

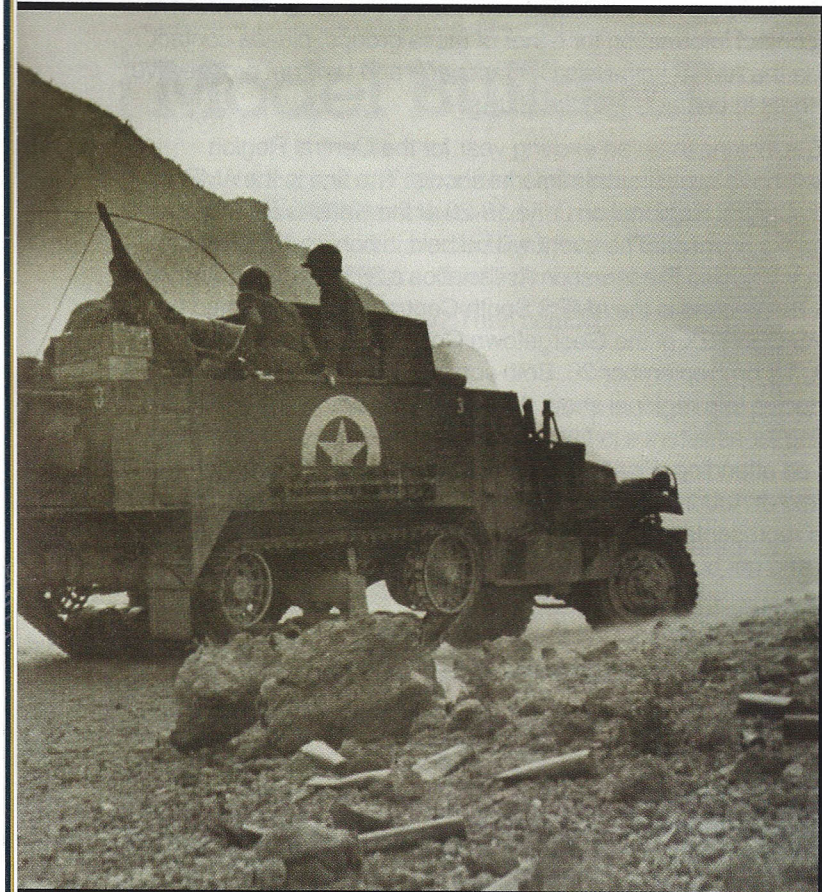
M3 75mm GMC halftrack

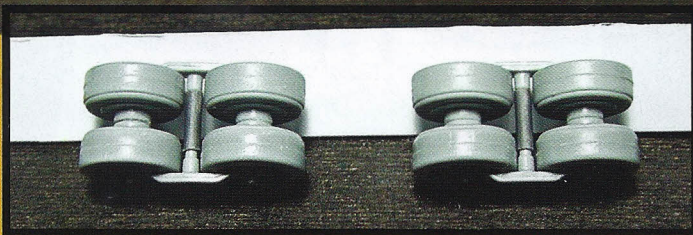
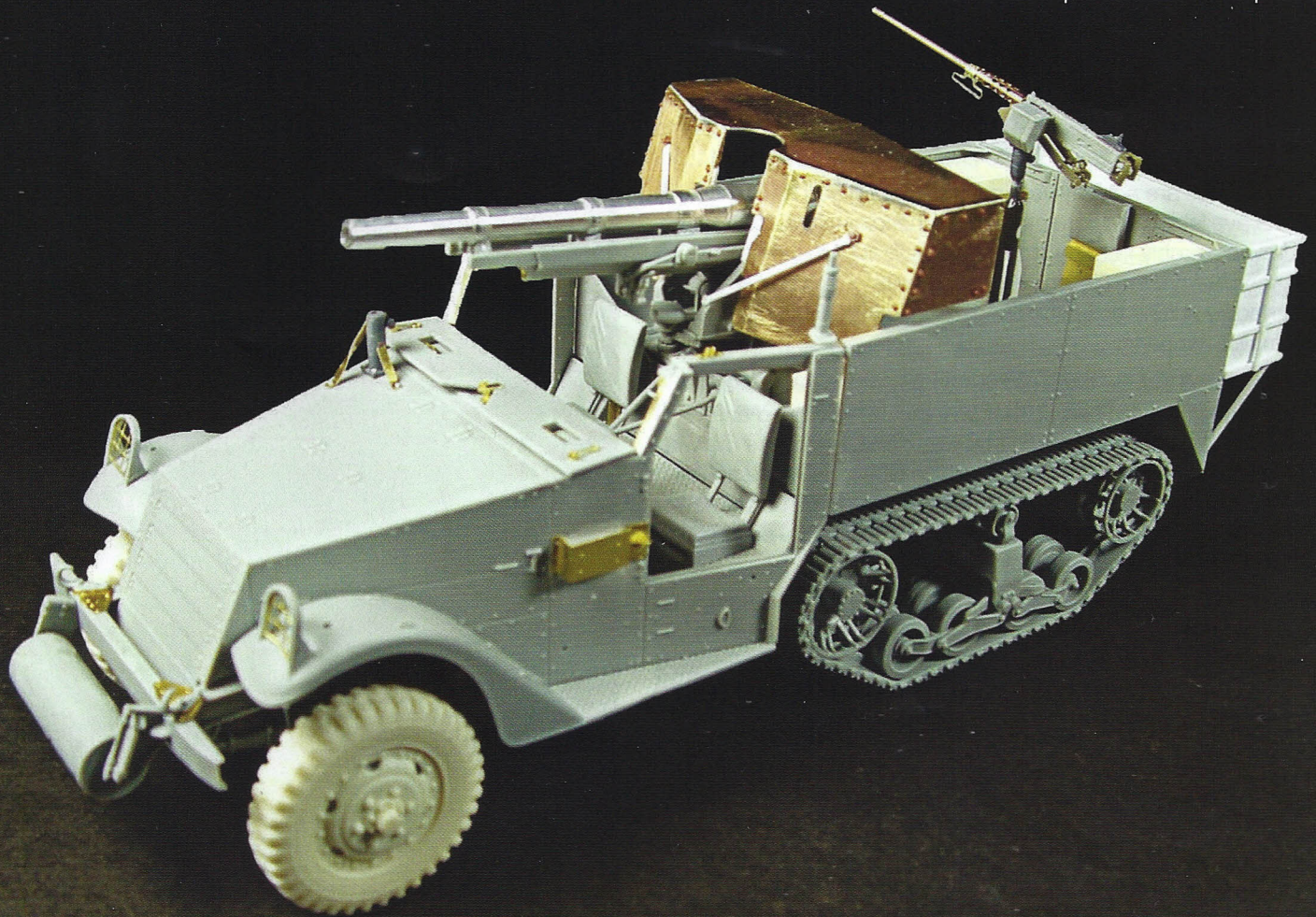
by David Black

In September 1943, the US Army's 1st Ranger Battalion, also known as 'Darby's Rangers' landed at Maiori, Italy and charged 12 miles inland to seize the Chiunzi pass overlooking the Plain of Napoli and the German Army's rear. They had four M3 75mm GMC halftracks with them for support. These vehicles would pull up to the crest of the pass, fire several rounds at German targets and then retreat back down the pass before German artillery could fire back.

Ever since Dragon released their M3 75mm GMC Halftrack and Archer Fine Transfers produced decals for the Ranger vehicle, this conversion has been on my list of 'to-dos'. I used the Dragon kit, Archer Fine Transfers decals, Griffon Model M3 75mm GMC detailing set and Hussar tires for the build. There were also lots of white plastic and parts from the scrap box used.

As references, I found five photos in LIFE Magazine of the #3 vehicle. As far as I know, they are the only photos of the vehicle. The photos are the normal black and white type and quality from WWII. Some details were hard to determine and others required artistic liberties.





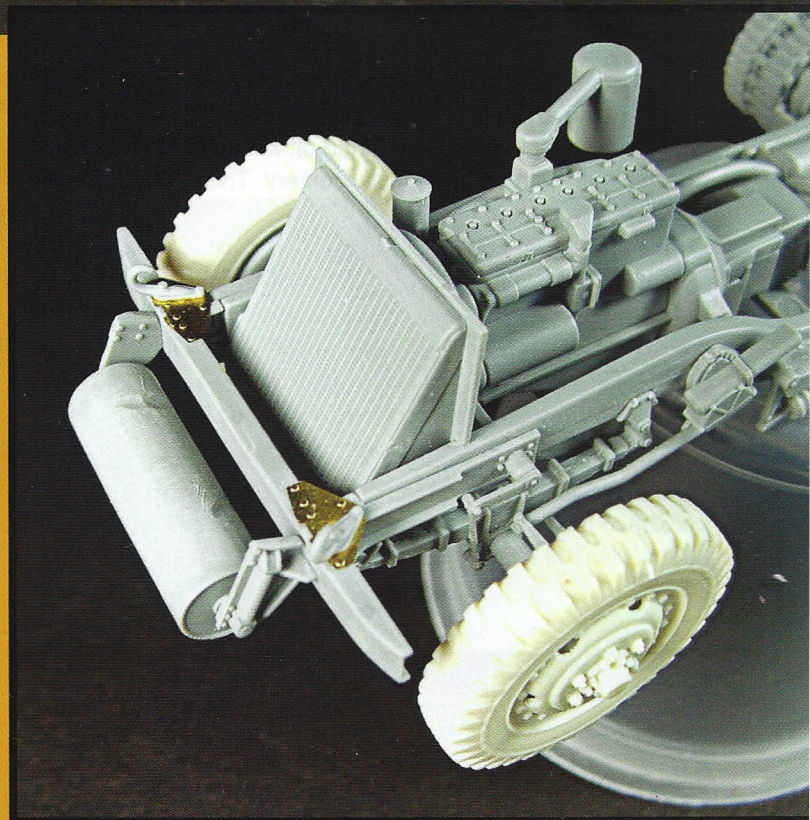
The model was built in three sub-assemblies: 1) chassis 2) driver's compartment (including engine) and 3) gun compartment.

Chassis

Steps 1 through 7 were built according to Dragon's instructions. I attached the photo-etched brass exhaust pipe mount to the appropriate bogie assembly. Hussar M3 wheels were substituted for the kit ones.

In step 6, I assembled the roller as directed, with the exception of sanding off the roller mount plates on the front of the bumper as they were not there on the real vehicle. Note: be sure to shorten the locator pins on the roller mounts when you do this as otherwise they will stick out from the bumper.

Axles and bogie mounts were attached to the chassis frame per the instructions. The one modification I made was to cut short lengths of Evergreen plastic tubing and then place them between the bogie wheel frames. I did this because the two posts on the frames do not meet well and therefore are difficult to glue. The addition of the tubing allows a better fit.



The Dragon kit comes with the later-style double idler spring. The Ranger version had the single idler spring and so this was scratchbuilt. I used photos from the Hunnicutt book 'Halftrack' for reference.

The springs are actually very easy to make if you have the parts available. They are made from the idler wheel tensioning screw assembly from an old Tamiya halftrack kit, the spring assembly from the Dragon kit, copper wire and plastic rod. I started by cutting down the Dragon kit springs. Then I reassembled the parts.

Next I drilled out the ends (shown by arrows) to fit the plastic rod. I cut off the rod part so that only the nut remained and glued it to the bolt/hub. Once that was done, I wrapped the wire around another piece of the same size wire to form the spring. After measuring and cutting the rod to length, I cut down the spring to fit. Be sure to use a metal file to flatten the ends of the spring for a more realistic look.

I did not do anything extra to the motor except to assemble it per the instructions since I planned to have the hood closed. That completed the chassis, so now I moved on to the cab.

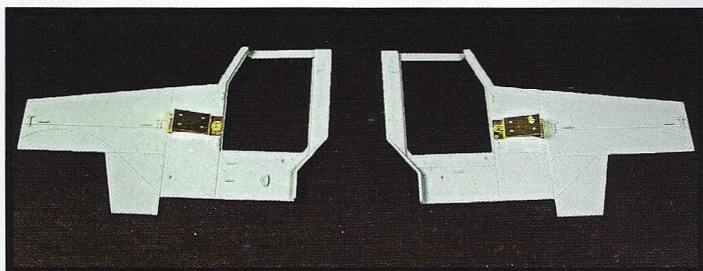
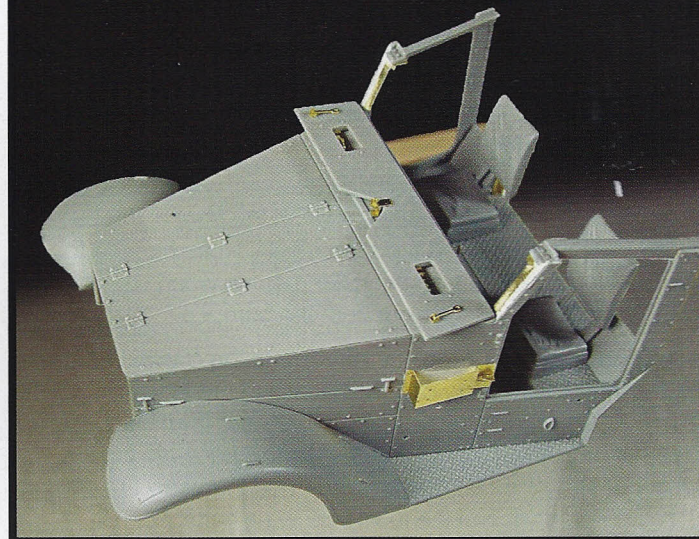
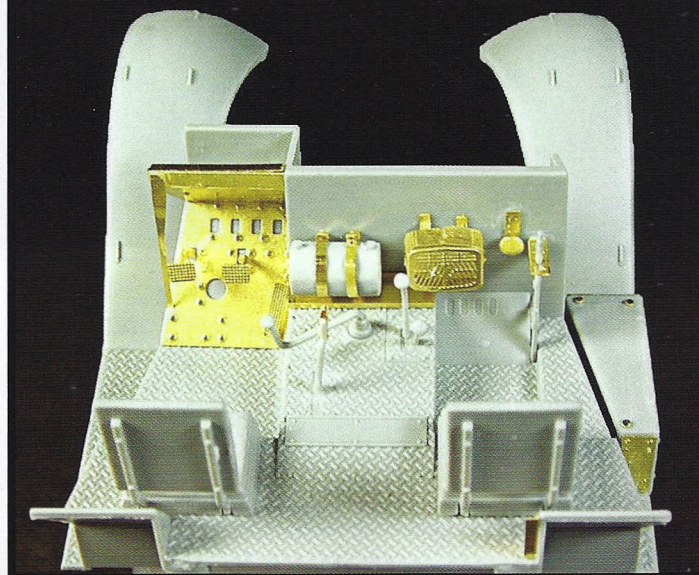
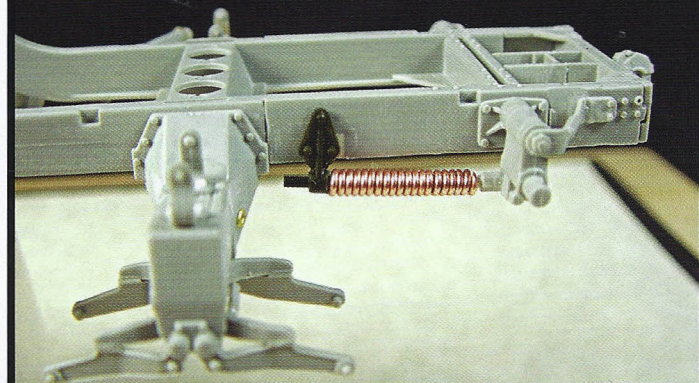
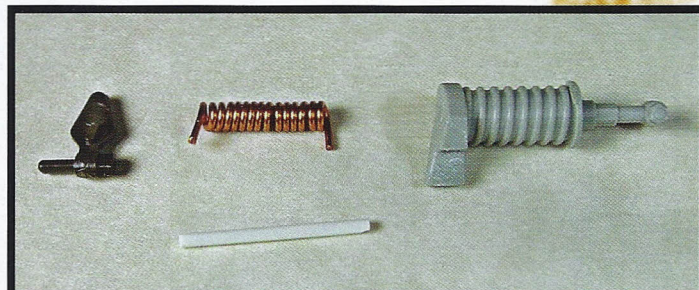
Cab

The cab required lots of photo-etched brass. The floorboard on the driver's side was replaced and pedals added. The water tank, heater and dashboard were converted. The fire extinguisher mount was added. Various photo-etched brass parts were added behind the passenger's seat and under the floorboard.

I removed the molded on gas can mounts and replaced them with the photo-etched brass ones. I had always dreaded this task, because it seemed I would take too much off, including rivet and other detail. This time I used extra special care, took a longer time and did a much better job. The holes were filled with plastic sheet and then finished off with Squadron white putty thinned with Testors plastic cement. This makes the putty much easier to work with.

Next, I started on the radio. This kit does not come with one but I went to the scrap box and found a radio from another Dragon kit that I had built previously. It was modified to be realistic and the photo-etched brass radio mount was used. It was mounted between the two seats as it seemed to be the appropriate location according to my various references.

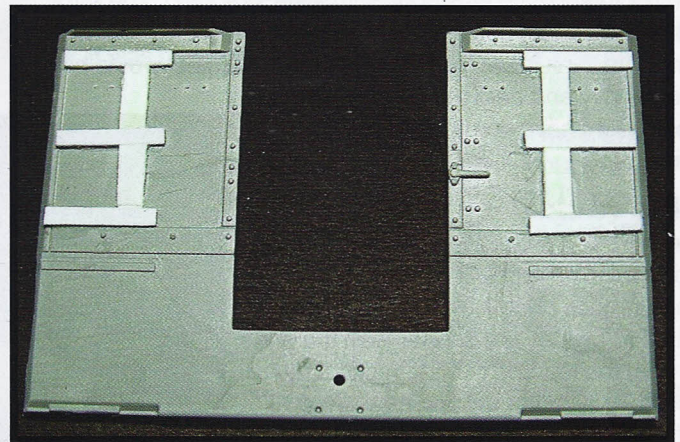
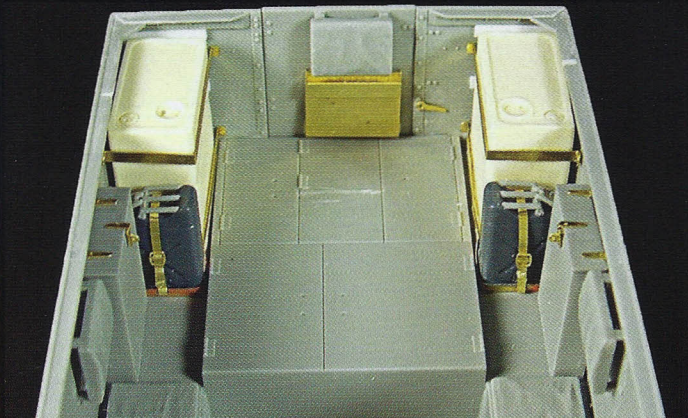
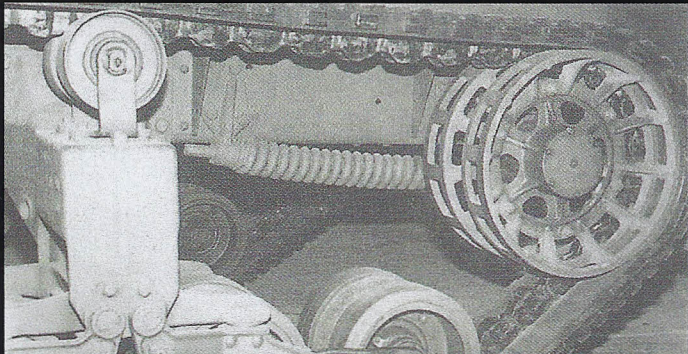
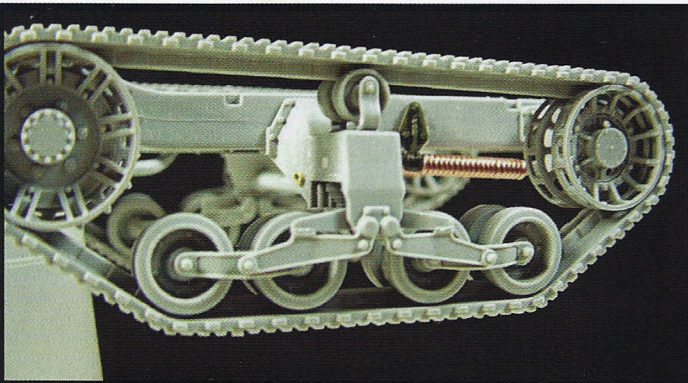
The cab was finished now and the tools, dashboard, gas cans and doors were added after the initial painting. This was because I found it easier to paint some things before they were attached to the finished model.



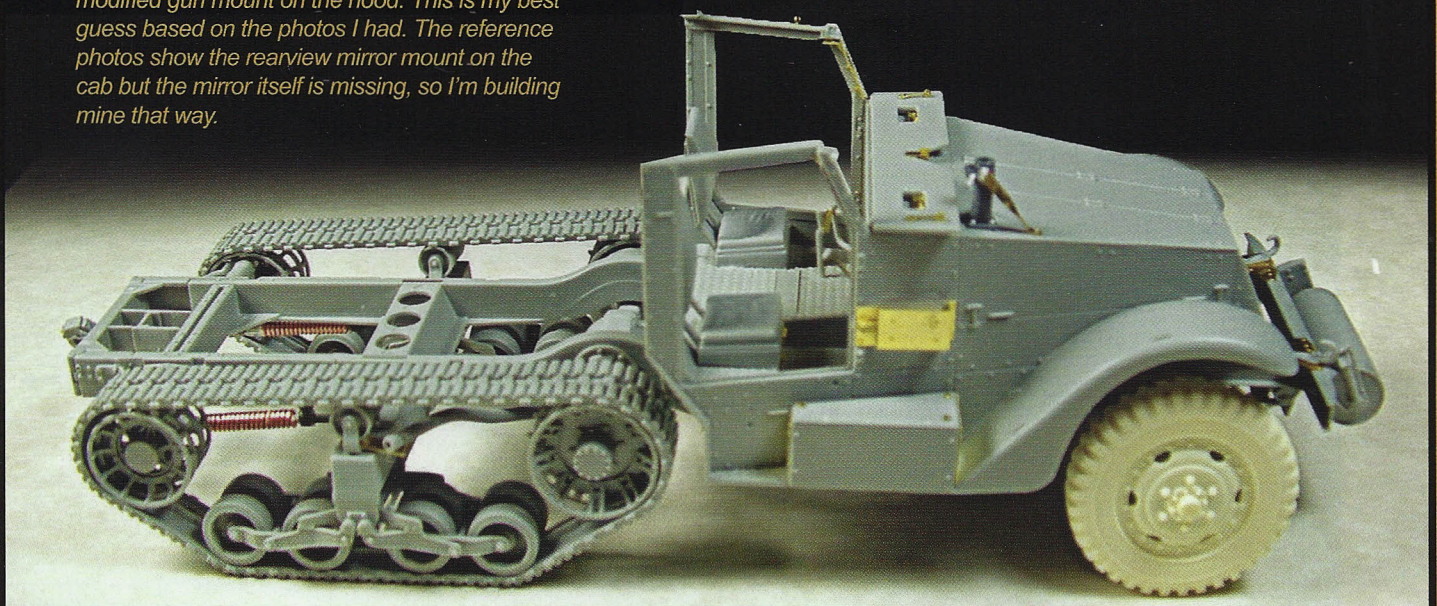
Gun compartment

I expected this to take the longest since it is by far the most complicated in terms of photo-etched brass and scratchbuilding. I have included dimensions of the things I modified or scratchbuilt whenever possible.

The very first dilemma I encountered was the rear compartment panel. Since the Rangers added a storage bin on the back, I knew I had to remove all of the molded on items including the two stowage boxes and the bucket but I concluded that it was a lot more work than I wanted to do so I came up with an idea after looking at my Dragon M3A1 kit. It has two rear panels, one for the M3 and one for the M3A1 option. Since I had two of these kits, I decided to use the M3A1 rear panel for my M3 75mm GMC build. The only problem was adding the gas tank mounting structures on the inside of the panel, which I did by using the M3 75mm panel as a guide.



The cab is dry fitted to the chassis. Note the field-modified gun mount on the hood. This is my best guess based on the photos I had. The reference photos show the rearview mirror mount on the cab but the mirror itself is missing, so I'm building mine that way.



I decided to use the lower part of the rear compartment seat that is provided in photo-etched brass as it is a better representation than the kit version. I also used replacement resin gas tanks from an old Trakz M3 75mm conversion. The walls and floor were assembled and then the gas tanks, stowage boxes, seats and water cans were installed. I also filled the locating holes for the cleaning rods on the top of the compartment sides. When dry fitted together the three major sub-assemblies finally began to look like a halftrack.

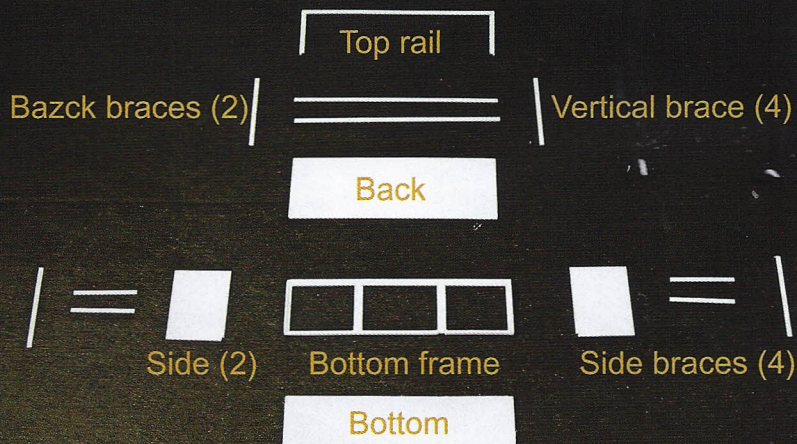
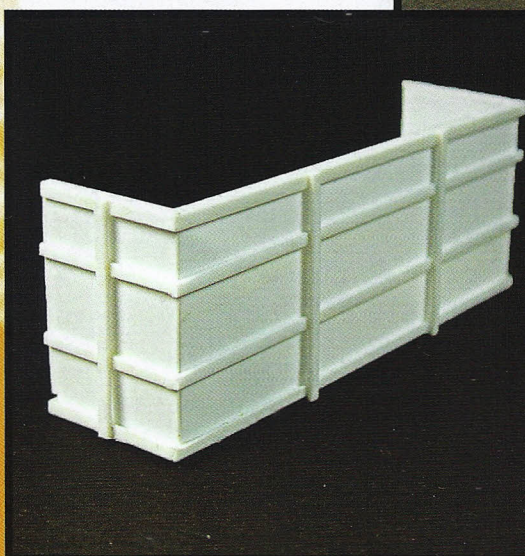
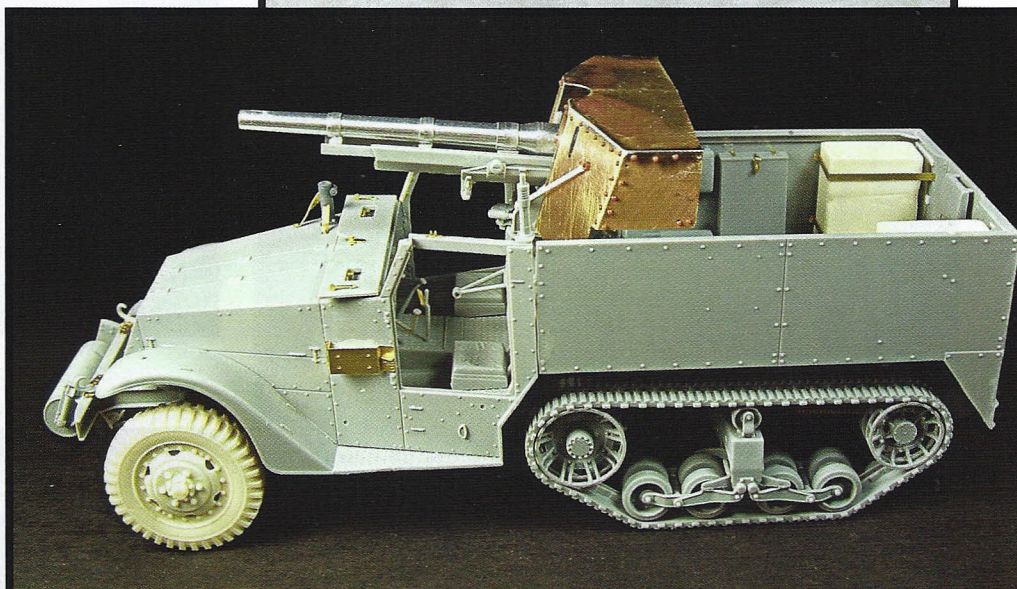
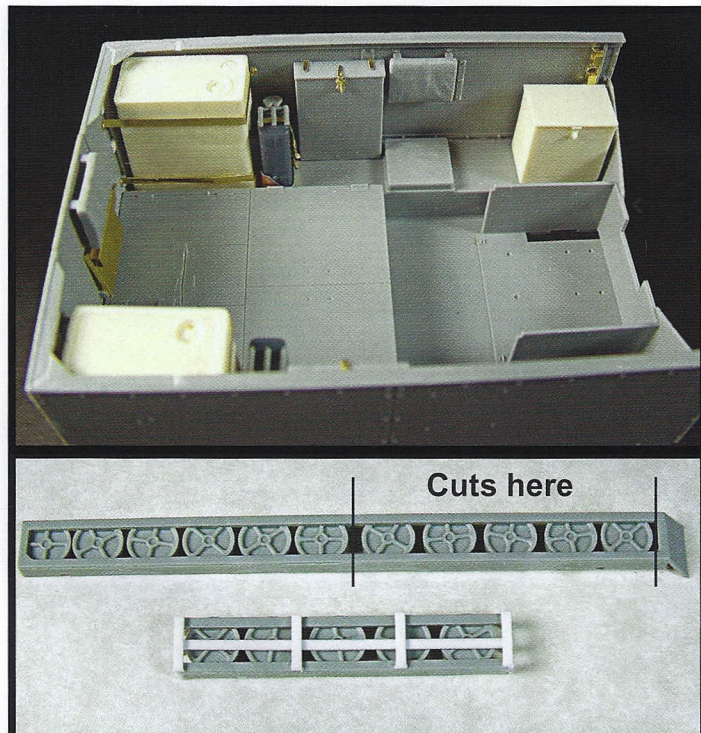
Rear storage bin

The large stowage box on the back of the vehicle was entirely scratchbuilt. I started out by taking measurements on the model and then studying the reference photos. My copies of the photos were not that good and when I tried to enlarge them, they became very grainy. In addition, they are very dark and therefore detail is hard to see. What I concluded was my best guess based on that information.

I assumed (and I know what you are thinking) that all framing and ribbing/bracing was done with steel strapping. The back, sides and bottom could have been steel sheet or wood sheets. I prefer to think it was wood sheets because steel would have been heavy and hard to come by. The wood might have come from packing crates etc.

Mine racks

The next side project was the two side-mounted mine racks. It was obvious from the reference photos that they were not standard as they are shorter than the ones on both the M2 and M3 halftracks. They also have a center rail and more vertical supports. I took the racks that were in the kit (marked 'not to use') and cut them as needed. Then I added the center rail and the vertical supports.



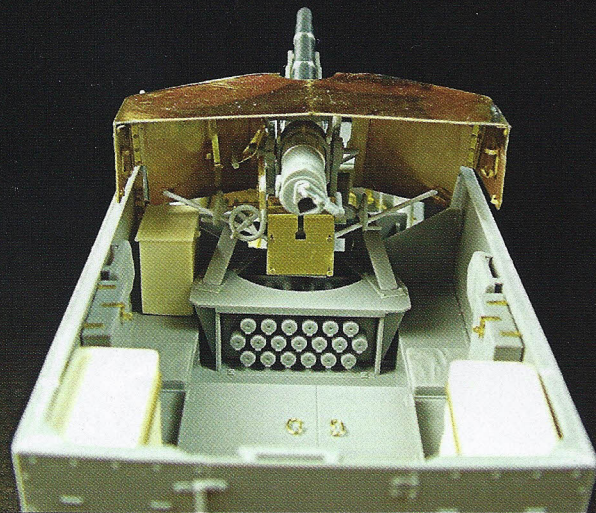
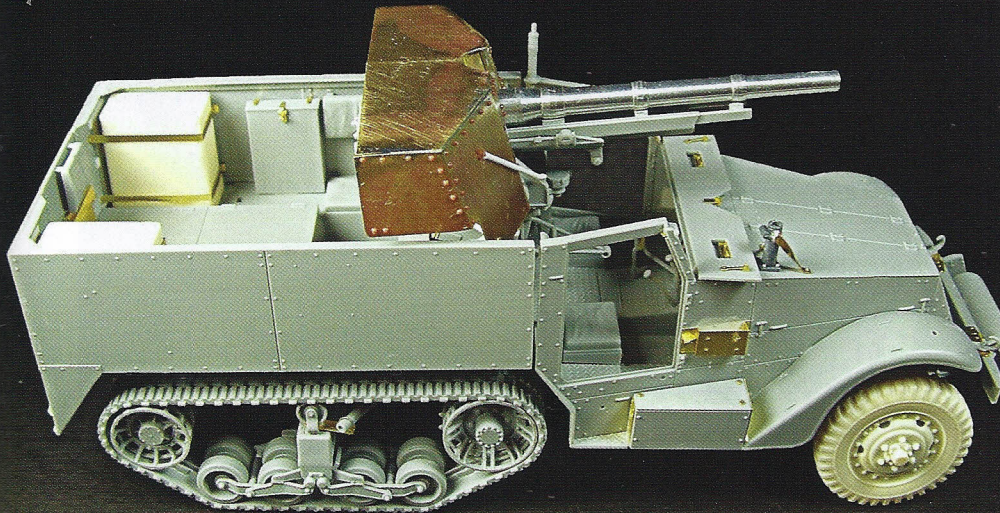
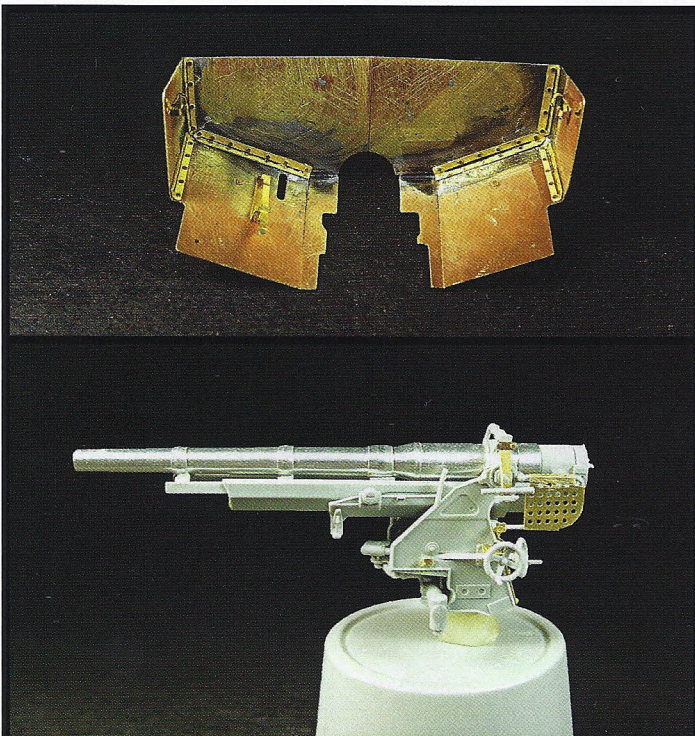
Gun shield

I thought that the Griffon detailing set had the gun shield but it did not. Maybe another Griffon set does but not the one that I had. I considered using the kit's shield but passed on it due to the lack of detail and its thickness. Luckily, the Trakz kit has a photo-etched brass gun shield so I used that one. I soldered the top, front and sides together. This was not that difficult except for figuring out how to hold the pieces together so that my hands were free to do the soldering. Once I figured that out, the rest was easy. Once soldered and cooled, I cleaned up the seams using a Dremel tool with a sanding stone and followed up with a wire polishing attachment. Rivet detail and other parts were added to the inner surfaces. Plastic rod was used to add rivet detail to the outside.

The photo-etched brass set comes with slide and mounting parts for the metal gun barrel. They were too small for my fingers and tweezers; I could not get them to glue together, nor was I able to solder them together. Old age sometimes creates its own problems in modeling. The solution I arrived at was to carefully cut apart and sand down the parts from the kit's gun barrel. It was probably not the best solution but it worked for me.

I began to assemble the gun mount next. I had to be careful and continuously cross-reference both the Griffon and Dragon instruction sheets. If not, I can guarantee that I would have missed something. The assembly is straightforward but there is a lot of plastic to remove and replace with photo-etched brass. I tried to stay about two steps ahead of where I was actually assembling so I could anticipate any problems. This has saved my butt more than once.

The Dragon instructions, in some cases, were not easy to follow. The parts could easily be missed or mounted wrongly if had not been careful. My advice to anyone tackling this model is to take your time when assembling the gun.



I fabricated a .50 caliber machine gun pedestal for this model. The Ranger M3 was an early version of the M3 75mm GMC and still had the anti-aircraft .50 caliber MG mounted on a pedestal in the compartment rear. I did this using plastic rod, a mount from the AFV Club LVT4 that was just finished and sheet styrene. The MG is a combination of parts from Academy, Dragon and Aber. Gas cans, lights, tools etc. were painted separately and added later.

Final assembly and painting

I combined all subassemblies, applied Mr. Surfacer 1000 as a primer and then painted the model with a base coat of Model Master Olive Drab #4728. The tires, tracks and bogies were painted with Floquil Weathered Black. As this paint is out of production, a good substitute is German dark grey.

Archer Fine Transfers produces an excellent marking sheet specifically for this vehicle. I used it and Archer's M2/M3 instrument panel set for this project.

Marking were added to the model exterior and to the dashboard. I felt that the Archer Fine Transfers markings for the fender - 'CAR3' and 'RNGR' - were out of scale (too big) based on the reference photos I have. I used Archer white US bumper codes to make smaller ones for my model. I gloss coated the areas that needed markings, which helped them to settle down nicely. Once all the markings were in place, Dullcoat was sprayed over the entire model to kill any shine from markings or irregularities in the base coat.


I added the mine racks and all stowage next. Stowage came from Tamiya (Allied Vehicles Accessory Set), Legend (M2 Halftrack Storage Set), Value Gear (Set #8) and assorted finds in the spare parts box. All stowage was painted with Model Master or Vallejo paints. I added the radio antenna and painted the rear lights and a few other small details.

After a primer coat of Mr. Surfacer 1000, Model Master Olive Drab was applied, followed by markings from Archer Fine Transfers

Weathering

I began weathering the model by first giving it an overall brown wash followed by a black one. Then MIG Productions pigments were mixed with acrylic paste and added to lower areas to simulate dirt buildup. That was followed by a dusting of pigment to carry the dirt up the model.

Scenic base

The base utilized home builder's foam insulation sheets (pink) that were cut to shape and mounted inside a picture frame. The insulation was covered with Aves ClayShay. The roadway was made by pressing fine gravel (from old roofing shingles) into the ClayShay while it was still moist. Once it was dry, I used acrylic paste to fill in and smooth the roadway. The rock faces were painted with acrylic artists' paints and given a black wash. Ground areas and the roadway were painted with the same type of paint. Ground cover and plants are a combination of products from Scenic Express and natural items from the backyard. Bottles, ammo cans, spent round cases and crate are all from my spare parts box. 

References

Hunnicut, R. P. (2001), Half-Track: A History of American Semi-Tracked Vehicles, Presidio Press

Janda, Patryk (2011), Gun Power #35, Half-Track Vol. 2, AJ-Press

LIFE magazine photographs

Photos on the internet

Pink builder's insulation foam was carved to shape and Aves Clay Shay formed the ground work.

