

M3A3 Bradley CFV

by Eric Christianson,
IPMS # 42218

Scale: 1/35

Company: Orochi

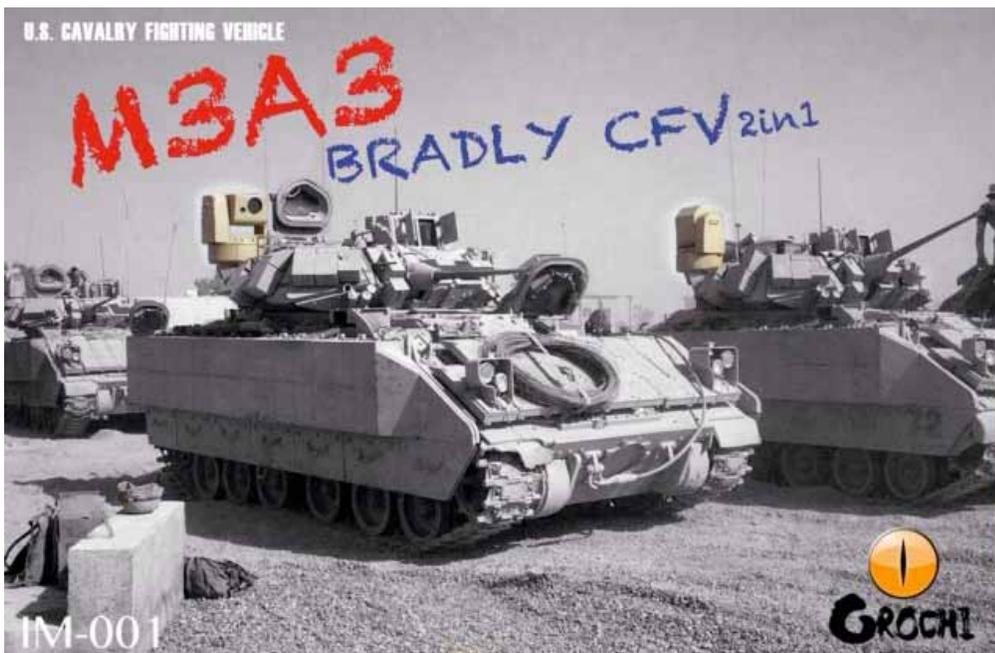
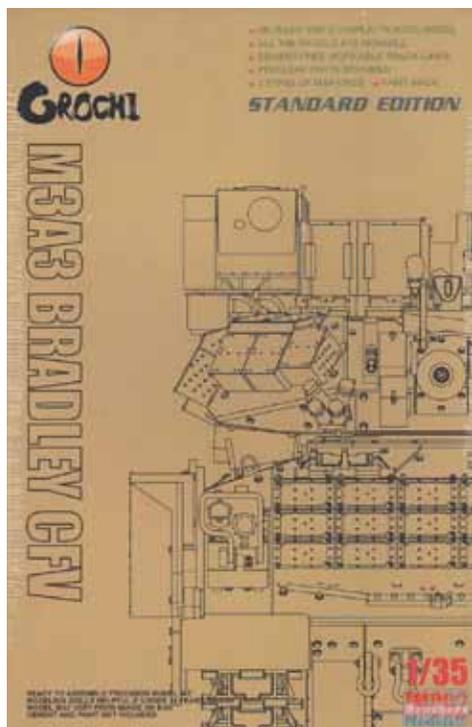
Price: \$64.99

Product/Stock #: IM002

Product provided by:
Stevens International and
Internet Modeler

Summary

In a market flooded with M2/M3 Bradley vehicles, new player Orochi, out of China, seems to have scored an ace with their new M3A3 Bradley. The kit sports many of the features of the higher-end manufacturers, but offers it at a much lower price – representing one of the best values on the market.



The contents of this box include:

- 6 sprues of soft, tan-yellow plastic, individually wrapped.
Some minor flash in places.*
- Separate upper and lower hulls, individually wrapped*
- 20 sprues of individual-link track made of hard black plastic*
- 2 sprues of clear plastic parts*
- 1 sprue of poly-caps allowing removal of the wheels for painting and weathering*
- 1 small sheet of photo-etch containing grill covers and other detail*
- 1 small brass painting template for wheels and tread*
- 1 small sheet of decals*
- 1 poly-urethane flap that fits over the base of the gun*
- 13 page booklet of cad-illustrated instructions with 31 steps, printed in black and white ink.*

The biggest surprise is the track – Orochi has found a way to provide truly snap-together individual-link track that stays together. The track is not some unusual variety that lends itself easier to assemble this way, but standard, run-of-the-mill U.S.A. AFV track. Innovations

such as this and value-pricing will motivate more modelers to try building armor.

Background

The M3 Bradley Cavalry Fighting Vehicle (CFV) is an American tracked armored reconnaissance vehicle

manufactured by BAE Systems Land and Armaments (formerly United Defense) based on the Bradley Fighting Vehicle family. The M3 CFV is used by heavy armored cavalry units in the U.S. Army. The M3 Bradley CFV is very similar to the M2 Bradley IFV (Infantry Fighting Vehicle) and is fielded with the same powerful two-man 25mm Bushmaster Cannon turret with the coaxial 7.62mm machine gun. It only varies from the M2 in a few subtle ways and by role. The M3 is classified as an armored reconnaissance and scout vehicle and does away with the firing ports found in the M2 series. The M3 also carries more TOW missiles as well as more ammunition for its 25mm and 7.62mm guns.

The Bradley family as a whole was originally intended to support the M113 Armored Personnel Carrier (APC), but ended up replacing it altogether. Today, the Bradley is fielded in conjunction with the M1 Abrams series of main battle tanks and often accompanies infantry squads into combat. In the 1991 Persian Gulf War, Bradley's and their powerful 25mm cannon / TOW anti-tank missile combination destroyed more enemy tanks than the M1 Abrams. Only three Bradley's were lost to enemy fire, however, at least 17 were lost to friendly fire. Improvements to the Bradley family have



included enhanced identification features, as well as anti-tank missile countermeasures (for first generation wire-guided missiles only) and improved armor protection in the form of ERA.

The decals are very thin but in perfect register. There are no color schemes provided other than what is printed on the side of the box. Paint callouts for Tamiya Acrylic/Lacquers are included in the instructions.

The benefit of having very few pour-tabs and knock off pins on the sprues is slightly off-set by some pretty thick sprue-connection points in places.

Things to consider before starting

Orochi thoughtfully provides the rubber portion of the wheels as separate parts to help with painting and finishing. If you choose to paint them separately, however, you will need to completely assemble, paint and mask off the lower hull before continuing on with the upper hull, because once the upper hull is in place you will not have access to wheels and/or the track. I did not paint them separately in this build.

Decal placement is identified in the instructions throughout the build – I suggest you keep



track of where things go as access to some of the areas is difficult in the later stages of the build.

Orochi includes a 'Read Before Assembly' page in the instructions. On this page you are shown where to place 22 bolts/rivets that you remove from Sprue A. They are small and require a deft touch to shave off the sprue and place on the surface of the upper hull and rear hatch.

There are many places in the build where the receiving 'female' divots that are supposed to receive the 'male' posts on parts, and are not deep enough for the task, leaving many parts standing proud of the surface. I suggest that you drill out the divots whenever you encounter this before applying glue.

The large storage basket at the back of the turret needs something, so I went to my stash of Value Gear products for things that would fit in there. Likewise for the antenna – there are none included in the kit. I used the excellent products put out by Orange Hobby for those.

The Instructions

The instructions are excellent and show a lot of care has been taken by this new company to get things right. I only found one oddity: there is no three view drawing or color schemes provided - several times I had to resort to the internet to find where and how parts should be placed.

Construction

Lower Hull and suspension

The build begins with the lower hull and suspension, and this is where you encounter your first (and just about only) significant issue. The small, nylon poly caps inserted inside the wheels in Step 2 end up causing fit problems in Step 4. They are used ostensibly to allow the wheels to be removable, but do not exactly fit the posts the wheels are inserted on. They fit, but something is preventing them from easily slipping on – most likely the poly caps are too small for the cavity they sit in and can end up just off center when you sandwich them between the two wheel halves. Whatever the case, the posts, as designed, are not strong enough to withstand wear and tear – they will easily bend and even break before you manage to get the wheel on. What's more, the poly caps inside the drive sprockets don't engage the posts at all.

I suggest that you leave the poly caps out; they create more trouble than they are

worth, and having removable wheels is of little value once the upper hull is attached anyway.

The fit of the tires over the wheels, on the other hand, is excellent and does not even require glue.

The Track

The track is assembled and attached in Step 5. The two runs of track in this kit are made of black, individual-link plastic parts that 'chunk' together, and hold remarkably well after connected. Take a link in your left hand and one in your right hand, slip the right hand link into the top of the left hand one and push the bottoms together until you feel (and hear) a solid 'chunk'. Do that 78 more times and you have a complete run. I had both runs done in about 20 minutes. What's more, careful removal of the links from the sprue even eliminates the need for clean-up, although purists might differ. In truth, the sprue separation points are hidden on the completed track. The toughest part was getting that

last link together while the run was on the model. I managed to get the first side done, but for the second side I decided to scrape off the tiny pins and glue the last link in place.

While this track is amazing, it will come apart if enough torque or pressure is applied, so I recommend hitting the runs with a little Tamiya Liquid cement once you have the track in place on the model. The instructions call for 79 links per side which is spot on, with 10 links left over. Great job Orochi!

Before moving on, I sprayed the lower hull and track with a layer of pre-shade black, followed by an initial camouflage coat of Buff on the wheels (see painting notes, below for specific brands). Once the upper hull is seated you will have very limited access to this area.





Upper Hull, Rear and Main Deck

In Steps 11 and 12, the placement of several parts (C1, C21) would have benefitted from a three-view image of the vehicle. In Step 14, the three prominent armor sections that adorn the front of the vehicle sit on a set of 12 vertically-arranged spacers and rely on numerous tiny bumps to line up – a task beyond my modeling skills. If I had a good overhead shot of this area these would

have been easier to place. The only overhead illustration included (for the rivet placement) curiously lacks any this detail?

If the little 4-part assembly at the top of Step 11 has you confused, you're not alone. I placed Part C36 where I thought it should go, and discarded Part C7. If you can make these parts fit where they are supposed to go on the hull, good for you!

Turret

The fit and finish of nearly everything on and around the turret was superb. Many of the smaller parts and assemblies looked complicated but ended up coming together perfectly – even the weird rubbery flap that covers the base of the main weapon. Normal hobby cement worked perfectly to secure it in place.



I painted the frame of the sectional shield around the commanders hatch without the glass in place. After dipping the glass in Alclad (See Painting section, below), I inserted it into the shield but waited to attach the assembly until the very end of the build so the clear parts would not be affected by airbrushing.

In Step 21, the placement of Part C44 as shown will impede the fit of the turret onto the turret ring of the main hull, so I left it off.

Orochi did not provide any content for the turret bustle on the Bradley, so I went to my

spares box for period-appropriate baggage to fill up the void, including, conveniently, the big blank spot where the (torn and destroyed) decal would normally go. If you decide to leave the storage area empty, note that several prominent and visible ejection pin holes on the inside of the bustle will need to be filled.

Painting and Finish

I finished the M3A3 in a basic, one-color desert camouflage scheme, preferring to highlight and accent the monochrome finish using filters and washes. The kit can be completely assembled before painting, save the antenna and armored glass sectional.

Primer and Pre-Shade

I started by airbrushing a primer/pre-shade coat of Gunze Mr. Finisher 1500 Black to give the plastic and PE some grip for the following coats, and to fill in the recesses and create a shadow effect near the flat surface edges, adding depth for the subsequent coats to come. I really like Gunze's new product – it goes on beautifully and it combines what used to be two coats of paint applied in two painting sessions all into one. I allowed that to sit overnight to de-gas.

Airbrushing Vallejo Model Color Paints with a (syphon-feed) Pasche H Airbrush

I used with Vallejo Model Color paints in my continuing transformation over to true acrylics. I went through a bit of experimentation up front, but eventually found them to spray beautifully once I dialed in the right setup and thinning ratio. First, I dialed the pressure up to 20-25lbs (Vallejo recommends 12-15lbs). I think the higher pressure is needed because I use a siphon-style airbrush (Pasche H) as opposed to a gravity-feed airbrush. Once I did that, the spray pattern evened out and I lost the scatter-shot look of the paint on the surface.

Next, regardless of what line of paint used (Model Air, Model Color, or Panzer Color), I found that adding a single drop of Liquitex Flow Aid and a hefty squirt of Vallejo Air brush Thinner to each cup worked well and (almost) never clogged. A Q-tip wetted with Vallejo thinner was kept nearby during my painting sessions for knocking off the tiny 'paint clod' that would form on the nozzle tip when minor clogging did occur.

Also – cleaning the airbrush became a must-do chore afterwards, which is a break from using other paints when I just blew some thinner through the brush and put it away.



On the flip side, Vallejo paints are odor-free and allow me swap my heavy, uncomfortable vapor mask I use with distillate-based paints for a simple painters (particulate) mask.

Camouflage

I followed the pre-shade coat with Vallejo's Model Color 70976 Buff, and then laid down a light coat of Model Air 71.075 Sand on the upper surfaces. What starts out looking yellow-green ends up as a nice pale yellow. I worked each color from the center of the panels outward to preserve some of each color showing through from underneath. Some parts I left the original darker yellow and some parts were nearly

ivory-white, depending on where I thought the sun would hit, achieving sort of a forced-color perspective.

Filters

I applied an overall filter of Mig Wash Brown while the surfaces were still flat, and used AK Interactive Track Wash on the track and a Mig 110 Black filter on the fenders, extra track links and the engine grills. I went back and added a second and third filter coat to specific areas to break up the monochrome surfaces. I thin all of my washes and filters using Mona Lisa Odorless Thinner, which will not affect underlying layers of paint.

Decals

Once dry, I airbrushed a coat of Future over the entire vehicle to set it up for decals. I applied the decals using the Red and Blue Micro Sol/Set system without any problems, followed by an additional layer of Future to seal them.

The decals were perfectly registered but very, very thin and thus prone to tearing easily. Orochi chose to show

the paint callouts and decal placement throughout the instructions instead of in a single section. The placement of the large unit number on the starboard side of the turret is not shown, so I put it where it could fit.

Pin Wash

I applied a pin wash of Mig Dark Wash (aka Raw Umber) straight from the bottle using a small red sable brush,

concentrating on the panel lines, recesses, buckles, on-board tools, etc.

On-Board Tools

(Note: For hand-brushing Vallejo paints, I put a drop of Vallejo Slow Dry and a drop of water onto an old CD and then single drop of all the colors I need. I mix the colors with the water and slow dry until the paint flows smoothly off a red sable brush.)





I painted the wooden portions of the tools with a mixture of Vallejo Panzer Aces New Wood (311), Old Wood (310) and (Model Color) German Cam Medium Brown (70822). 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 Paint Thinner, leaving the areas near the latches and metal parts darker than the center of the wooden shafts. I painted all the steel parts Vallejo Oily Steel. I then let a little Mig 110 Black wash puddle up on the horizontal surfaces of the metal axe and shovel heads. When dry, I think this gives them a convincing look of used steel.

Other details

I left the main barrel black from the pre-shade step, went over it with a silver quilter's pencil to highlight the

protruding parts, and then hit it with all the washes and filters as I went along. I think this gives it a convincing look in the end. I painted the lights Tamiya X7 Red and Tamiya Chrome Silver, and added a drop of Future when they were dry to suggest glass covers. I painted the backpacks and tarps (Vallejo Model Color) Buff and Canvas, liberally adding filters and washes using Mig Wash Brown and Mig Dark Wash.

Armored Glass

The M3A3 Bradley has a four-piece section surrounding the

commander's hatch that sports armored glass. Before adding the glass sections, I dipped them in un-diluted Alclad Armored Glass Lacquer, and let the paint wick off and dry before attaching them. I weathered this section separately and attached it at the very end of the build.

Road Dust and Final Assembly

Finally, I applied a 'road-dusting' coat consisting of Vallejo Model Air Sand (Ivory) (71.075), followed by a coat of Vallejo Flat Varnish to kill any shiny spots still remaining. I cut each of these 50/50 with Vallejo Airbrush Thinner and a drop of Liquitex Flow Aid to

improve flow. Once everything was dry I dusted some Mig Russian Earth and Black pigments on the sides of the armor here and there, as well as the track to rough the visible surfaces up a little.

I attached the antenna and the armored glass sectional and this busy little guy was done!



Conclusion

The M3A3 Bradley was a lot of fun to build, and for the price, which I have seen heavily discounted, an unbelievable value. I think Orochi did an excellent job of translating the busy look of a modern U.S. AFV into this scale representation. A perfect kit would have included stowage gear for the turret bustle and a three-view drawing but that kit might have cost more as well. I think what you get in the box is a good compromise, and a great value.

The track is magnificent. Purists might find inaccuracies and opt for after-market replacements, but once all the paint and pigment is applied, who's to know? The easy snap-assembly of the links will attract new armor modelers to the fold, and there's nothing wrong with that.

There are design issues with some of the assemblies, and the instructions could use some rework with better angles in the drawings. That said, I can

recommend this kit to all levels of model builders. If you go slow and follow the suggestions above, you should be able to have a lot of fun building it.

I would like to thank Orochi Models and Stevens International for providing this kit for review, and to Internet Modeler for giving me the opportunity to build it.

