JagdPanzer IV L70 (A) Final Production - Smart Kit

by Eric Christianson,
IPMS # 42218

Scale: 1/35
Company: Dragon Models
Price: $64.99
Product/Stock #: 6784
Website: Dragon Models
Product Web Page: View
Product provided by:
Dragon Models USA

Dragon Models has released their (fourth? fifth?) incarnation of the German JagdPanzer IV L70 (A) self-propelled tank destroyer in 1/35th scale.

The Jagdpanzer IV (Sd. Kfz. 162) was based on the Panzer IV chassis built in three main variants. As one of the casemate-style turret-less Jagdpanzer ("hunting tank") designs, it was developed against the wishes of Heinz Guderian, the inspector general of the armored corps, as a replacement for the Sturmgeschütz III (StuG III). Guderian objected to the 'needless diversion of resources' from Panzer IV tank production, as the Stug III and Stug IV tank destroyers were still more than adequate for their role. Officially, only the L/48-armed vehicle was named Jagdpanzer IV. The L/70-armed vehicle that this kit was modeled after was named Panzer IV/70.

Originally fielded in the summer of 1944, the Panzer IV/70 saw service in Normandy, the Ardennes Offensive and on the Eastern Front. The vehicle was nose heavy and difficult to operate in rough terrain, leading their crews to nickname them "Guderian-Ente" ("Guderian's duck"). To prevent the rubber rims of the road wheels being dislocated by the weight of the vehicle, some later versions had steel road wheels installed on the front. This kit contains both steel and rubber-rimmed wheels, allowing the modeler to represent either version.

Previously released by Dragon/DML at least four times, this (Smart Kit) release of the last production version has been improved upon by the inclusion

The contents of this box include:

1 Main lower hull, packaged separately.
1 Main Upper Casemate and Rear Deck, packaged separately.
20 sprues in soft, light grey plastic parts, packaged separately.
2 sprues of clear plastic parts, packaged separately.
Dual-colored, sided sets of individual-link MagicTrack
1 photo-etch sheet, including schürtzen frames.
1 baggie of steel outer-rim wheels and gun mantlet.
1 baggie of six individual wire mesh schürtzen sections – say that three times fast.
1 8-page blue and white instruction sheet with 17 steps.

of 50 new styrene parts, MagicTrack and a 204 piece set of etched brass to complete it. The newly tooled upper and lower hulls properly represent the slightly higher profile of this late war variant.

Opening the box

As is usual with Dragon kits based on other Dragon kits, about half of the (abundant) parts included in the box are not used. Fortunately, many of these unused parts will be useful for other projects - nice personal weapons, handy pioneer tools, antennas, cables…'the good stuff'.

Looking at the sprue stamps, the kit appears to be cobbled together using (sprues) from several previous products, including: Pz.Kpfw IV, Pz.Kpfw IV Ausf. H, JagdPanzer IV L70, Brumbär,JagdPanzer IV L70(A)

Sprue stampings of rivets, bolts and two sizes of numerals can be carefully scraped off and applied to the model surface for serial numbers, etc.

The kit comes with a single scheme represented using the ubiquitous Dragon blue-and-white three-view drawing, and a very small (but perfectly registered) sheet of decals from Cartograph of Italy.
These include: Unidentified Unit, Eastern Front 1945 in overall German yellow, with brown and green camouflage.

The Instructions

As mentioned, there are sprues from several different Dragon kits included in the box. That said; I found nothing significant as far as errors or omissions. There are some minor inconsistencies and these are pointed out where needed, below. The only criticism I have is that in many steps the exact placement of crucial parts is vague at best, illustrated by a simple arrow pointing 'somewhere in this general area'. Fortunately, all the tricky areas are documented correctly and fit well.

Things to consider before starting:

The build sequence is pretty straight-forward. The wheels and bogies first, then the track, followed by the front and rear lower hull details and front deck, the fenders, the rear deck and finally the casemate and main weapon, in that order. Once all this is completely dry, the schürtzen is added. The only significant departure from the instructions I took was adding the track before the fenders – I didn't see any benefit from doing it the other way and the easy access to the upper runs of the track made things easier when molding the 'sag' into the track.

The front deck must be installed prior to the fenders, which isn't clear from the instructions.

The instructions contain a handy 1:1 scale drawing to use when attaching the various PE and plastic parts to the schürtzen sections. Be forewarned, however, that there is only the left (port) side depicted. You have to do a little finesse work to mentally flip the illustration the other way to assemble the right (starboard) skirt sections correctly.

Finally, the build-it-all-and-then-paint-it approach will work (it's what I did) but it still pays to plan ahead and proceed slowly.

The Build

Running Gear

Right off the bat, literally the first part of the first step, you will run into a common Dragon-ism. The 'Not-Used' diagram will have you discard parts until you are left with six sets of rubber wheels and ten sets of steel wheels, while the instructions show eight of each, with an option icon. I guess as long as you end up with sixteen wheels total, it doesn't really matter which way you go. Dragon provides plenty of both types, with an option to add steel and/or rubber wheels as spares on the back deck later in Step 8 - so decide what you want to do and continue on. I chose to make eight sets of each so that the front two bogies on each side would sport steel wheels. One of the earmarks of this vehicle was that it was perennially front-heavy, which required the support of the beefier steel wheels.

In Step 2, Parts A63 and A65 are shown sort of sitting there with an arrow pointing 'here'. Part A63 should be attached to the back of A65 first, and the assembly then attached to the hull.

There are two small bumps molded into N12 and N13 that impede the fit of the front hull armor (Part B4) (see picture). I shaved these bumps off to get the armor to seat correctly.

You might as well remove the four prominent tabs, two on each side, from the main hull now (see picture). The instructions don't show this but the fenders and upper hull won't fit otherwise.

Remember to fill in the holes in Part B4 as shown unless you intend to attach a run of spare track links across the front hull armor.

In Step 3, the instructions don't tell you how to orient the two different (sided) bogies on the hull. Just be sure to install them so that the small box (Part A48) is on the side closest to the front of the vehicle.

Aside from these small issues (mostly with the instructions) the overall detail, fit and engineering is excellent.

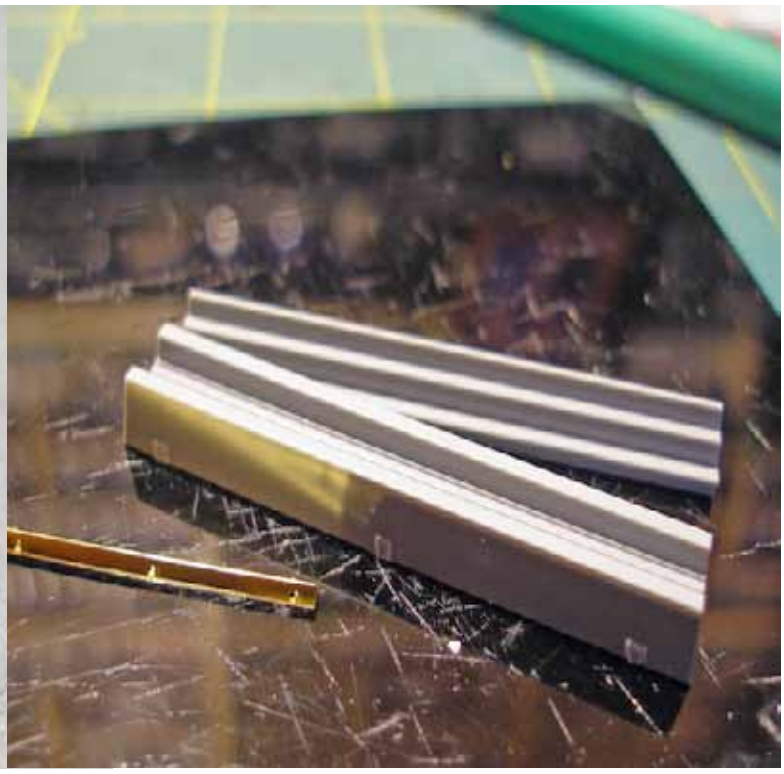
The Track

I decided to assemble and attach the track prior to adding the fenders. The L/70 comes with Dragon's excellent individual-link Magic Track, a good choice for this vehicle since it is easy to add 'track sag' if desired. The links come in two baggies; one in light grey plastic, the other in darker grey plastic to distinguish which side the track goes on. The instructions call for 99 links (per side), and darn if that wasn't exactly what I needed to show the loose sag common to German armored vehicles in combat. Impressive! Dragon did include about 114 per side, but some of that track can be used elsewhere.

I laid the links out in a single run, added a single drop of Testors (black bottle) liquid cement to each side of the center post of each link and let the glue dry for 45 minutes. After that the links came up in a single, easy-to-manage run. Starting with the bottom of the drive sprocket, I ran the track up and along the top, adding length between each return roller until I had the right sag, then down around the rear wheel and along the bottom back to where I started. I finished up by adding a drop of glue to every wheel surface the track touched and I was done. Snap.

Rear-Lower Hull and Fenders

The busy rear hull comes together in Steps 5 and 6. The two prominent exhaust stacks found on late-war Mark IV's require that you snip, bend and glue PE – unusual for Dragon; normally a plastic alternative is provided. The pipes won't fit without it (see picture). Additionally, I had to open up the two holes on Part N18 to make the stacks fit flush with the rear plate. Once



installed, however, they look pretty sharp.

There is a substantial box-end wrench that is shown in the image attached to the 'G' fender at the rear of the vehicle, although how it got there is a mystery. Checking the parts map, it appears to be Part H6.

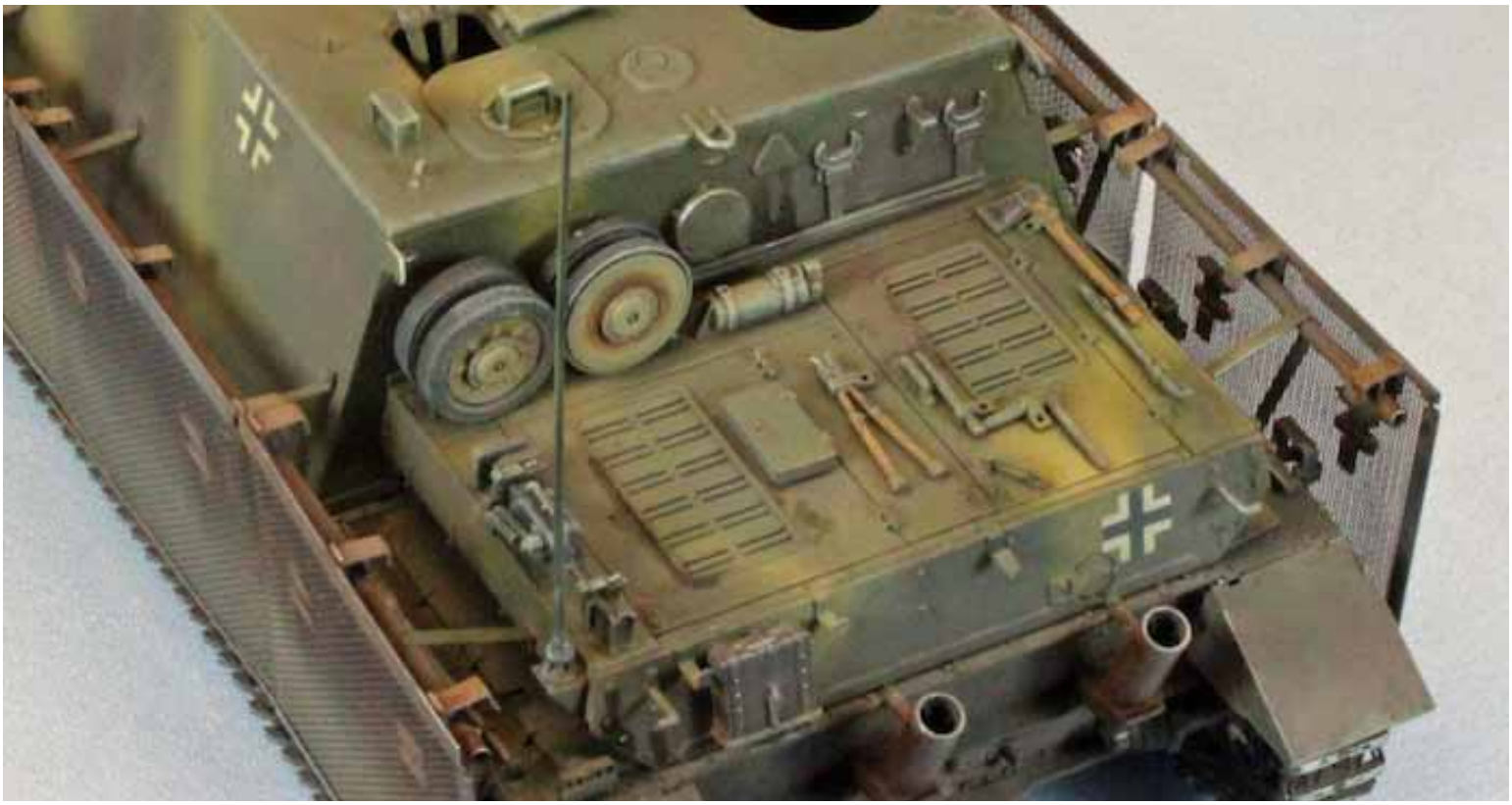
The placement of the two air intake covers (Parts P1 and P3) in Step 6 is vague and since they cover up a lot of nice detail on the rear fenders, it's important to get them right. I suggest you wait until Step 15, when the intakes are in place to see exactly where to put them.

The design of the fenders works well with the lower hull, although the fit in the back is problematic. I had to snip a tiny protrusion off each fender at the back before they would seat flush with the hull. Once that is done, I suggest you start from the back and fit forward and you shouldn't have any problem. I commend Dragon for revisiting this tricky procedure and improving it with each new kit.

Front-Lower Hull and Front Deck

I've been through the bric-à-brac assembly of the track links across the front hatch of the Mark IV several times, so I am familiar with the procedure. This time, however, I believe that something went sideways at Dragon. The three links from the sprue (Parts Q1, Q2 and Q3) won't fit with the three (right or left side) links from the baggie. Looking across the internet I can't seem to find a single example of this vehicle sporting this particular run of track, so perhaps I'm not the first one to come up against this issue. I like the look of a busy front-end to the Mark IV, however, so after a little surgery on several links I found a way to add the run anyway. I really like the detail added by the six tiny but visually-engaging brackets that hold the track run in place.

I exercised the option in Step 8 to add an additional run of 10 spare track links across the lower front hull, securing them with two crossbars from the unused parts included in the kit.



Later, in Step 15, the barrel travel-lock will be placed over the spare track run. There are no attachment points for the lock – I had to simply lay it across the hull-mounted hardware and drop some glue on it. Strange.

Rear Deck

If you want to use the 14 pre-drilled holes to attach a variety of equipment and tools you will need to open them up – the instructions don't tell you this. The completed jack assembly is shown hovering in mid-air – this should be attached to the four tiny rectangles molded into the port side of the deck. I really like this version of the jack - Dragon keeps improving how these are engineered for assembly - and I like that as well.

Normally in Dragon kits you are provided with several fire extinguishers to choose from. Only one, however, comes in this kit and (unfortunately) it is the wrong design. There are two (female) holes in the deck and two similar holes in the extinguisher (no male posts) so I just sort of put it down 'there' with enough glue to hold it in place.

In Step 10, the picture shows two parts (P18 and P19) that do not match what I cut off according to the 'Parts Used' diagram. I dug through the pile of unused parts, found two that did match the instructions and used those instead. Now that it is done I don't really think it matters one way or the other. Both sets will fit and do the job. The parts shown in the Parts-Used diagram have more surface area to attach to the hull, and for that I think they will work a little better.

There are three pieces of PE that look like cable run brackets that can be left off until the end of assembly, which is what I did.

Casemate and Main Weapon

The top of the casemate includes several options to show periscopes, corner-firing guns and hatches – all well represented in the kit. I wanted

"This kit was a challenge, but I mean that in a good way."

to pose the round hatch open, use both periscopes and ditch the round corner-firing gun (the curling barrel (I thought) looked odd extending from the flat, angular casemate top).

The only problem encountered was the fiddly nature of the hatch hardware – a four piece assembly (Parts C38x2, C43 and C44) that never wanted to line up right. I ended up burying it in a blob of glue and letting it dry overnight. I felt the placement of the scissor periscope stanchion (Part C51) did not allow the periscope to extend high enough above the surface of the casemate so I cut 1/8th inch out of it before gluing it to the inside of the casemate. That seemed to do the trick. I don't know why armor periscopes are always molded in clear plastic (??) – most modelers will paint them and use aftermarket lenses or just a drop of Future to represent the glass optics. I feel the detail would be rendered so much better if they were made of normal plastic.

The main weapon and all of its detail came together and fit perfectly – Dragon did a great job here. The gun (and attached periscope) can be made to slightly traverse from side to side and up and down, but I glued everything down just to keep it from drooping later on when it hits my display case.

In Step 13, the parts labeled G33 and G34 in the instructions

are actually parts Q38 and Q39 on the sprue.

The rear of the casemate is attached to the rest of the box via beveled edges that don't want to align easily – they kept sliding without anywhere to fit or grip. I felt the design should have allowed for some kind of attachment point here.

Finally, there are two types of photo-etch (21 tiny pieces in all) that are supposed to adorn the sides of the casemate. I tried one of each type and decided that I would talk the talk here and let someone else walk the walk. Good luck.

Stanchion hardware and Schürtzen

The slightly complicated array of stanchion braces and piping that support the side skirts fit perfectly and were a breeze to install. Dragon has really set the bar with their engineering here, a process which has been a challenge with the late Mark IV's from (some) other manufacturers. I recently finished Dragon's latest PzKpfw IV H (Kit 6611) and that, too, made a simple task out of this complex problem. Good job.

Now to the schürtzen… In my opinion, the wire-mesh stand-off armor skirts (or schürtzen) on the JagdPanzer IV L\70 (A) are one of the most unique and appealing features of this vehicle, so, regardless of difficulty, I was going to get the job done no matter what it took.

Dragon includes a handy PE bending tool that perfectly bends the brass frames that edge the top and bottom of

each mesh section. This tool worked so well in fact that I was sorry to see it head off into my spare parts box after I was done. Aside from that one bright aspect of the task however, the rest required time, patience, and a little luck.

While the Schürtzen design promise is there, the engineering reality falls short. Each skirt is held in place using a pair of three-part assemblies (one plastic part in back and two small PE brackets in front). Once you work the slightly bowed wire mesh so it is flat, the problems start with the density of the mesh itself. The four plastic (male) connecting points for the two PE parts cannot be pushed through the mesh from behind, and it is nearly impossible to drill holes through the mesh that line up correctly to fit the plastic connecting points, that is, without destroying the mesh. I had to switch to Plan B.

For each assembly, I decided to shave off all the connecting points and glue all the parts to both sides of the mesh to look as if they were connected, and treat the delicate skirt sections with kid gloves from then on. Trying it on a single section seemed to produce satisfactory results, so here's the approach I took:

1. I started by using a fine black Sharpie ink pen to mark up the 1:1 instruction sheet drawing itself to make a paper template, filling in the PE brackets with the dark ink. (I chose the lower option of the two in Step 16). [Careful – these images can lead you astray if you aren't careful. Refer to 'Things to consider before Starting' to see what to watch out for.]

2. Next, I took a piece of mesh, worked it with my fingers until it was flat, and laid it on the matching section in the instructions.

3. I traced the placement of the PE brackets on to the surface of the mesh section using the Sharpie.

4. I then bent and attached the PE framing for the section using the handy two-part bending tool Dragon included with the kit (works great!). I bent each piece once, troweled in some extra-thick super glue along the center line, slid it over the mesh,

carefully crimped it with tweezers, and then pressed it under 100 tons of scale weight (about 10 pounds of scrap steel chunks I have). I repeated this procedure for the other end of the mesh. (See picture).

5. Next I applied the super glue to the four black Sharpie marks on the mesh and dropped the PE parts (MA32), carefully pushing them into the mesh until I could see the glue ooze through the two holes on each piece. That way I could be pretty sure they were going to stay put.

6. Once dry, I shaved the connecting points off on the two plastic parts (T10) and glued them to the other side of the mesh, lining them up with the PE parts.

7. The last step was to glue the upper (plastic) attachment hardware (Parts T25) to the back of the mesh section, making sure to line each one up where it's supposed to go by test fitting each section to the horizontal pipe running along the side of the vehicle. There are small detents on the pipe that will receive this hardware.

8. Finally, I did not see any practical way to attach the front plastic triangular sections (Parts T8 and T17) to the mesh sections so I left them off.

Once I had completed all the sections I intended to install on the vehicle, I carefully set them aside to dry on a cotton towel that I could use to hold them during airbrushing later on.

Painting and Finish

I decided to finish my vehicle using the scheme in the instructions as a starting point. The only items I left off the completed model for painting were the antenna, the two spare wheels, the barrel travel lock and the wood block. These were painted separately and attached just before weathering. Painting and finishing followed these steps:

(Note: I thin all Tamiya paint and primer products 50:50 with Gunze Mr. Color Leveling

Thinner, which has its own retarder for airbrushing. If you haven't tried this thinner with Tamiya paints, you really should. I use a Pasche-H Single-Action airbrush, Number #3 tip, at 20 lbs. pressure for everything. I use Vallejo's own thinner for all Vallejo paints.)

1. I started by airbrushing a primer coat of Gunze Mr. Surfacer 1200 to give the plastic and PE some grip for the following coats, followed by an overall pre-shade coat of Tamiya NATO Black (XF-69) – this would fill in the dark recesses and provide the shadows near the flat surface edges, adding depth to the camouflage coats to come.

2. Next came the first camouflage coat consisting of a mixture of Tamiya Desert Yellow (XF-59), Deck Tan (XF-55) and Flat White (XF-2), which results in a color that is close to Tamiya Buff, but a little more yellow than brown. I sprayed it carefully, allowing a hint of the black to show along the edges and behind the pioneer tools, etc.

3. Next I applied the second (mottled) camouflage coat using Tamiya Olive Green (XF-58), following that with spots of Tamiya Flat Brown (XF-10). I also gave the schürtzen a dusting of Flat Brown, laying the ground work for some rust washes and pigments applied later.

4. Once the camouflage coats were dry, I hand-painted the areas that would receive decals with Future.

5. While the Future was drying, I painted the wooden portions of the pioneer tools Vallejo Acrylics New Wood and all the steel parts Tamiya Metallic Grey (XF-56). For Vallejo paints I mix a tiny bit of Vallejo Slow Dry and water with each color until it flows smoothly off a red sable brush.

6. To give the wooden parts of the tools more depth, I brushed on a little Mig Wash Brown oil paint straight from the tube and let that set overnight. Don't let this paint leach out its oil beforehand, like you would when you are using oils for dry-brushing. The oil helps it stay workable. In the morning I carefully removed most of the oil paint using a brush dampened with Mona Lisa, leaving the areas near

the latches and metal parts darker than the center of the wooden shafts. Finally, I let a little black wash puddle up on the horizontal surfaces of the metal axe head. When dry, this gives it a convincing look of used steel.

7. I applied the decals using the Red and Blue Micro Sol/Set system without any problems. After I was sure they were dry, I hand-brushed another layer of Future over each decal to seal them between layers of acrylic.

8. Next, while I still had a flat coat on the model, I applied several filters to enhance the colors. I first gave the whole vehicle a filter of MIG Wash Brown. I then gave the jack and spare track runs a filter of MIG Black. I applied a filter of MIG Dark Rust to the rear exhaust filters, the schürtzen racks and the schürtzen itself. Finally, I used several filter applications of Paynes Gray and Dark Rust on the track sections. I heavily thin all of my washes and filters with Mona Lisa White Spirit.

9. I then gave the vehicle a pin wash using Mig Dark Wash (aka Raw Umber) straight from the bottle, paying special attention to the welds, buckles, pioneer tools, wheels etc.

10. Before applying a flat coat, I dry-brushed the vehicle to lighten things up a little, using Mig Abt155 German Three-Tone Fading oil paint that I let sit for a while on cardboard to leach out as much of the oil as possible before applying it the protruding detail and wheels.

11. I followed this with a 'road-dusting' coat of Vallejo Model Air Light Brown and then shot the whole vehicle with Vallejo Flat Varnish to kill any shiny spots still remaining. I cut each of these 50/50 with Vallejo Airbrush Thinner to improve flow.

12. Finally, I applied a light dusting of various Mig pigments, light earth tones such as European Dust and Dry Mud for the body and wheels, Dark Rust, Concrete, European Dust and Black for the track.

13. I attached the schürtzen and antenna and took out my camera. This little dude was done.

Conclusion

This kit was a challenge, but I mean that in a good way. There are many intricate parts – schürtzen, periscopes, hatches, track… but nothing that got in the way of a thoroughly enjoyable build. Dragon keeps on improving how their kits come together, and that is one thing that really sets them apart.

It's easy to conclude from this review that many parts do not fit, or that the instructions are not up to the task, but doing so would be a mistake. For every part that doesn't quite fit, there are 100 that do, and they fit perfectly. There are a lot of things that make up a Dragon armor kit, and the overall design, engineering and attention to detail are beyond reproach. I always look forward to building new armor models from Dragon.

I would like to thank Dragon Models and Dragon USA for providing this kit for review, and to IPMS USA for giving me the opportunity to build it.