with Ammo Dark Brown wash for green vehicles. I applied pin-washes this time quite lightly, just details, not a filter/general wash. I let the



washes dry for a while and then cleaned any excess away with soft round brush moistened with clean turpentine. With the basic pin-washes on it was time to start rusting. I like to do rusting with simple methods and Ammo Streaking rust effects- very good stuff for the purpose. I spread it quite heavily on horizontal surfaces, let it dry for a while and then blend and remove it partly with a paintbrush moistened with clean turpentine. On horizontal surfaces, I used a tapping motion for the removal and cleaning stage.





Before the upper surfaces were totally dry, it was time for rusty streaks. At first I paint-brushed vertical streaks, let them dry for a while and then blended them again with soft paintbrush moistened with clean turpentine. On the sides you need to move your paintbrush up and down otherwise you will clean everything away just dragging to the bottom edge. I repeated this process several times working on small areas in stages.

The final weathering effect for the upper hull was to add spilled oil. Oil stains were found all around the vehicle, especially around locks and hinges. These were produced like pin-washes, both direct from jar and also diluted with turpentine. I also airbrushed the streaks from the door locks to replicate effects seen in Parola.



The wheel rims were already painted and chipped like rest of the vehicle so it was time to replicate the tyres. At first I airbrushed tyres with Tamiya Rubber Black and after drying I added a heavy wash of Lifecolor Dirty Black to add interest and contrast to the treads.

After base paintwork was done, the tyres were given a dusty wash. I used the same pigments and washes as the chassis. When dusting was dry and set, more darker rubber black tone was needed on treads, this was done very carefully with help of a sponge.





The final, and quite strange, weathering step was to add rust on the tyres. It seems that vehicle's tires have been changed and the replacements have been stored horizontally. There is a lot of fresh orange rust around the rims on the side walls. This was replicated with several washes of both water diluted Lifecolor rust set colours and Ammo's enamel washes. The tyres were the cellular rubber type (no pressurised air inside, not rubber but a kind of foam) These tyres can sit a little loose on the rims so the kit's vinyl tires work nicely and they look realistic. On the Parola vehicle the spare wheels have German-made Continental Extra Gelanders. PanzerArt has just the right size tires on their Sdkfz 250 set, the only issue was to remove the German wheel rim. These spare tyres look newer so no dusting for them!

The non-original rear light was made of clear sprue. At first the rod was heated and flattened with the corners rounded by Wilder's excellent sanding sticks. Rough forming was done with side #3, continuing with #2 and then polishing with #1. The lens itself was polished with #0. I used a razor saw to make a small groove around the lamp, between the lens and lamp body. To simulate a bulb and also to attach the lamp to vehicle, I drilled a small hole on the rear wall and then painted it with silver. The lens was painted with Tamiya clear red and orange, and the lamp body finally with Vallejo Model Colour matt black. Up front, headlights were painted with silver and then lenses were glued in place. After some final touch-ups, pigments and washes, were made here and there, I was happy with results and called the Finnish BA-10 finished!





I enjoyed this little kit a lot, totally new, moulded very well and easy to assemble. Hobbyboss will have more versions of the BA on the market as there are clues on the sprues! I'll look forward to building these sometime, but I'll give myself some more modelling challenges before that!

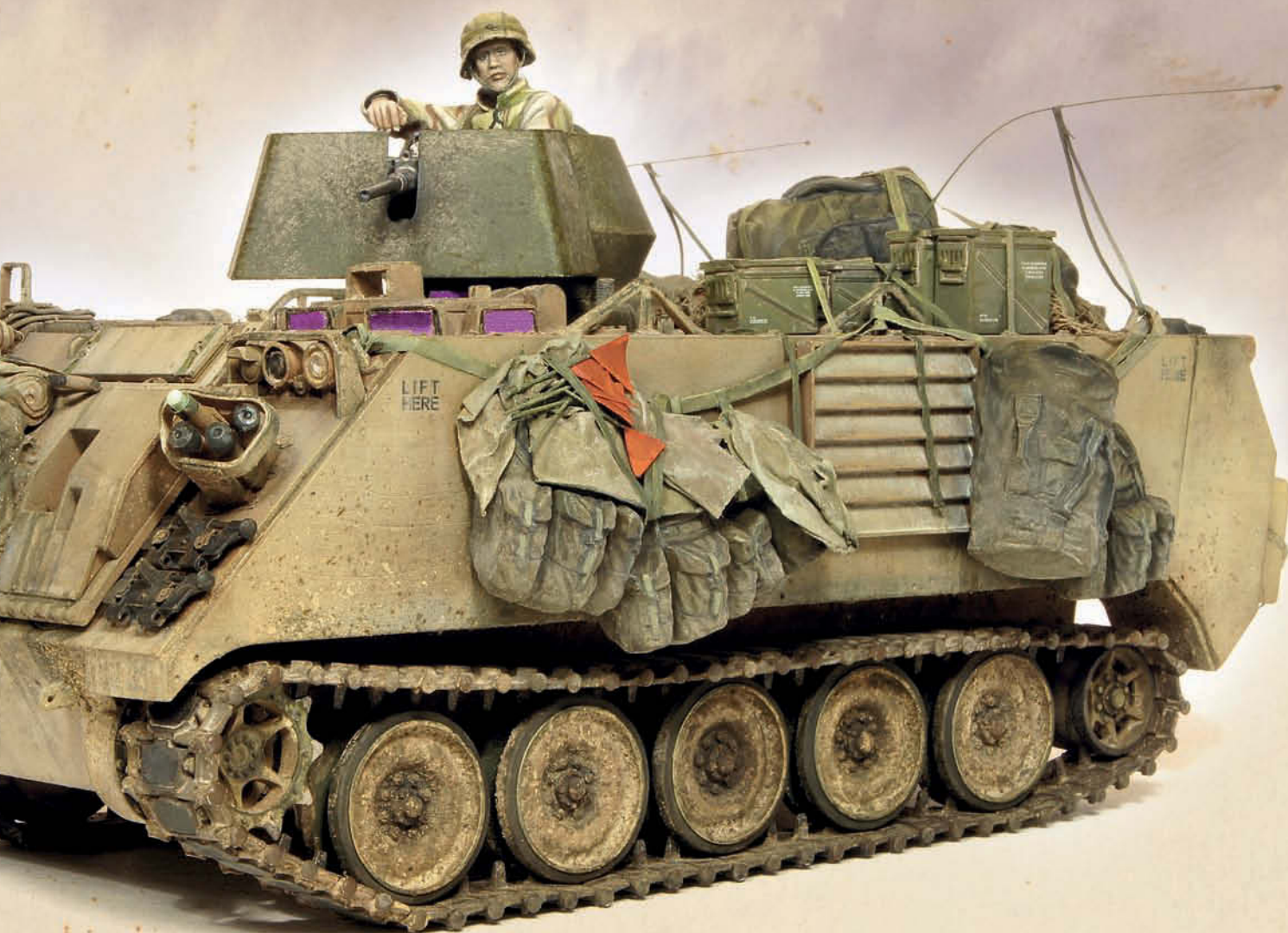




M113A2

THE U.S. ARMY'S BATTLE TAXI





Kev Smith gives the old Tamiya kit a new lease of life

Firstly a disclaimer

I would like to say this Tamiya kit isn't an accurate representation of the vehicle. The labelling on the box would suggest that the model was an M113A2, but the external fuel tanks would make the vehicle an A3. In fact, it's hard to tell exactly which variant the kit represents.

Their original release back in 1974 was a very good miniature of the early vehicle, sadly, Tamiya have carried over most of the parts from that original release onto this one. In fact, the kit has features of several generations of M113's. So it's not really an A2 or an A3. But for arguments sake it's an M113A3...

Now that's as clear as mud we can move on!



Construction

The hull tub is the original, so there is some filling to be carried out around the final drive, this from when Tamiya had motorised kits. With the filling and sanding soon done, it was on to the swing arms. These are moulded onto the hull giving the vehicle an unnatural ride-height. From

experience, and photographs found on the internet, combat vehicles are normally weighed down with all sorts of equipment, fuel, ammo, etc. I like to replicate this in my models, so the last three swing arms on either side were carefully removed with a modelling saw. I then realigned them

slightly higher on the hull to give the distinctive appearance of a vehicle riding low on the suspension. That was the most demanding part of the construction out of the way. So it was time to move on.



Next the .50 cal, this is a new addition to the kit and is much more detailed than the old part but I had some parts in the spares box so I decided to beef up the detail with bits from the Academy U.S machine gun set.

Single piece tracks are from the original M113 release and by far the weakest part of the kit. Not only hard to join together (I remember it well from the first time around!) they also lack any detail on the inner surface. The outer treads also leave a lot to be desired in detail and accuracy so I opted to replace mine with Frui!model tracks. There are other offerings on the market, AFV club have a set of one piece vinyl tracks if the budget doesn't stretch to Frui!s.

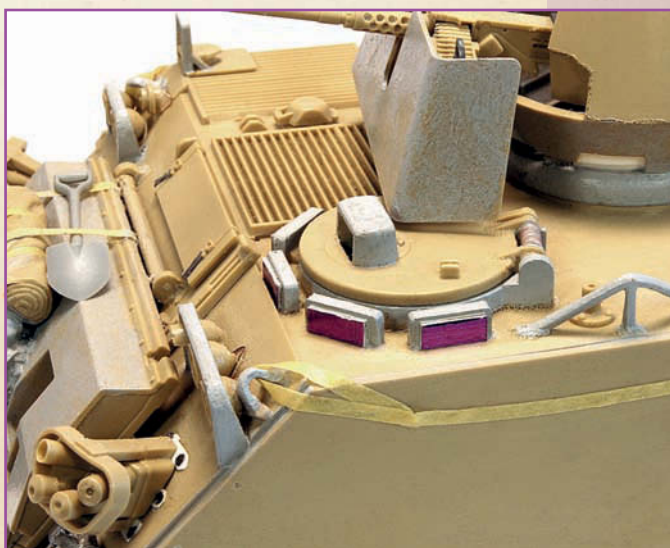


Three of the smoke grenade tubes were drilled out and loaded with grenades cut from plastic rod. The mounting brackets for the grenade launchers are missing from the kit, these were fabricated from plastic card. Headlights were next; first the missing electrical cable was added, this was cut to length from thin wire. Then the moulded lenses were drilled out and replaced with lenses from the Resicast range. These are a couple of minor improvements but once done, they greatly improve the overall look of the model.

One thing that is common with all U.S vehicles from WWII through to the modern day is the external stowage. Study photographs of vehicles in the field, and along with a bit of trial and error you'll get the best results. All the stowage on the model is from the Tamiya set that is included in the kit. What I did do, is

to wrap the larger bundles in thin metal tape to get a more defined and detailed look. They were then given a thinned coat of MR surfacer 1200. The Alice packs were "married" to the hull sides with Magic Sculp putty for a more natural sit and a couple were altered to break up their uniform appearance. The cam net is my usual, made from bandage soaked in PVA glue then sprinkled with tea leaves. All the stowage straps are cut from Tamiya tape.

One thing that is apparent on modern AFV's is the colour of the periscopes. Mine were cut from iridescent card bought from a local craft shop. All that was left to do now was to drill a number of bolt holes out along the lower hull for the missing track guards.



Painting



My first step was to undercoat the model with grey car primer; there two reasons for this. One is to highlight any inconsistencies in the build, and two, it helps with painting stage as the primer provides a good key and uniform colour for the base tones. I

then applied Tamiya XF-52 Flat Earth in light coats on all the surfaces of the model. This was followed with Tamiya XF- 68 NATO Brown and was sprayed through my airbrush into the areas that would be shaded, such as, around the Alice packs



and stowage, driver's copula and the large crew hatch on the roof of the vehicle. In fact, any recessed areas which would enhance the detail and shadows further when the base colours were applied.



Tamiya XF-58 Olive Green was sprayed to the lower hull on both sides and then masked with Tamiya tape. When finished, this would suggest that the track guards had been removed at some stage. Whilst the airbrush was out, the commander's copula and armoured shields were sprayed

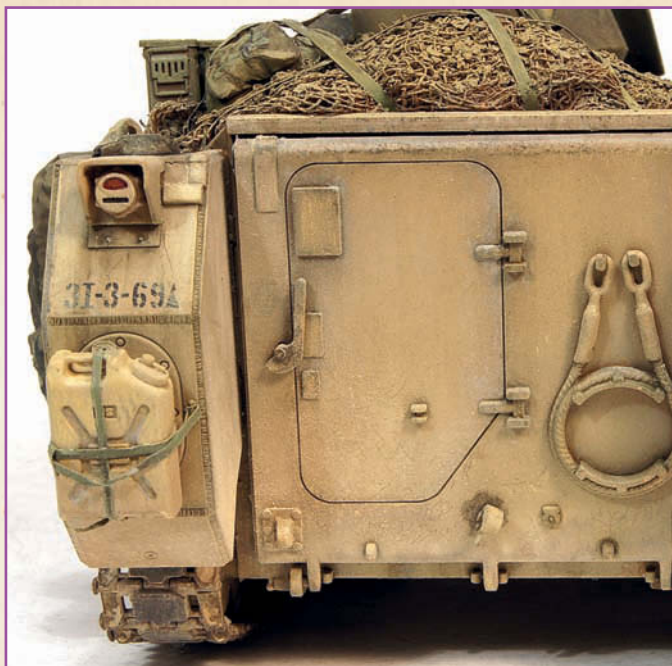
green at the same time to add interest. Now the model was ready to receive the base colour. First a thin coat of Tamiya XF- 52 Flat Earth was airbrushed over the entire model. The idea being is to defuse the harsh border lines of the pre-shading. Then, starting with XF- 60 Dark Yellow, the



base coat was sprayed on again in light passes, taking care to let the darker pre-shade show through. A lighter coat of XF-60/XF-57 Buff was then sprayed over the first layer. I then lightened the mix again by adding a drop more of XF- 57, finishing with an almost pure layer of buff on the top of the model.



The model at this stage looked stark to say the least! To regain the yellow tint, and tone down the garish look, the model was given an overall filter of thinned 502 Abteilung German Ochre oil paint (Abt092).



Weathering & finishing

Once thoroughly dry I masked-off the Alice packs and sprayed them with XF-51 Khaki Drab, (detail painting would be done at a latter stage). Next, I started on the chipping; this was deliberately kept to a minimum. I started with the driver's periscope guards. I used a small piece of sponge and a new 000 brush. I kept this light and didn't go down to the bare metal only the original green base coat. The hand rails and the frame for the smoke grenade dischargers were treated in the same way. The model was placed on its side then light to dark pigments were applied directly to the lower hull sides, road wheels and bogies with a reasonably large brush. Then taking care not to disturb the pigments, I

used MIG pigment fixer dripped through a pipet, using the capillary action to set the powder. Once dry I added another layer using the same method.

With the lower hull now weathered I turned my attention to the hull sides. Here, I employed the hairspray method. I decanted some cheap hairspray into my airbrush and sprayed two even layers over the hull sides. Once dry, I thinned some Tamiya X-F 57 Buff with water and sprayed a thin patchy pattern over the model which was then scrubbed away with water and a stiff brush, I also had a toothpick to hand to add small scratches.

For the tracks I first sprayed them with a mix of acrylic dark brown/grey colours for the base, then washes of sandy/earth tones from Humbrol enamels. When dry, the track pads were picked out with different grey tones. They were then mounted onto the model and any damage this caused was touched in.

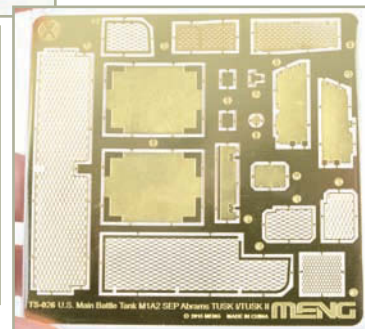
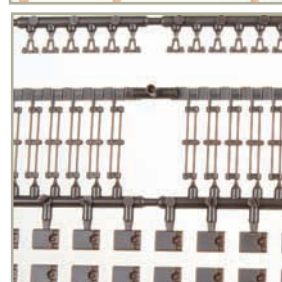
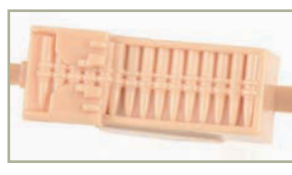
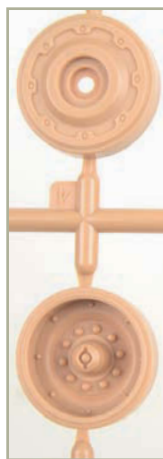
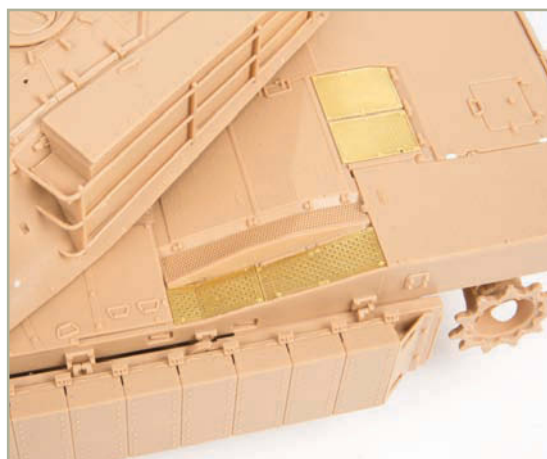
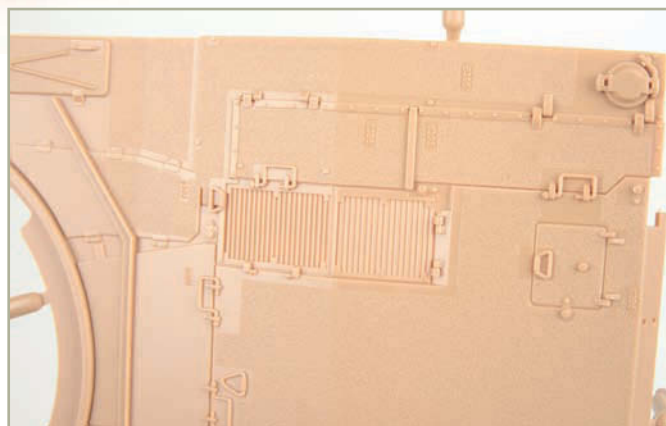
To harmonise the hull, road wheels, and tracks together I dusted a small amount of MIG Gulf war Sand (PO37) onto the model with a soft brush. Finally, the figure is a Dragon U.S. Marine that has been slightly altered. The flesh was painted with oils, and acrylics used for the uniform.

As I have already mentioned, this isn't the most accurate of kits but I really enjoyed this project, a nice change from my usual WWII era AFV's, this is my first, but definitely won't be my last. It also goes to show we shouldn't forget some of the older kits, with a few old-school detailing tricks and a set of tracks we can still produce a good looking AFV model.



M113A2





Meng Models 1:35 M1A2 Abrams SEP Tusk I/Tusk II

Meng's eagerly anticipated new Abrams has arrived in a huge box and offering the modeller the choice of building either Tusk I or II armour configurations. Excitingly the design of the kit and marked options inside the hull and turret point to plans for other Abrams variants but we will have to wait to see if these materialise. The big bits of plastic which make up the turret and hull are beautifully moulded with a pleasingly rendered anti-slip texture and the kit features the now expected working torsion bar suspension and rather daunting looking multi-piece tracks. Our experience with these style of tracks which are designed to snap together is that they actually assemble surprisingly quickly. You can also cheat and skip the top run of tracks which are hidden behind the skirts. There are assorted holes that need to be drilled out depending on which version you decide to build so it is worth checking these before assembly is too advanced. Rear exhaust grilles are well rendered but need care in fitting to avoid

damaging the hinges they mount on and I would have liked the outer exhaust grille bars to be a little more delicately moulded. The gun is a traditional two part moulding but assembles without any problems. Clear moulded periscopes, armoured glass and light lenses are supplied and there is a two part etched fret with mesh for the turret basket floor as well as engine deck grilles. There is a choice of two styles of cupola design and smoke grenade dischargers. The kit comes with spare roadwheels, spare drive sprocket, exhaust deflector and 12.7mm ammunition boxes. Four different sets of markings are provided on the decal sheet, three are Tusk I and just one for Tusk II. As you can see we have started to assemble the kit and we can confirm that it goes together beautifully. Care is required to align the hull roof with the hull tub but nothing out of the ordinary. It has been a delight to work on and we plan to have a closer look at the build in a future issue.



Meng 1:35 Cougar 6x6 replacement wheel set

SPS-024 in Meng's Supplies series is a superb set of resin replacement 'weighted' wheels for their Cougar MRAP kit. Six wheels with hubs and two spares are included and the detail is stunning with very fine attachment points to the moulding gate.



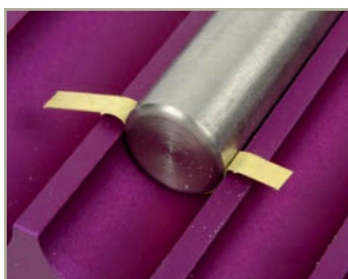
Meng Colour

Meng have joined forces with AK interactive to release dedicated paint sets to tie in with their kits and these are the first two sets, perfectly timed to use on the new Abrams! The first set of Modern US vehicles colour offer a three tone set of sand colours, base, light and dark, along with olive green, interior green and rubber black. The second set offers primary colours along with a gun metal to paint equipment like the cool boxes illustrated.



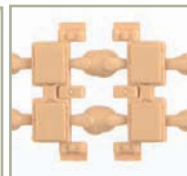
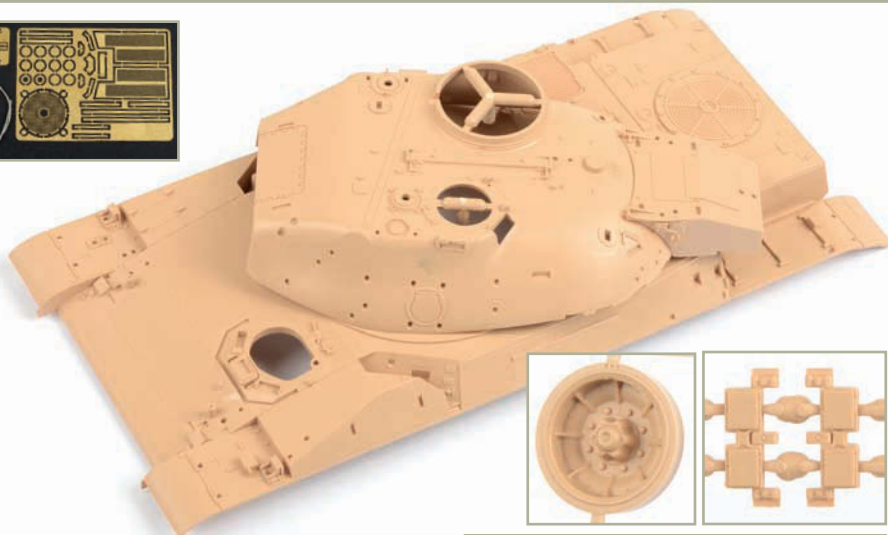
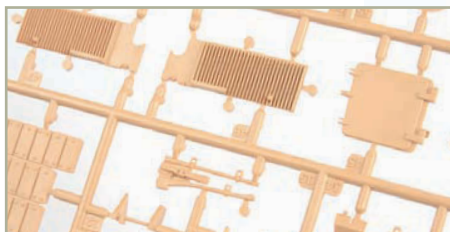
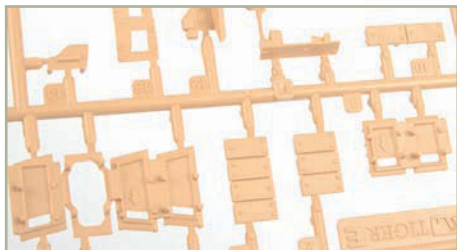
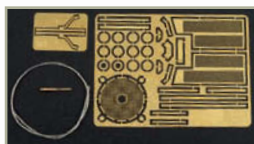
RP Toolz. Punch & Die Trays and Roller Set

RP Toolz have some great new additions to their range of modelling tools and for those who already use their excellent Punch and die sets these dedicated trays are a really worthwhile add on. Moulded in a strong black plastic the tray holds your chosen punch securely but in a raised position which allows the punched out discs or hexagons to drop down into the tray below. This avoids the bunching of the plastic parts in the neck of the punch which happens unless you clear the parts you have made regularly from the neck. Failing to do this can mean the plastic parts are damaged as new parts are made. This tray means you no longer need to keep clearing the neck and makes for a much faster process when producing numerous parts. The tray also conveniently holds the parts that you make ready for you to apply them to the model. These are a great addition which really add to



the smooth operation of the tools and i would hate to be without them now. They have been getting some intense use lately on the big Panzer IV build.

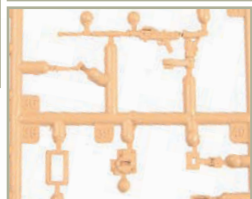
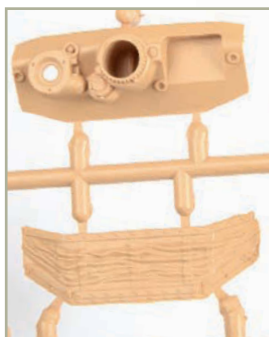
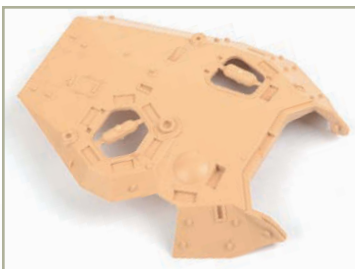
Next we have a Roller Set with a beautiful anodised finish and a choice of roller sizes from 4mm to 16mm. The idea of this tool is to assist modellers in rolling or curving photoetched parts to create curves or to roll a complete cylinder. The machined curved troughs are matched to the six graduated roller sizes so that parts can be accurately shaped or the rollers used one against the other to help close your chosen cylinder. I have used a similar tool before with excellent results and if you are working a lot with photoetched parts or scratchbuilding this is a precision made tool that you will want add to your workbench. Details of these and the rest of the RP Toolz range can be found at: www.rptoolz.com



Tiger Model AMX-30B2 BRENNUS

The AMX-30 takes on a whole new look with the 112 piece BRENNUS reactive armour package as presented in this all new kit from Tiger. In common with the other new offerings from this new manufacturer the presentation and feel of quality are immediate, the sand coloured styrene shows some superb detail with clean and crisp moulding. The lower hull has a separate belly section and sides with enough suspension parts to offer good detail without getting too complicated with a helpful jig included to align the suspension arms. Wheels are all sharply detailed and fitted via poly caps which is always a help should you wish to remove them for painting but that could be tricky with the individual link track links supplied. These will be quite tedious to clean-up with four attachment points but the detail is nice and specific links are used for the links that wrap around the sprocket and idler so be careful

with the part numbers. The track is the Diehl type with the squared pads common to upgraded AuF1 vehicles. The single piece upper hull is an impressive moulding as is the main turret shell. Tiger have included some sensible photo etched parts which are essential for the exhaust guards and fan cover. Thankfully the reactive armour blocks are grouped to cut down on assembly time and appear to replicate the real blocks well with well designed attachment points to provide the correct spaced-off look. A nice treat is a turned brass co-axial MG and something that still has us puzzled and very impressed; just look at the aluminium gun barrel which is integrally moulded into the sprue! Whether you'll tell when the paint is on or not, this is a great party-piece from Tiger hinting that they are ready to compete with the best on the market. Very nice looking kit indeed, our thanks to Tiger Model for the samples.



Tiger Model Tiger 1:35 AMX-10RCR SEPAR

Who would have thought that such a healthy selection of modern French subjects would be available to modellers in 1:35? The list continues with Tiger Model releasing another version of their six-wheeler AMX, this one with the SEPAR side armour giving a very different and distinctive look. These AMXs are ideal if you like to build tanks but lack the patience or time involved in individual track links! The flavour of the presentation is in-line with the other kits Tiger kindly sent us, top quality; the large upper and lower hull parts have excellent detail and fit beautifully. Without the complex running gear associated with a tracked vehicle we look to have a very swift build on offer with a sensible number of parts and some

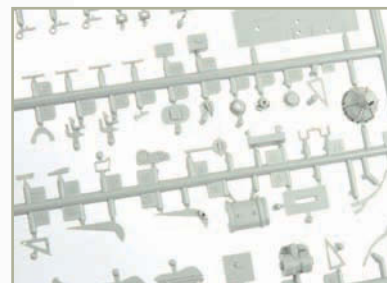
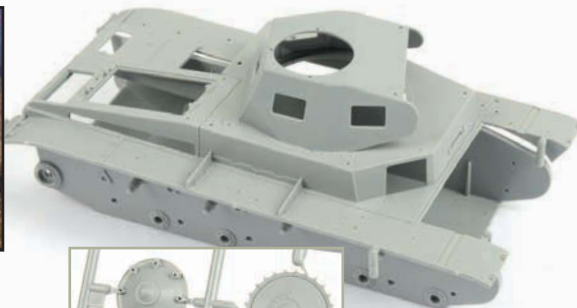
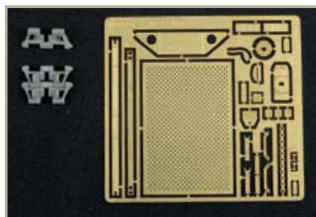
very nice moulding and detail. Some goodies are included also in the form of some photoetched parts and a metal woven tow cable with the usual clear parts, poly-caps and decals. The wheels are huge with the tyres being moulded in soft vinyl, Model Miniature have again assisted with this kit and offer some super-detailed resin wheels and tyres (as do DEF Model). Apart from some holes to drill here and there the main gun will need careful assembly being split along its length with some fine surface detail to preserve. Another cracking-looking kit which leaves modellers of French subjects spoilt for choice. www.tiger-model.com has more details on this new manufacturer and their range.



Tiger Model 1:35 Panhard VBL with 12.7mm M2

This is our first look at Tiger's VBL, this being the version with the M2 mounted in the roof turret making for a very cool and purposeful looking vehicle. Being a relatively new manufacturer we're bound to compare these kits with the best on the market and first impressions are really good with the packaging and instruction booklet being very close indeed to Tamiya's brand. Looking over the sprues the quality of moulding and detail also stacks up very well with four green sprues, one in sand colour (the turret), clear glazing, poly-caps, a small photoetched fret, metal tow cable, decals with colour plans and a choice of two patterns of vinyl tyres. The body is split through the waist-line in two beautifully moulded

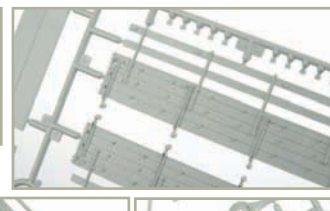
sections finishing a packed-out little box with a high-quality feel. French model manufacturers, Model Miniature, have assisted in the research of these kits which is a reassuring nod towards accuracy. The kit design appears well thought out with the busy interior able to be fully assembled and painted before offering the upper body into place, doors are posable and detailed both sides also. The body has plenty of stowage and features which will make this a small but interesting model with a lot of finesse straight from the box which quotes 'Great parts fit for easy and happy build'- what more could you ask for?



Dragon Pz.Beob.Wg.II Ausf.C

It's a little while since we looked over a Dragon Panzer II and are immediately reminded what an impressive box of bits this is. As a comparison we lifted the latest Tamiya Panzer II off the shelf which looks is if it could be assembled before bedtime! Dragon's kit will take somewhat more effort but the modeller will reap the rewards with superb levels of detail and full internal detail (with the exception of the engine bay) much of which is carried across from their previous Panzer II kits. The highly detailed running gear is topped-off with delicate, de-sprued Magic Track. The diamond pattern tread on the mud guards is nicely rendered and the separate vision blocks and on-vehicle-equipment ensure superb detail with photo etched

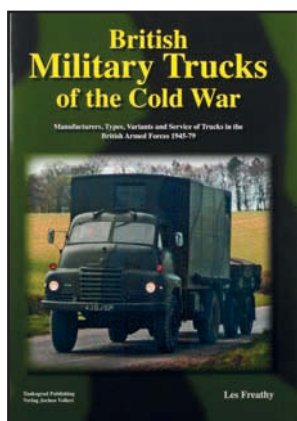
tool clasps and multi-part jack. Inside the turret we've a well detailed 20mm cannon and MG34 which does make you wish the Panzer II had larger hatches to leave open. New parts appear limited to the frame antennae mounted to these command vehicles; two options are given each being broken into sections which will need some very careful alignment, I'd have preferred the main section moulded as one with separate legs. As most of Dragon's kits this one is for the 'builder' who strives for the ultimate multi-part detail which is certainly delivered here. If you can't wait to get into the painting the Tamiya kit is the one for you! Again Dragon are releasing very subtle variations of subjects to exploit existing tooling to the full, very nice



Dragon 1:35 3t 4x2 Cargo Truck with FlaK 38

Available previously, if we're not mistaken, only under Dragon's 'Cyber Hobby' brand is the Opel Blitz truck amalgamated with DML's FlaK 38 providing the usual packed-out box of familiar grey sprues. The kit appears unchanged with the option to build a 'standard' cargo truck with different styles of sides and the gun mount on a highly detailed base and sled. The FlaK 38 is highly detailed and has optional barrels and elevation degrees with some photo etched parts to create the spent case basket (having built one of these I can vouch for the fact that they are a 'challenge'). The truck itself shows some beautiful delicate detail and is very comprehensive with a basic engine, folding bonnet and good cab interior with a convincing

texture to the seats. While the quality of moulding and detail is first rate the tyres are a little disappointing being an old-style central split and not the sandwiched tread detail or even single piece DS offerings. Markings and paint finish options are almost endless but a choice of seven offered by the decals should have something for everyone. A very nice out-of-the-box project, maybe some detailing to the engine if you want to display it, but a lot of modelling for your money nevertheless.



British Military trucks of the Cold War

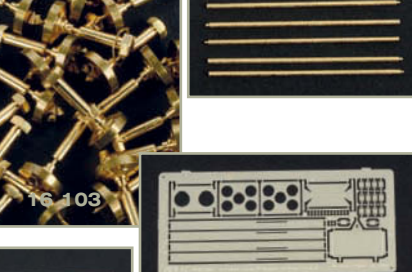
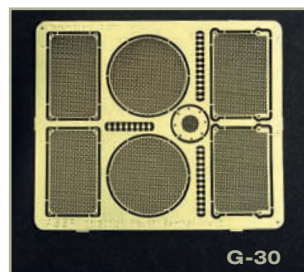
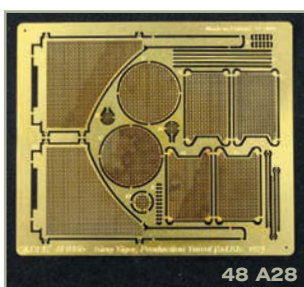
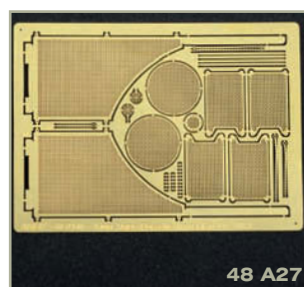
By Les Freathy

Published by Tankograd
Hardback format, 184 pages
ISBN 978 3 936519 426
www.tankograd.com



This large hardback from the guys at Tankograd will be most welcome by fans of post-war softskins, in particular ones operated and designed by the British in this frantic time of vehicle development. Featured alphabetically from AEC to Thornycroft. An introduction chapter outlines The development of military movers from 1845 to 1945 with some excellent images. The quality of the images continues throughout, the majority being in black

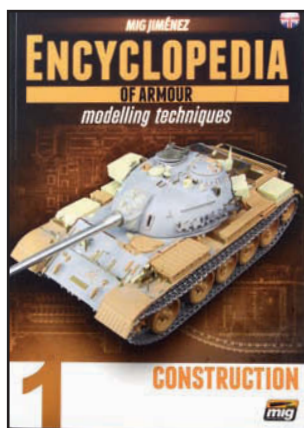
and white and in large format with detailed captions covering a wide cross-section of vehicles from giant ANTAR tank transporters to lightweight Land Rovers, tankers, fire tenders and trailers. Twenty pages of colour images complete this very comprehensive general reference of some great looking vehicles, many available as kits in resin from the likes of Accurate Armour and Kit Form Services. Possibly the definitive study on the subject?



Aber

A bumper batch of top quality detail upgrades from one of the original and best manufacturers around. Starting in 1:48 for Tamiya's King Tigers, 48A27 is to fit the Porsche turret version and 48A28 for the Henschel version providing all of the mesh and fittings for the engine deck. In 1:35 for the Hobby Boss kits are 35L-174, a 45mm barrel for the T-26 and 35L-175 is a set of three 7.62mm MG barrels and the 76.2mm gun barrel. More Russian subjects with 35L-182, a superb barrel set to fit either the Meng or Trumpeter T-10M and 35L-183 is a sleeve/barrel set for the tank version of the 14.5 KPVT cal. In 1:35 still for Tamiya's 'Easy 8' Sherman M4A3E8 is 35L-186, another beautiful barrel set. Still with Tamiya is G30, a set of engine deck grilles for their new Panther D and finally in 1:35 is R-41 for Tunisian Tiger Is, a superb set of barrel cleaning rods and brackets. For the vintage 1:25 Tiger

I kits is a 88mm KwK 36 L/56 barrel set (you have to love the precision of these threaded muzzle brakes!) 25L-04 is the code. Not only are modellers lucky enough to have a good choice of 1:16 kits to choose from, Aber are keeping up with some very detailed upgrades. For Takom's FT-17 is set 16L-10 to replace the Mle 1914 MG barrel and how could we forget Trumpeter's King Tiger? 16L-12 is the massive KwK 43/3 L/71 (late model) in multi-parts (with a choice of muzzles to be available separately) and something to suit the Editor's latest series, 16 075A is an etched ammo rack with two 75mm rounds and decals as found inside the Panzer IV Ausf. F2-J. Finally, 16-103 is a set of 30 1.55mm hex-head bolts for super-detailing 1:16 kits. Great to see Aber back at the top of their game www.aber.net.pl



Encyclopedia of Armor Modelling Techniques

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ISBN 978 84 944741 56
www.migjimenez.com

If you've been into armour modelling over the last ten or so years you're sure to have seen the inspirational work of Spanish modeller, Mig Jiménez who has always been a driving force in the 'new-wave' of finishing styles. This is the first in a series of five books to form a collective encyclopedia of armour modelling techniques starting with (as you'd expect) with construction. Well presented with a clean design, the book starts with the basics; kit part preparation and the best tools to use for a multitude of tasks with chapters focussing on vehicle interiors, exteriors and all of the more advanced techniques

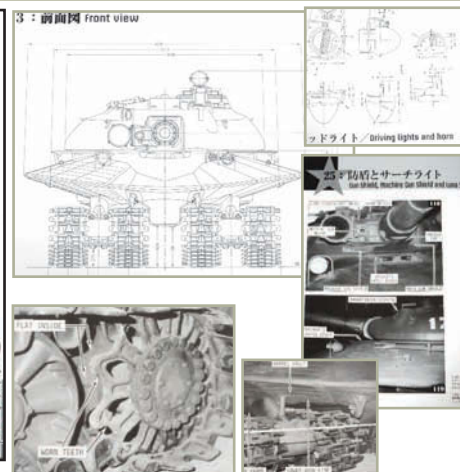


to create effects such as weld beads, zimmerit application, battle damage and textures. A clear step-by-step format guides the reader through everything from filling gaps to folding photoetch and scratchbuilding. Although obviously well suited to beginner and intermediate modellers there will certainly be tips and techniques for even the most seasoned builders, a very solid start to the series which should build into a very useful resource and reference. www.migjimenez.com has more details on the series and Ammo's extensive catalogue.

Objekt 279, Detailed Photographs and Drawings

Sanzo Takemiya
Published by Kaiga
Softback format, 120 pages
ISBN 978 4499231 763

With its radical looks, the Soviet experimental heavy tank 'Object 279' was a surprise kit release from not one, but three manufacturers recently. Looking like a vehicle from a 1950s sci-fi 'B' movie, the 279 has obviously caught the imagination of the author, a retired Japanese medical consultant with an obvious passion for the more obscure armoured creations. The majority of this dual language (Japanese / English) book is a collection of captioned black and white detailed images of a museum vehicle (Kubinka?) and extremely detailed plan drawings with measurements. A short appendix on the kits available is unfortunately in Japanese only. Very niche and very technical but ideal if you want to scratchbuild your own model.



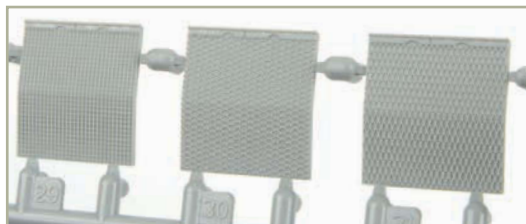
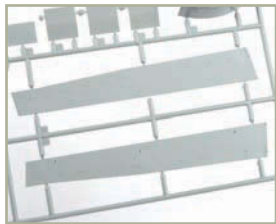
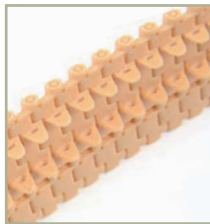
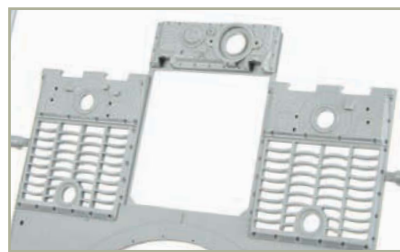
The Eagle Has Landed; Armour & Aircraft dioramas by Aitor Azkue

By Aitor Azkue
Published by AK Interactive
Softback format, 288 pages
ISBN 8436 535 576871
www.ak-interactive.com

If you've been a reader of AFV Modeller (or AIR Modeller) you'll be sure to remember some of the stunning work we've featured by master Spanish modeller Aitor Azkue. His complexed and extravagant dioramas always draw a crowd at model shows, and for good reason! Often containing both armour and aircraft, Aitor's artistic flair appeals to all. This second edition has been updated and features a nice mix of gallery images of Aitor's most well-known works and step by step lessons in many of his techniques



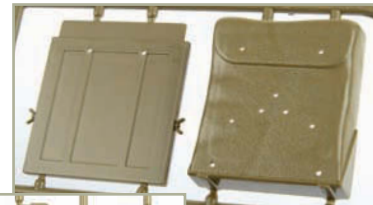
used to create the masterpieces. From the groundwork up, there's every aspect covered from making foliage and trees, converting figures and the vehicles and aircraft (even a U-Boat) and how to plan and compose a scene. With around 1800 images this is a hefty book and a visual feast that will teach any modeller a thing or two. The subjects are WWII German, even if that's not your favourite topic it's pretty irrelevant, this book shows without question that modelling is an art form when taken to this level.



Dragon 1:35 Tiger I 'Tunisian Initial'

Another early Tiger release from DML with this 'Tunisian Initial' which follows closely behind their recent '131' kit, at first we just thought that apart from the box art by the masterful Ron Volstad maybe the kit just has a different smell? But no, there are in fact a lot of smaller details and features to model specific Tigers such as front mudguards, headlight mounts and credit to Dragon, new hull sides (with track changing cable to suit the specific vehicles) and rear hull plate. The research appears very thorough with the smallest of features optional parts, right down to the field repairs on '724' of Pz.Rgt.7. The box is packed with masses of spare parts to please serial Tiger builders with stunning detail and moulding quality which is common throughout the latest generation Tiger kits. Photoetched parts are included and

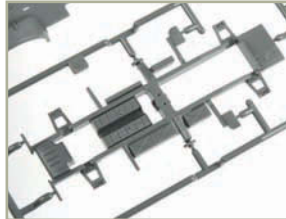
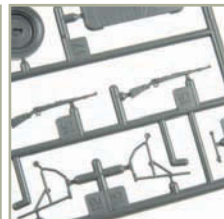
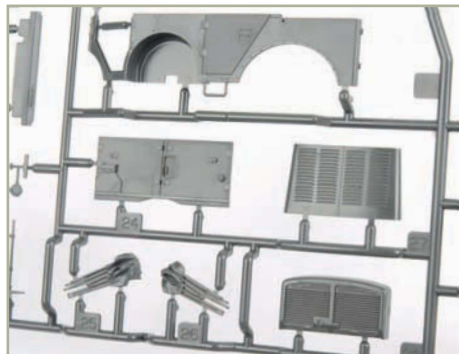
woven metal tow cable (which personally I find a little 'springy') and even pre-formed headlamp conduit in metal wire. DS one-piece tracks are included which certainly please me (maybe not so much the Editor) and the inclusion of an adjustable idler mount should make fitting your choice of tracks a breeze. The vehicles which can be specifically modelled are from s.Pz.Abt. 501: 142, 122, 132 and 112 and as mentioned already, 724 from Pz.Rgt.7. So even if you might groan at yet another Tiger kit there's no denying the sheer quality of the offerings from Dragon- just superb, but as the Editor works his way through the latest full-interior Tiger from new-boys Rye Field we'll be able to compare and contrast soon.



Italeri 1:9 Triumph 3HW

Italeri seem to have stumbled upon the moulds from the vintage ESCI Triumph! We remember this 1:9 range with great fondness which included German 'bikes and sidecar combos and a Kübelwagen. Popping the lid off the box reminds us of what good kits these were back in their day in the '70s and at the large scale the detail still holds up well and is easily enhanced. The olive green sprues are surprisingly free of flash considering the age of the tooling and a soft black vinyl sprue providing items such as the saddle covers and straps for the saddle bags and drive chain. Vinyl tubing is included to represent cables and actual springs for the forks, stand and saddle. A small clear sprue contains lamp lenses and the glazing for the speedo. There's no denying the

wheel spokes look over scale but some careful thinning with a fresh 'blade wouldn't be beyond most modellers. Decals provide generic factory details and an option of eight divisional markings from Tunisia, Italy and France in WWII and vintage motorcycle fans could easily produce a factory civilian version. Some of the metal-effects paint which have flooded the market of late will lean themselves very well to finishing this kit with everything from chrome (on the exhaust), cast aluminium and machined finishes. With this series being resurrected by Italeri it will be interesting to see if any aftermarket detail sets appear? Thanks to the Hobby Company who distribute Italeri kits in the UK.



Tamiya 1:48 Horch Type 1a

More fond childhood modelling memories for Tamiya's Horch, this time around though a brand new kit in 1:48 expanding this series of simple to build quarter-scale kits. Tamiya's reputation for quality and builder-friendly models continues to this day, and with such a massive following in their homeland of Japan the brand still remains a powerful force in the hobby. This kit continues the no frills approach with four dark grey sprues and a small clear one, tiny decal sheet (including WL markings for the obvious aircraft diorama potential) but we do have a surprise in the form

of six figures which are pretty good. A single piece floor / wings part has a simple (but adequate) chassis and suspension and well detailed wheels added to it with the body broken into flat sections. Some nice detail is included such as the front grille and louvred bonnet and the front doors posable open should you wish. Only a folded hood is provided but no doubt the aftermarket guys will look at an erected one (ooh-er). Nothing too exciting, dependable Tamiya quality and a good addition to the range.



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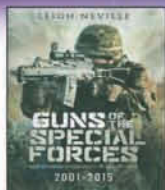
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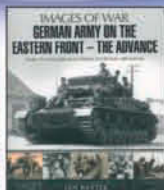
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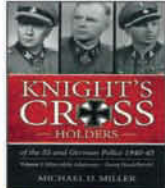
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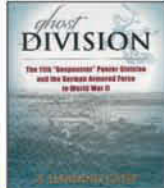
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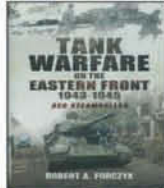
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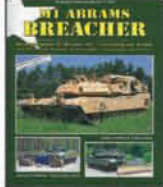
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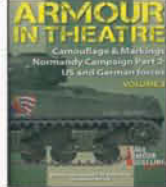
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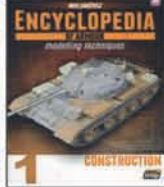
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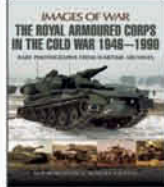
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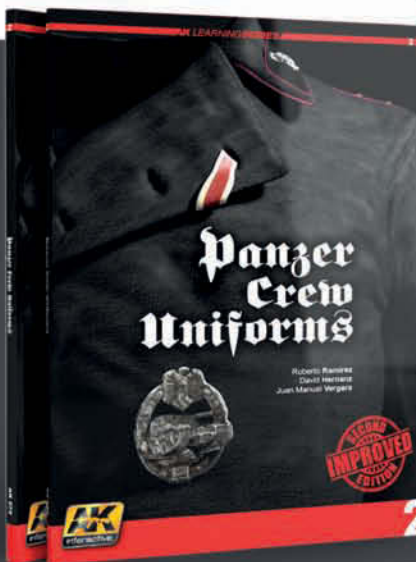
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AK4190

ISSUE 03 DUST & DIRT

The initial welcoming, critics and comments received about this magazine have been a lot more positive than we had ever expected. This makes us keep pushing to maintain and improve the quality and contents of this already reference magazine. This is an unconventional and collectable quarterly magazine with more than 100 pages for only 9 euros and a must-have for AFV modelers. With wider content than any other magazine, it is dedicated in this issue to represent dust and grime and also packed with different techniques, tricks, interviews and galleries. All this is available in three languages, English, Spanish and Hungarian.



AK272

PANZER CREW UNIFORMS

Second edition of the "Panzer Crew uniforms" book from our learning series. An essential book to start painting the uniforms of the German crews in World War II that looks deep into the colors used on the uniforms worn by crews. Lots of full color reference pictures come along with widely explained different techniques and painting styles that will help us to get optimum results. It includes an historical introduction and data, different paint systems used for faces and an extensive gallery.



AK4190

SPANISH CIVIL WAR COLORS 1936 - 1939

This set allows us to replicate almost all the military vehicles which participated in the Spanish Civil War conflict, giving even the chance to be used in the several transformations these vehicles had as they were stolen or changed sides during the war. To all these variations we have to add the color modifications made by each side made to these vehicles, overall once they were captured as they were abandoned. To Spain arrived amongst others German material and equipment at the beginning of the conflict and as it was almost finished (1939). These equipment showed the active schemes in Germany at that time. This chromatic richness makes contrast with the 480 used by the Soviet material and with which the government supported the republican side.

NAGMACHON



Kristof Pulinckx dives straight into the brand new Tiger Models kit of the IDF's ugly duckling

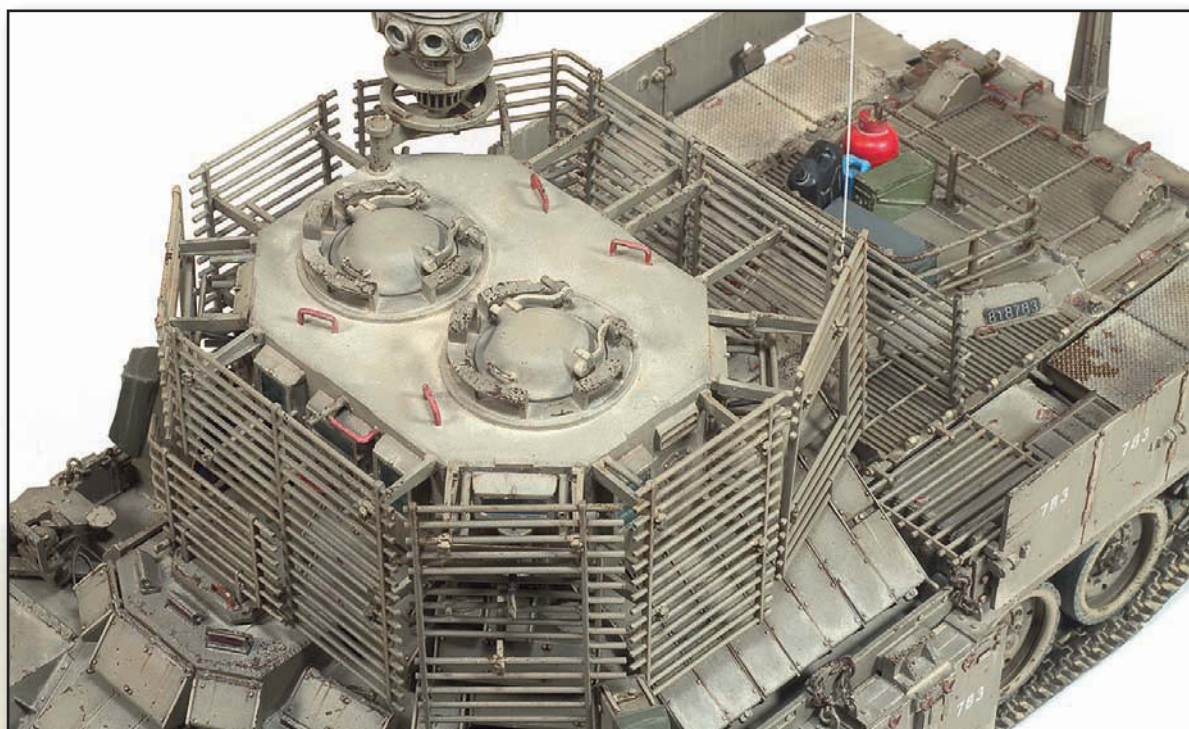




Tiger models is a fairly new brand on the market and their recent release of the IDF Nagmachon was a daring move. I didn't really know what a Nagmachon actually was until I saw the box-art upon the release and I was hooked. This 'thing' looks so odd and it's

certainly not the most attractive AFV, in fact it's so ugly it becomes attractive! Just something one has to build! Upon opening the box you find a mass of light sand-coloured sprues. Close inspection revealed that the kit is highly detailed. To be fair looking at the design of

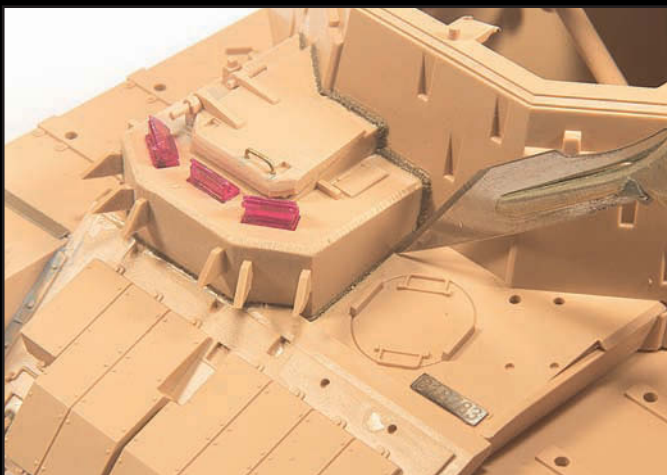
the box and the instructions it looks almost identical to a Tamiya kit, just the logo is different all the rest is exactly what you would expect when looking at a Tamiya kit. But does it have the same quality? Let's find out as we will build the Nagmachon straight from the box...well almost!



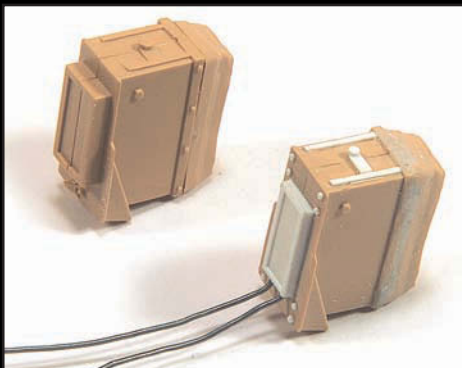
BUILD



The construction starts with the 'doghouse' which is quite complex and care must be taken to install the brackets for the slat armour in the right places. Some additional weld seams need to be added, the MG's are drilled out and you have the option to use clear white, clear blue or clear red parts for the windows, I followed the instructions and used the clear blue parts.



Missing weld seams are added around the drivers station, partly to fill the seams surrounding it. The fit of the parts sometimes could be better, putty is required in some areas but not in spectacular amounts.



The smoke grenade launchers are slightly modified, mainly because you will damage the details when filling and sanding the seams. Some lead wires are added as well.



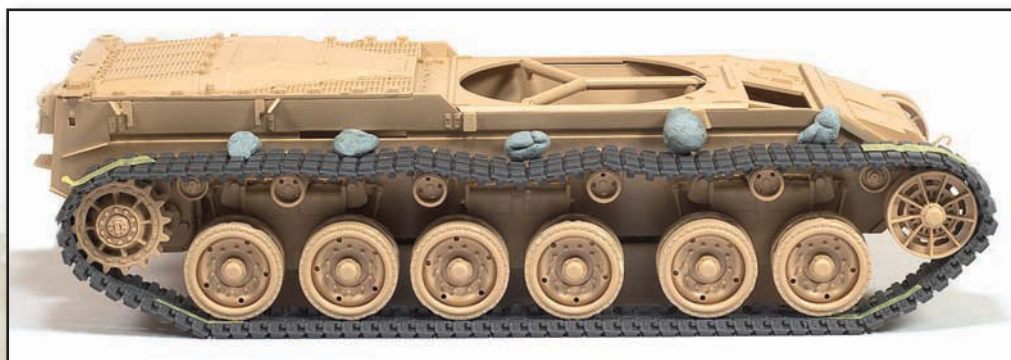
The rubber flaps on the mud guards don't look the part and were removed and replaced with thinner more realistic looking flaps made of 0.25mm plasticard.

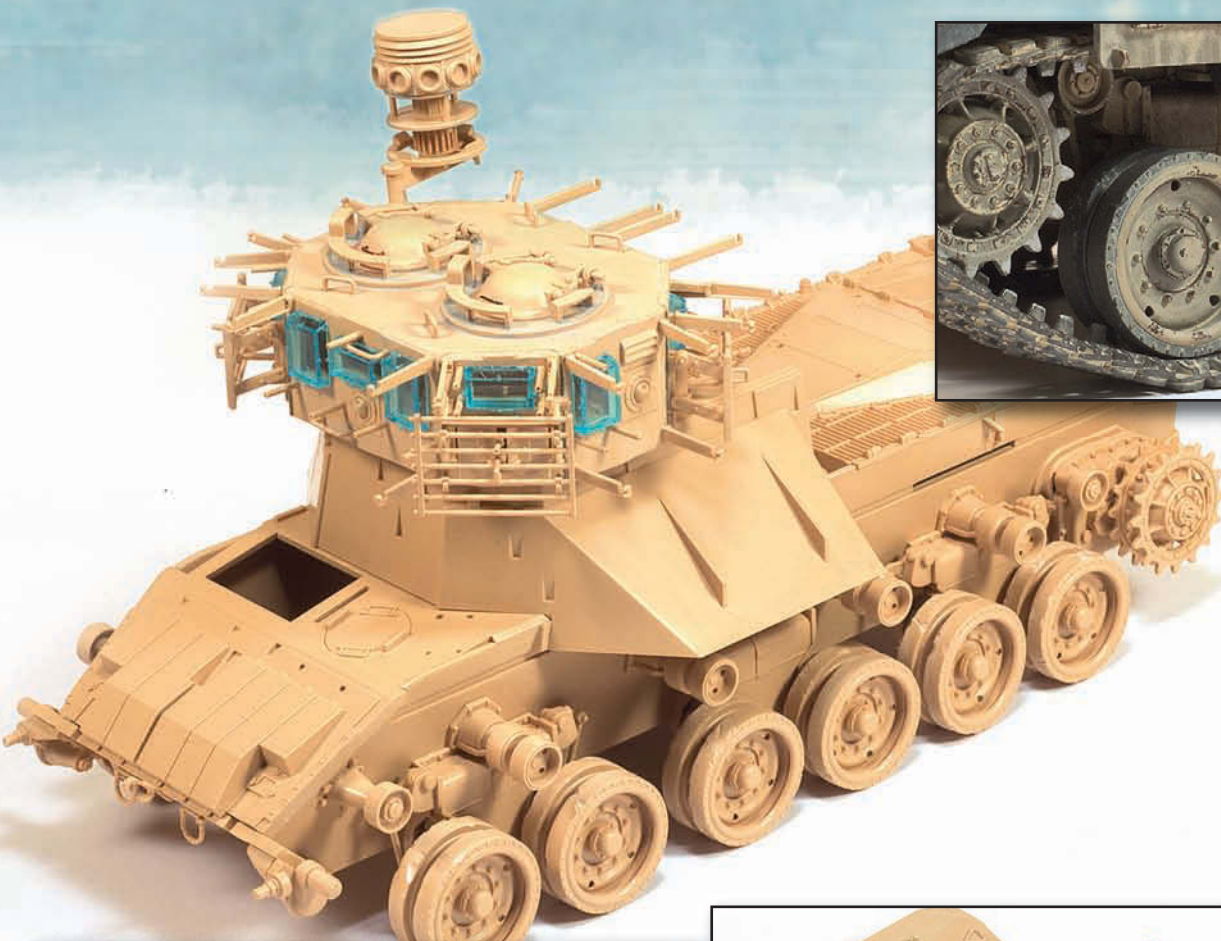


A time-consuming task is to cut the provided metal chains to the right size and attaching them to the side skirts. The front section of the inner side of the skirts are hollow and this will be visible on the finished model, so a piece of thin plasticard is used to cover the front part.



The individual non-working tracks require a lot of cleaning up before being assembled. Each track will be divided in 4 separate sections. And glued together with normal modelling glue. The visible outer sections of the tracks are treated with a burr to simulate wear on the rubber pads. Before the glue has dried the tracks are mounted on the model and kept in place with Blue-tack and set aside so the glue can dry thoroughly overnight.





After the wheels are assembled they are damaged with a knife to simulate wear and tear on the rubber parts. Care has to be taken when attaching the bogies for the wheels to make sure each and every wheel touches the ground. With the hull parts assembled and the doghouse temporarily in place you will notice that this is a massive model.

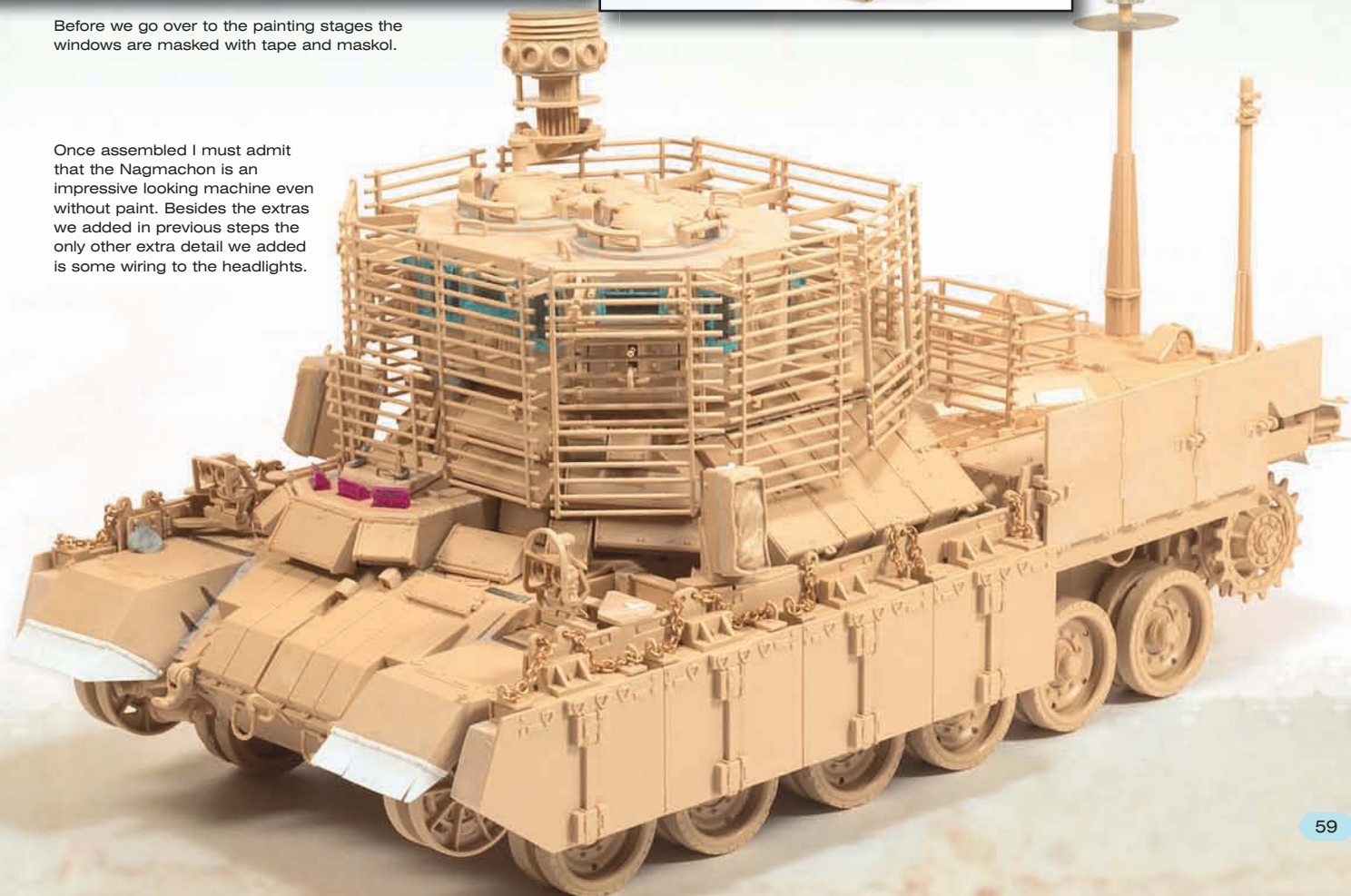


Before we go over to the painting stages the windows are masked with tape and maskol.



New photo-etch tie-downs are added on the air filters. A small change to add subtle detail.

Once assembled I must admit that the Nagmachon is an impressive looking machine even without paint. Besides the extras we added in previous steps the only other extra detail we added is some wiring to the headlights.



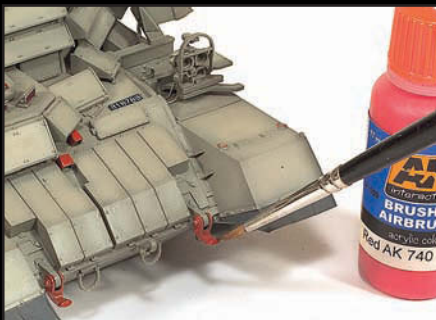
PAINT



The model is base coated with AK790 IDF Sinai Grey Modern which is as close as you can get to the real colour.



Next we add some Iraqi Army sand AK 725 to the base coat and paint the model in a cloud pattern to obtain some depth.



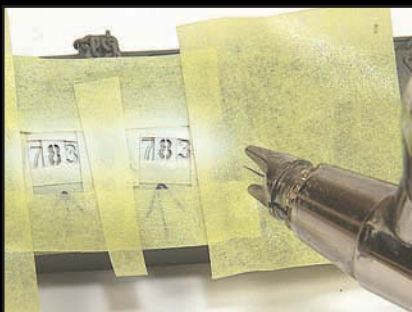
The handles, hooks etc are painted red as this is a common practice with vehicles of the IDF.



To create some shadows the whole model is given a wash with AK's streaking grime. This dark brown colour works well with the greyish base coat.



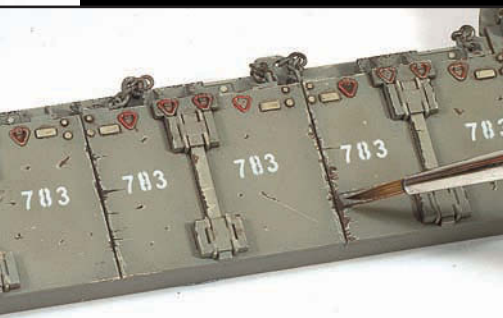
For the stencils on the sides tiger models provides decals, but to avoid the nasty carrier film I decided to spray paint the numbers using Eduard's photo-etch masks.



The numbers are made up and glued together with a bit of superglue and positioned on the side skirt. They are deliberate placed at slight angles as this would look more realistic than perfectly aligned. Once in place the surrounding areas are masked with tape.



Pure white is used to spray on the numbers. The white will be toned down during the weathering stages. Next the details are outlined and the panel lines accentuated with streaking grime to obtain shadow effects.



Most of the earlier applied light chippings are filled in with a brown rust colour to create a nice 3D effect. The amount of the light rust colour added may vary to have some variation in tone.



When the chipping phase is completed its time for dust. Africa Dust and regular Dust Effects are mixed together and applied generously. After the paint has dried for about 10 minutes its blended in with a brush moistened with White spirit.





The rubbers of the road wheels are also given a coat of Rubber tires although this time by hand painting.



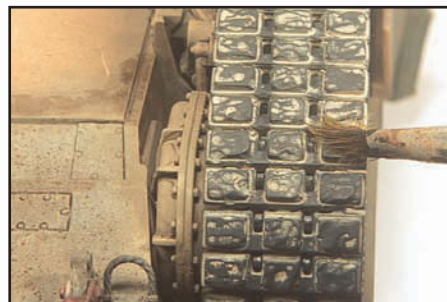
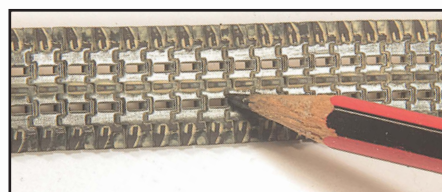
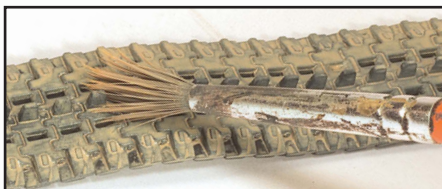
The wheels received a wash made of the same mixture used for the dust. Afterward some light chipping was done with AK's Chipping colour.



The sections of tracks are sprayed with Rubber tires, a dark grey colour. This is especially done because the outside of the tracks are covered with rubber tracks pads.



Middle east Soil pigments are mixed with White Spirit. This mixture is next applied over the tracks with a large round brush and set aside to dry. When the pigments have dried, the tracks are drybrushed with a dark brown rust colour. In one go the excess pigments are removed by the drybrushing process.



Once the tracks are in place the rubber pads are drybrushed with AK's Rubber tires acrylic paint. This will make them stand out and leave only pigments in the deeper areas of the tracks.



Accumulated dust is applied in selected areas of the model. Again we apply our dust mixture, let it dry for several minutes, and blend it in.



The sides of the lower hull are sprayed over with a light dust colour to form a base for the next step. A light dust wash is applied followed by the speckling technique done with the same colour. Finally some streaks of transparent dark brown are applied to mimic grime.

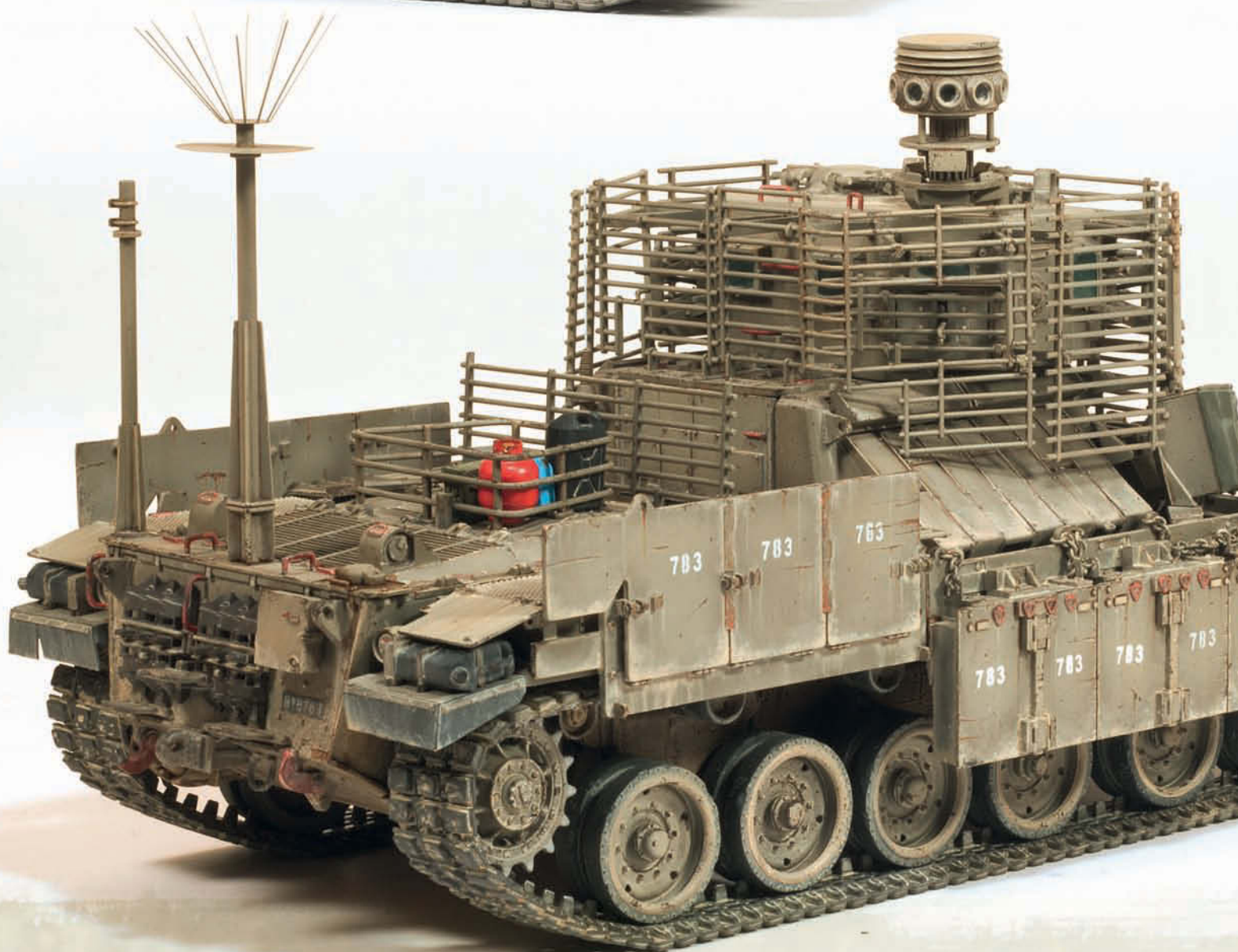
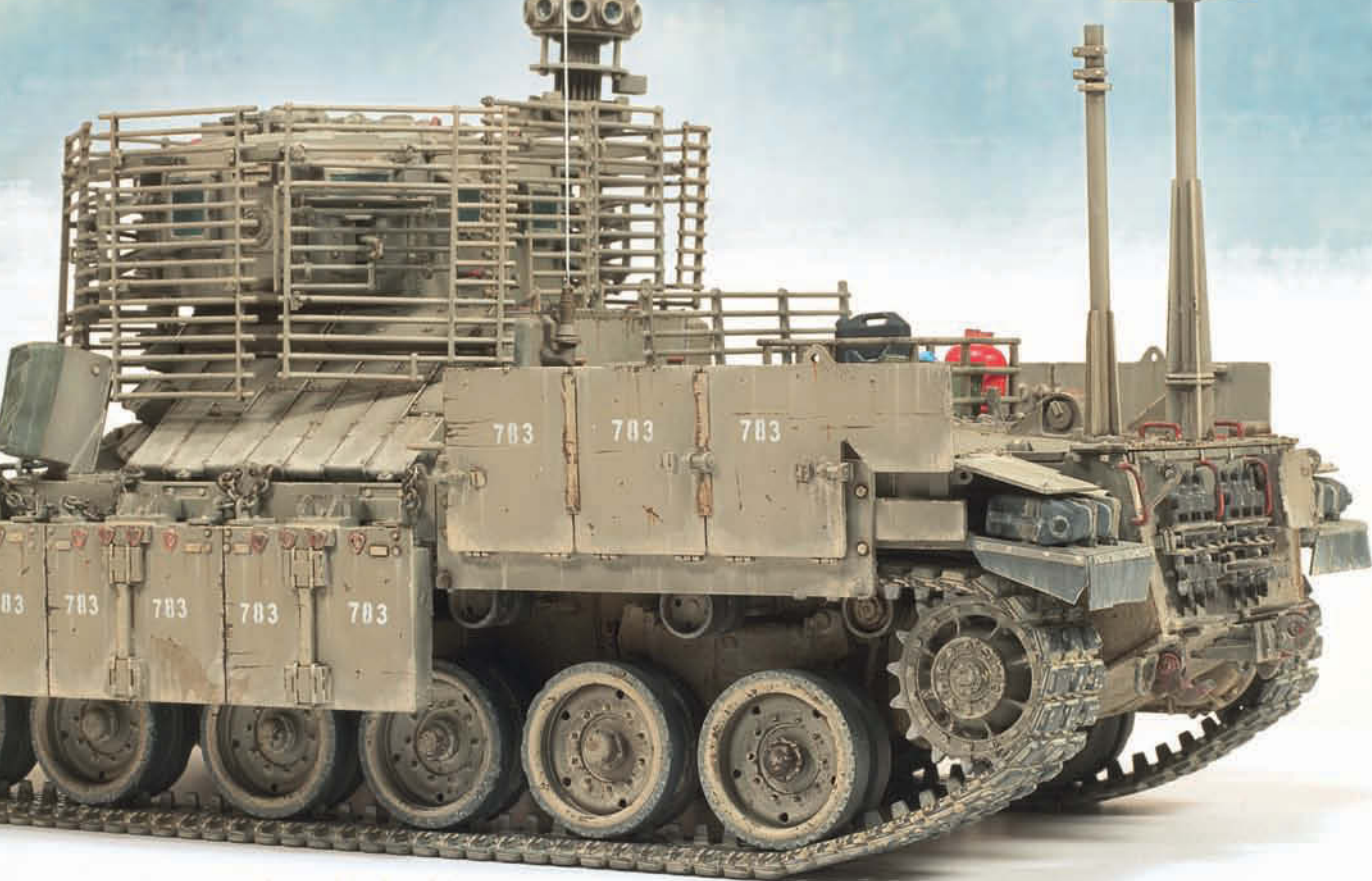


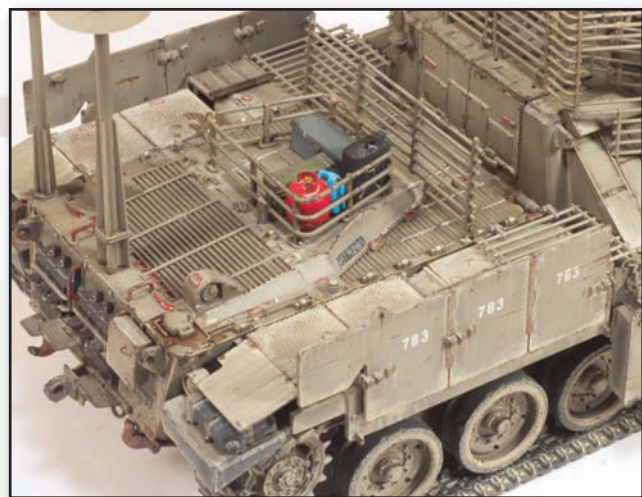
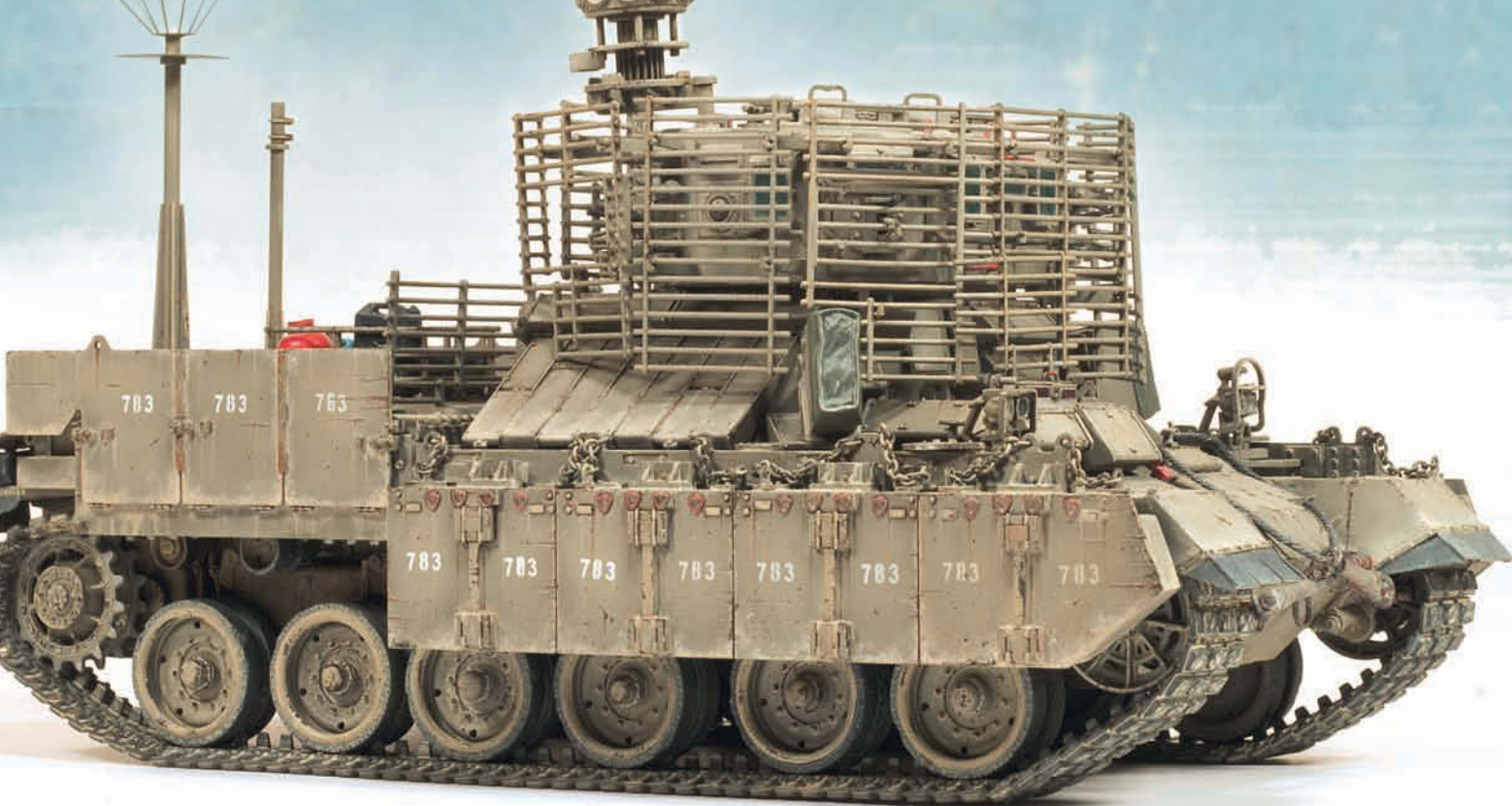
Wet stains always bring some interest to a model. Here we mixed Wet Effects fluid with streaking grime into a dark brown transparent colour and thin it with White spirit. The stain is carefully painted on with a fine brush.



Around a fuel filler cap we applied some fuel stains. If you like a heavier effect one must work in several layers with enough drying time between each layer.







Overall I can recommend this kit for IDF fans, although it is at some stages complicated to build and the fit of the parts can be challenging at some stages, but this is nothing that a modeller with some experience under his belt can't solve. This is surely compensated for by the fact that you will have a highly detailed kit when finished, even straight from the box. The key to finish this model successfully is to work in subassemblies. This makes life easier especially during the painting and weathering stages. And looking at the leftovers in the sprue, I would not be surprised that Tiger Models will release the early version of the Nagmachon very soon.





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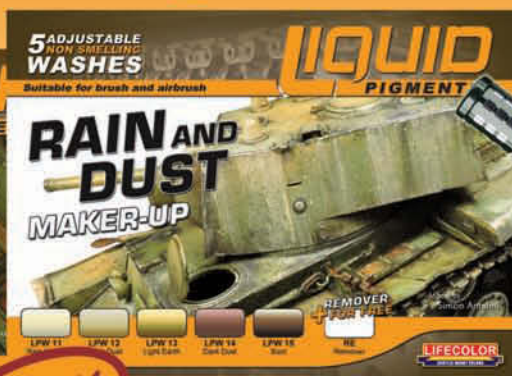
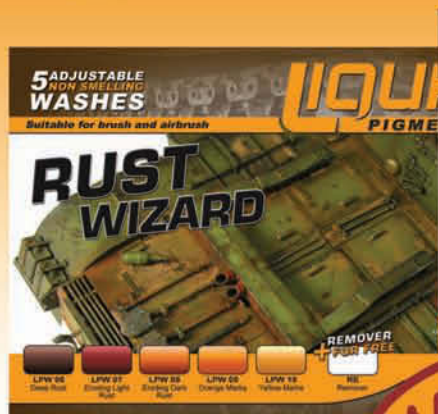
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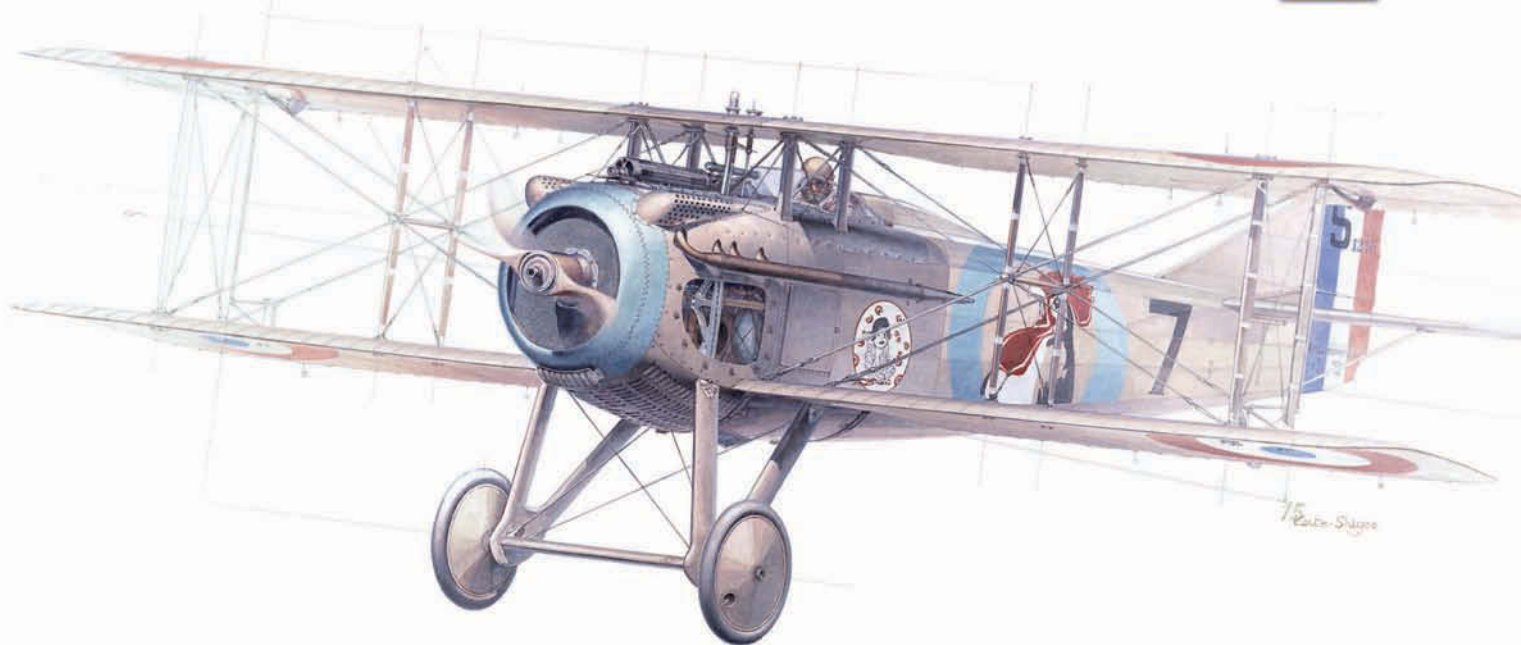
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