Instructions for Asiatam Sd. Kfz. 9 FAMO 18t Re-Build
Started: March 2, 2021 Finished: Oct 30, 2021
by Paul E. Howald © 2021

Goal:

1. Rebuild and detail the Asiatam all metal FAMO 18t heavy transport halftrack with new electronics, paint, weathering & decals.

Notes:

1. **Read these entire instructions before starting any work. Understand the processes followed.**

2. In general, I tend to make major repairs and modifications a model first and then add details last. This keeps the details from being broken off during the final assembly process. I also paint all details before they are added.

3. Normally I paint and weather all subassemblies and parts before gluing or fixing them in place. In this buildout, I weathered the running gear and lower frame early in the process, and then weathered the upper deck after most of the major work was completed. For this model I used Krylon Ultra Flat red oxide primer # 51317 and Ace #1617372 Iron Matte Enamel over which was sprayed small areas of Model Master's Gun Metal Buffer #1455. I chose to use a dark gray color, but with highlights of the Gun Metal Buffer to get some shiny areas showing thru.

4. In this re-build process we will focus on the following sub-processes: First we gather all reference material and complete research of what details are to be added to the model….make copies of pictures for reference and store everything in a 3 ring binder. Next dis-assemble and clean all major components. Then work on the Lower Frame, Suspension and Track (included in this step is configuring the new electronics package). Add new details to the Front Engine & Crew Compartment Area. Add details to the Rear Cargo Deck area. Install a Lighting circuit for Headlights and Taillights, and then re-assemble everything, adding final painting, decals and weathering.

Total Parts Used:

1.	Basic Asiatam metal model	$450.00
	(Note: Model selling for $1800 on Ebay 5/1/21)	
2.	11.4v Lipo 3 cell battery	$ 55.00
3.	IBU2U Electronics Board & Micro Card	$225.00
4.	2.4G 4 channel radio and receiver	$ 40.00
5.	(5) 1/18 scale 21st Century US Ultimate soldiers	$ 50.00
6.	(1) cast resin driver figure	$ 35.00
7.	Replacement of broken parts	
	a. Both Fender Position Indicators	$ 4.00
	b. (1) Rear Return Sprocket	$ free
	c. (1) Brass fitting for Track tensioner	$ free
	d. (1) Running Wheel	$ 9.50
	e. (1) Notek Light	$ 6.00
8.	Misc. screws, glues, resin parts, paints, decals	$100.00
9.	Labor to rebuild model	$200.00
	Total	$1174.50

Step 1:

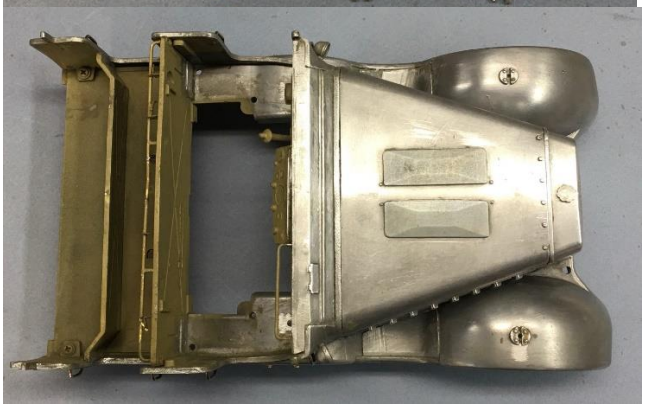
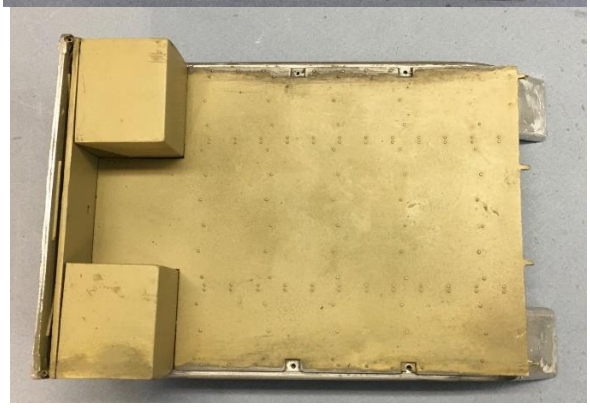
Research Materials used:

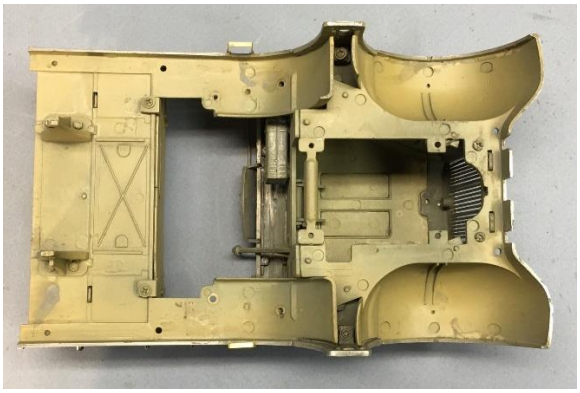
1. History File #002 FAMO 18t
2. FAMO 18t: the Military Machine
3. Nuts & Bolts Vol. 12
4. You can also access a lot of info and pictures via the internet.
5. Instruction Manual for FAMO assembly

Step 2:

Here are pictures of the model before I started work on it. This was a used model with certain degree of neglect and damage that needed repair. It also had some running gear parts that were defective from the manufacturing process and new parts were bought from Asiatam.

A. Start w/ disassembly of the model down to its basic components. Be sure to place screws, nuts and parts in baggies and label them so you know what they are used for when re-assembling. I did not take the suspension system apart but took the wheels and sprockets off for separate painting and weathering.

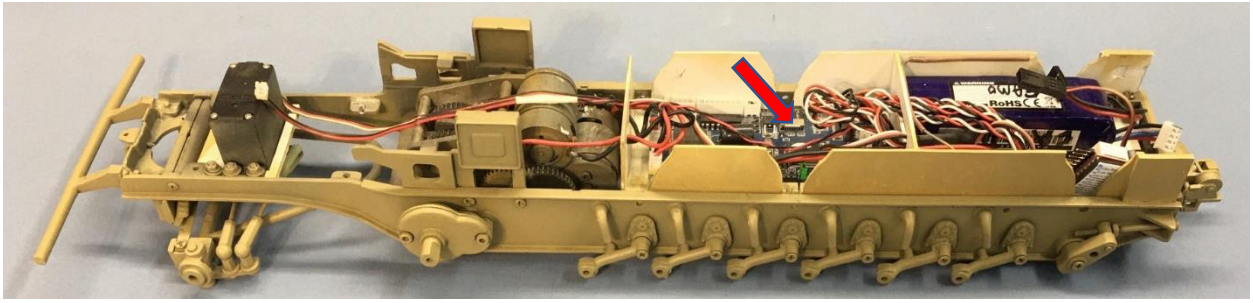





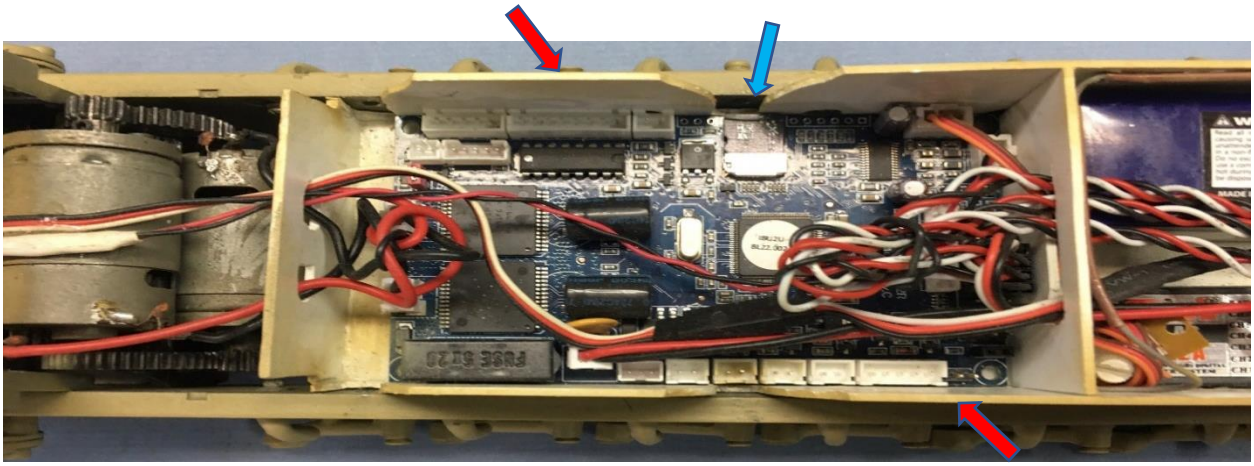
B. Strip all the old paint off the model and clean the parts in soap and water (I had not completed this yet in some of the pictures above).

Step 3:

The next area to address is the lower frame, front servo, electronics package installation, battery and speaker. Here is a picture of the completed work. Note the placement of wires. This picture was taken before I chose the gray color scheme.

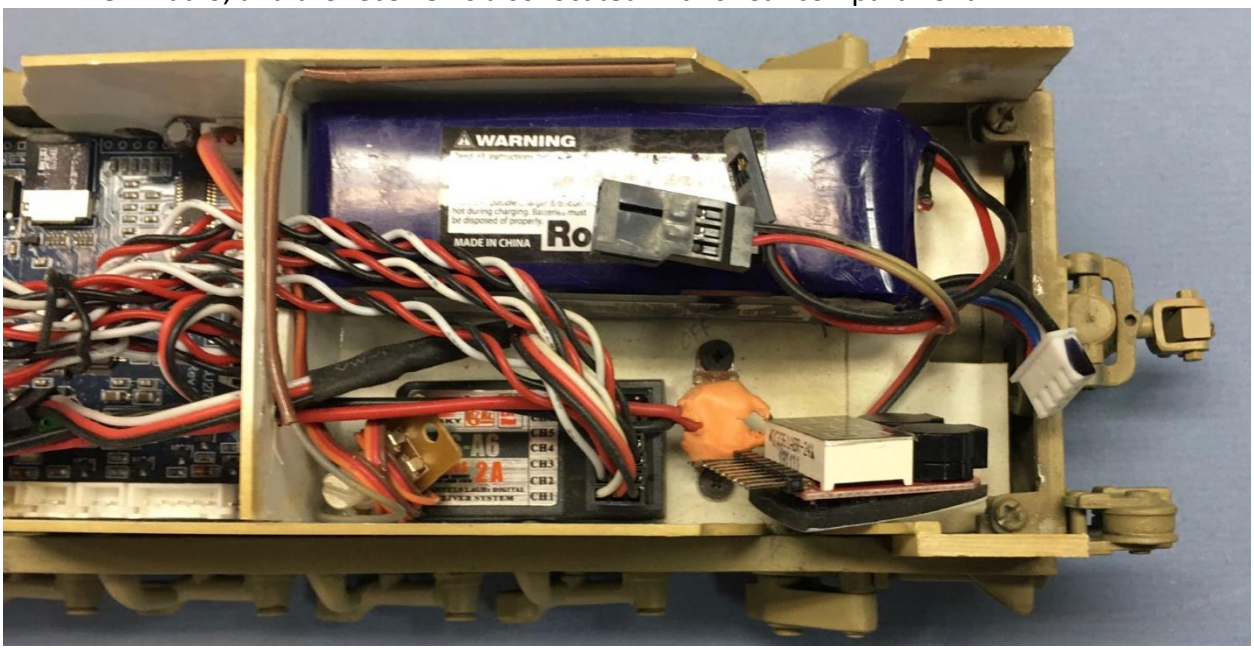


A. I chose to use the IBU2 Ultimate electronics with the FAMO sound, so this was fitted into the lower frame area in the center.



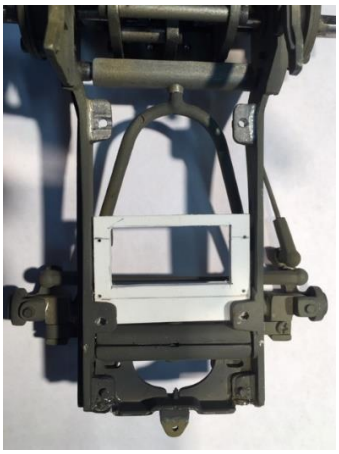
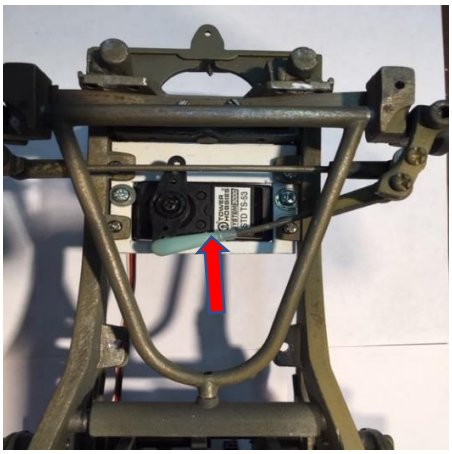
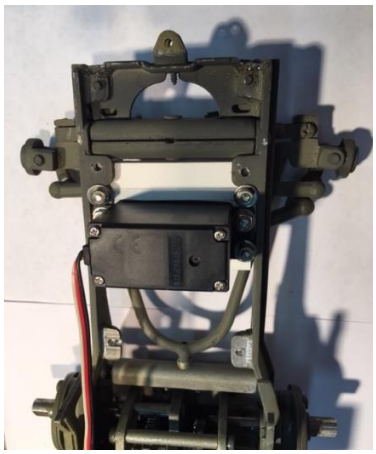
Note: To block areas where dirt and dust can penetrate inside the frame (and reach the electronics board), I built up card stock fins that closed against the upper deck when fitted in place (see red arrows). Also, an area has to be left to access the SD card in the center of the IBU2 Board (see blue arrow above).

B. The battery was located in the far rear compartment along with a low voltage alarm. The battery can be slid out at the back for charging. I also chose to use a FlySky FS-i4, 5 channel 2.4 Ghz radio, and the receiver is also located in this rear compartment.

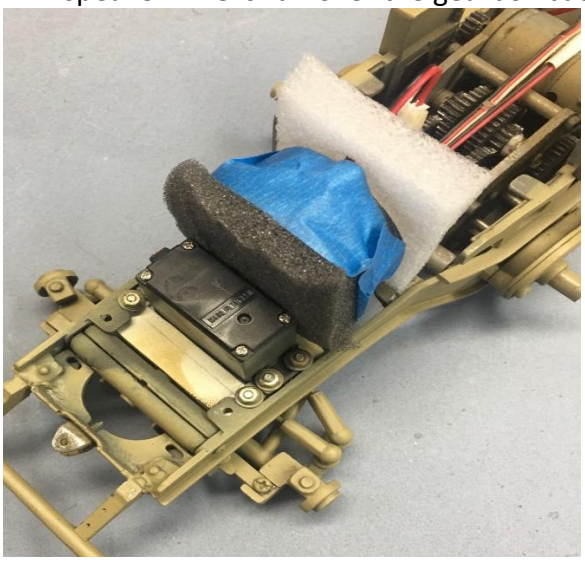


Because I chose this design and placement, it meant that a part and an actual function of the model could not be used bc there is no longer room for the “Cable Winch” in the Lower Frame. Asiatam actually provided a working winch if you wanted to go to the trouble to hook it up with motor and servo. Just use this part as an “extra” in the cargo bed as if it’s there bc it “needs repair”, or do not use it at all which is what I chose to do.

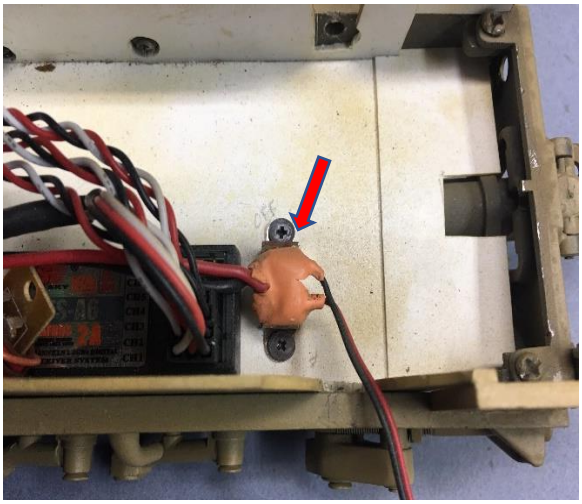
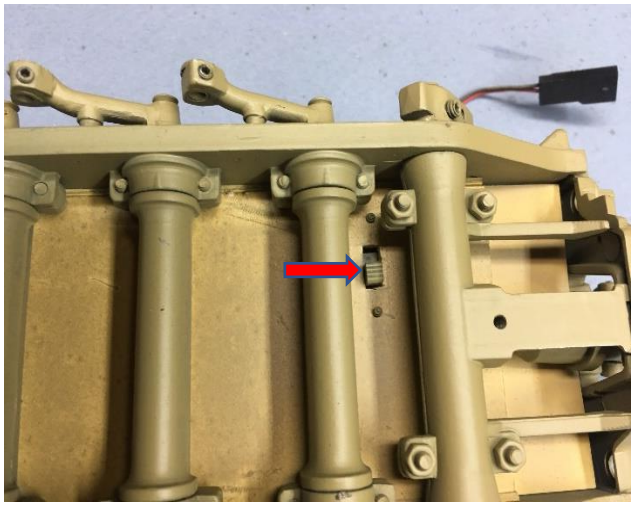
C. A heavy duty servo is installed in the front engine frame area to turn the front axel. Follow the Asiatam instructions on how to mount this.

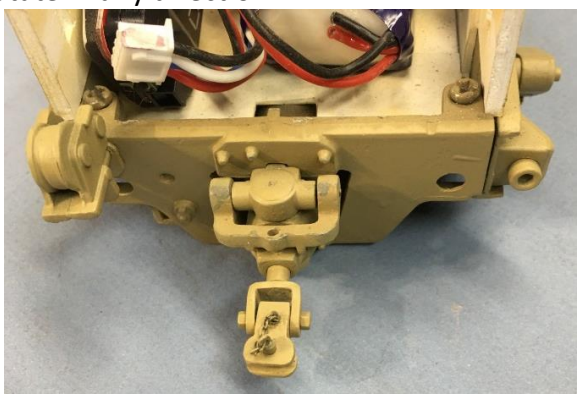
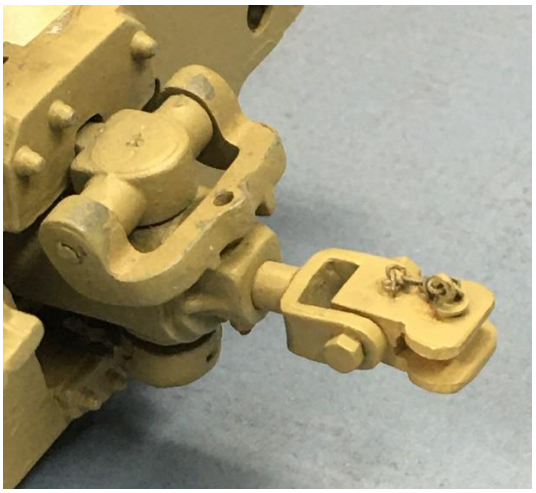
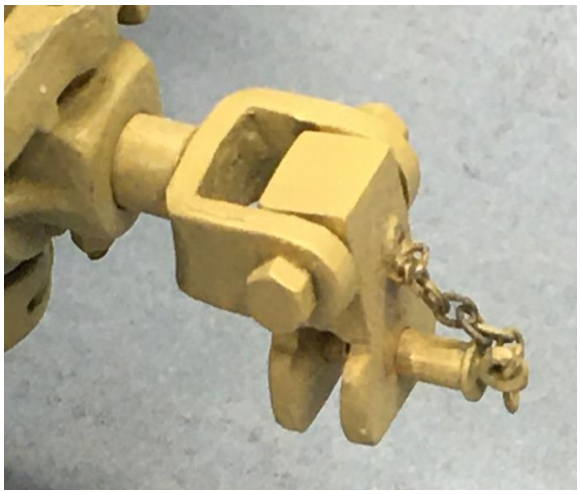
D. I chose to install the speaker in the front engine compartment area for realism, so the speaker wire is run over the gearbox back to the IBU2 Board.



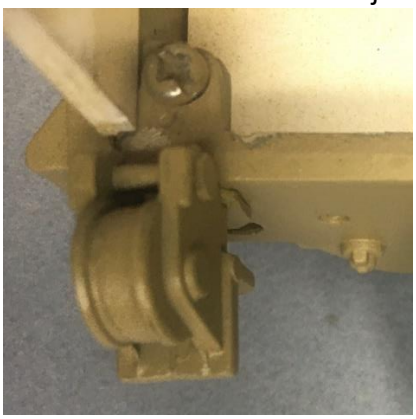
E. I installed the electronics On/Off switch so that it could be accessed from underneath.

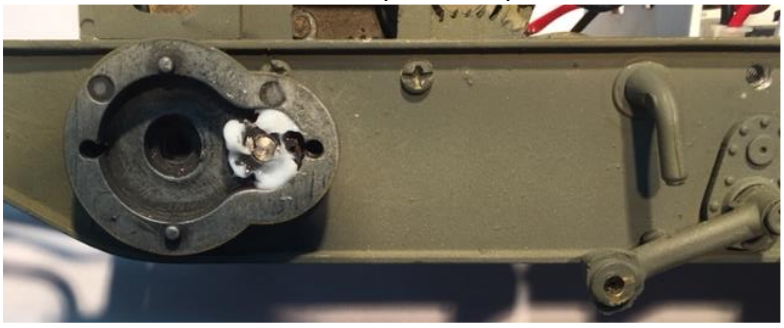
F. One of the details I added was a better hitch at the rear of the Lower Frame for pulling Guns and Trailers. It needed to be able to rotate in any direction.

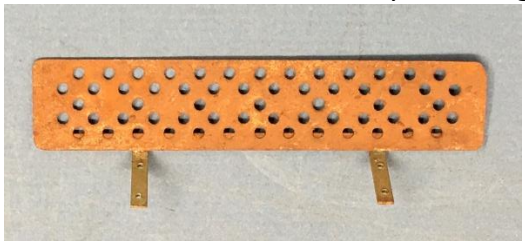
G. Since I was not using the Cable Winch, there still needed to be a "fake" cable extending out over the hose reel. So I just cut a short piece to glue in place.



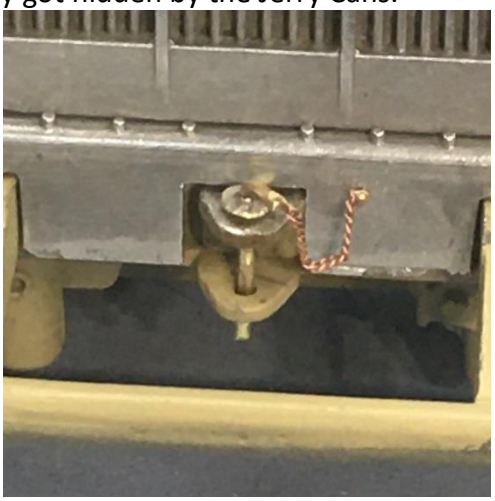
H. Besure to take the drive sprocket apart on both sides and add grease.



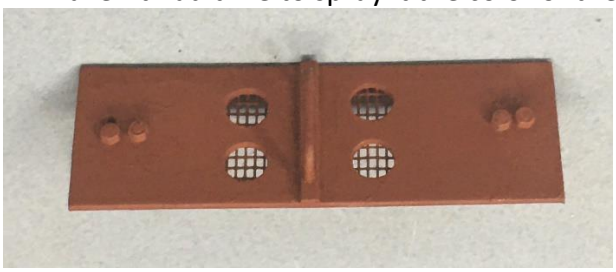
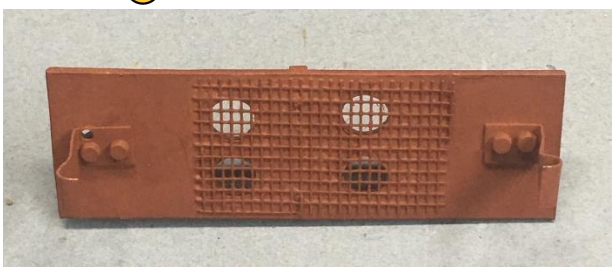
I. I added a perforated metal shelf to the front bumper of the Lower Frame. This will hold four German Jerry Cans of gasoline. Attache with 0-90 brass he hex head screws by 1/8” long.



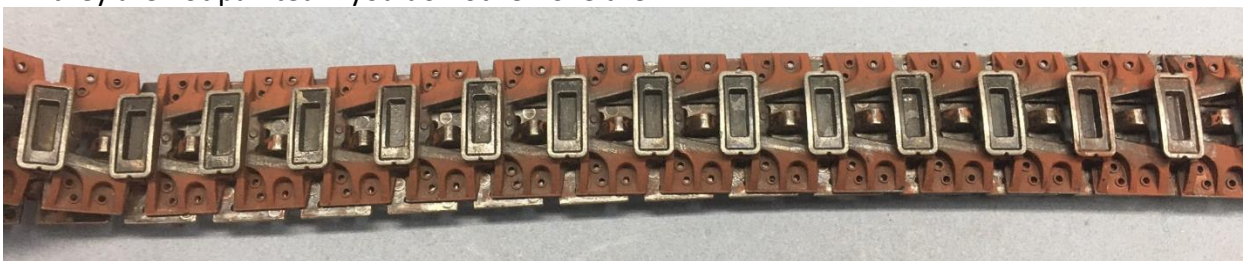
J. The halftrack also needed a “L” shaped pin for the front hitch. This is used primarily for attaching tow cables. But this ultimately got hidden by the Jerry Cans.



K. I built a rear wall enclosure above the rear hitch, that Asiatam did not include in the kit. This hides the battery area and adds some realism to the model. I sprayed it with Red Oxide primer and left it that color. I do like a few color highlights on my models rather than everything being dull gray or yellow, etc., etc. The rationale for this part being red is that the crew mangled the orignal one, had to fabricate a replacement, sprayed it with primer and just haven’t had time to spray it the color of the Halftrack. 😊

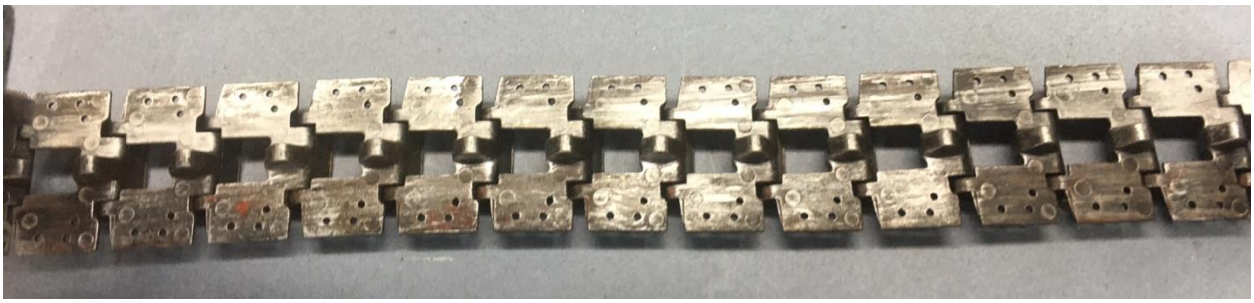



L. Tracks are next in the process. I first removed the rubber pads, then sprayed the outer portions with Red Oxide primer. Besure to cover the cnter track pad recepticles with tape so they are not painted if you do not remove them.

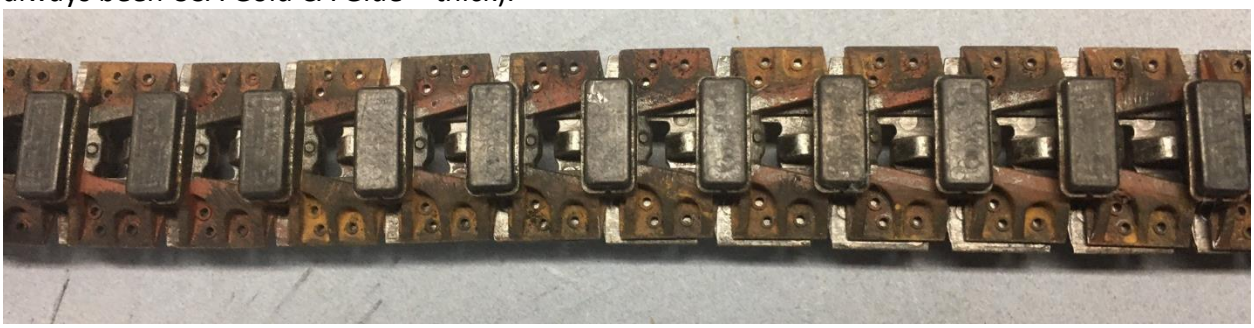


Next I brushed here and there splotches of a dark dry pigment called AIM Product #110-3107, and then sparingly a lighter brown dry pigment…AIM Product #110-3122. Affix this product to the track links by spraying with Testors Dullcoat.

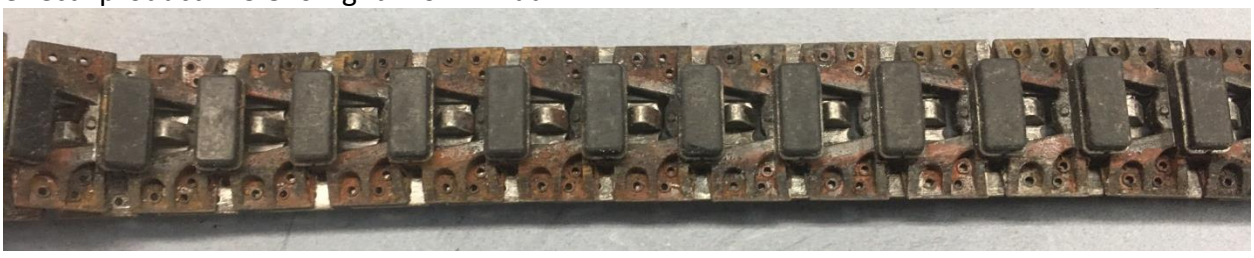
Lightly “dry brush” Steel paint to the otherside of the tracks. This is the area where the rubber wheels run and will cause wear and tear.



Once everyting has dried, then glue the track pads in place. I used superglue (my choice has always been USA Gold CA Glue – thick).



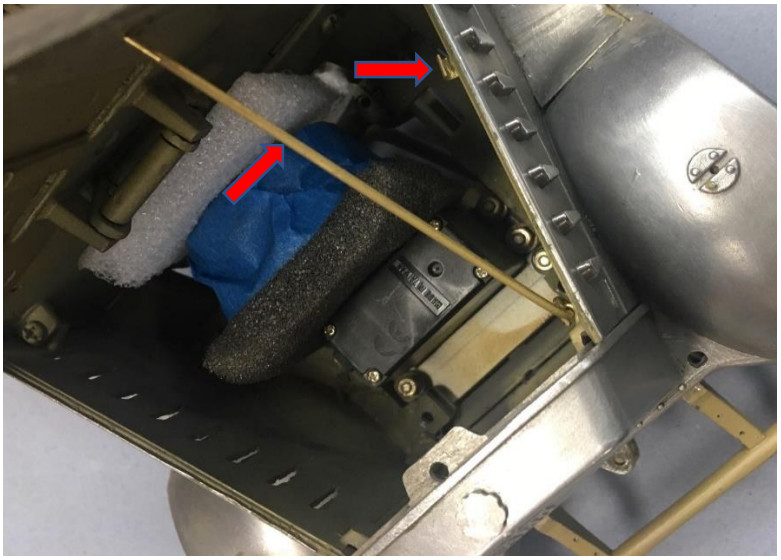
The last step is to brush a coating of liquid light dirt/mud over the track. I used Vallejo “weather effect” product #73.810 Light Brown Mud.



Step 4:

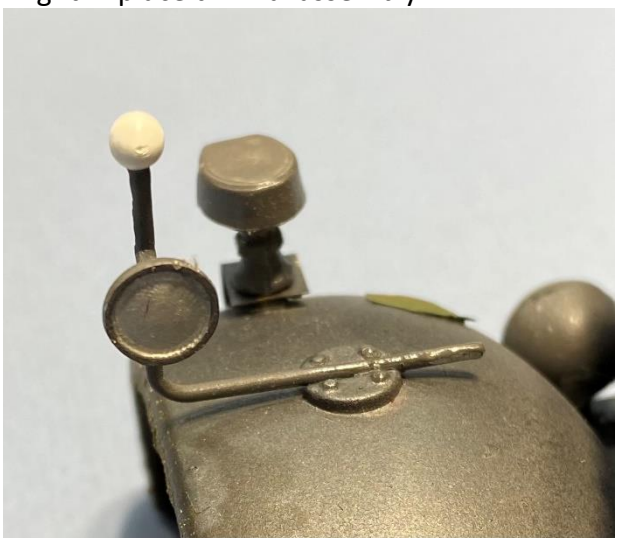
The next area to address is Engine Hood and Crew Area.

A. I added a hinged rod to hold the Hood open, and a U-bracket to keep inplace (see red arrows).



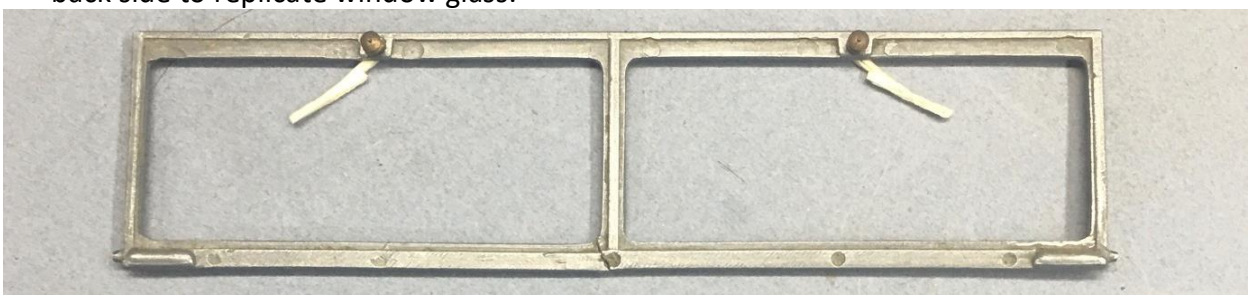
B. A Notek Light was installed on the LH Fender. This was ordered from Asiatam.

C. One of the fender position indicators was missing the white bulb so I ordered 2 new ones from Asiatam. Do not glue these or the Notek Light in place till final assembly.



D. Steps were added to each side of the Hood area so soldiers could have easier access to their seating area.

E. The Windshield was also broken, so a repair was made and glued together once mounted to the hood. Windshield wipers and motors were also added. Clear plastic was glued to the back side to replicate window glass.

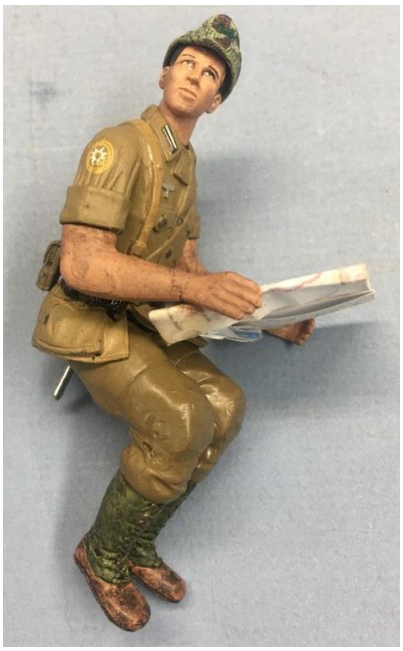


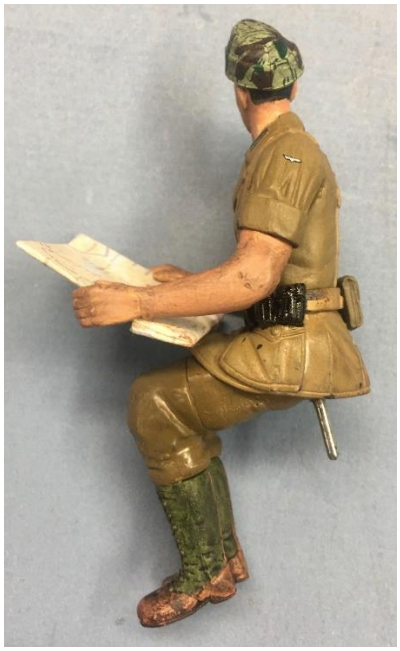
Masking tape was cut in the pattern of the windshield wiper arc, taped on and the a light coat of Testors Dullcoat is over sprayed to replicate a dirt film. Paint touch-up may be required in the plastic sheet to give a better impression of a “frame around glass”.

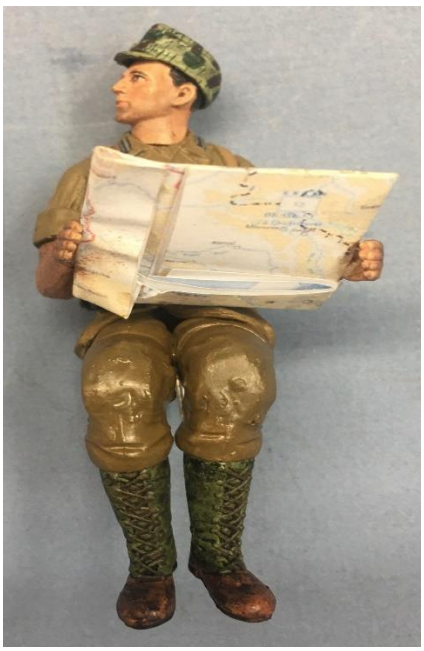
F. Crew figures: I used a 1/16th resin driver with a left arm leaning on a couple boxes for support and a right hand grasping the steering wheel (which does not move). This figure had its legs cut and extended so they would reach the pedals

The other 5 soldiers are 1/18th 21st Century poseable figures which I set in the desired positions, then glued all moveable surfaces and repainted. They have a 1/16th inch dia. metal rods sticking out of their rear ends and thru a hole in the seating. This makes them removeable but secure.

The finished soldiers are below:





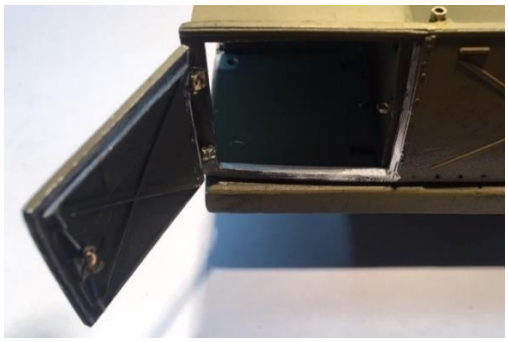


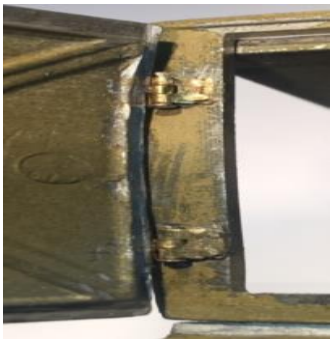
G. I also built brass rifle locking brackets that were mounted to the top rod at the front of the second row of crew seats. The rifles were glued to the floor bracket and the top locking bracket closed around them. Total 7 required….4 open to left & 3 open to right. NOTE: These were not installed until final detailing and the men were mounted on the seat.

Step 4:

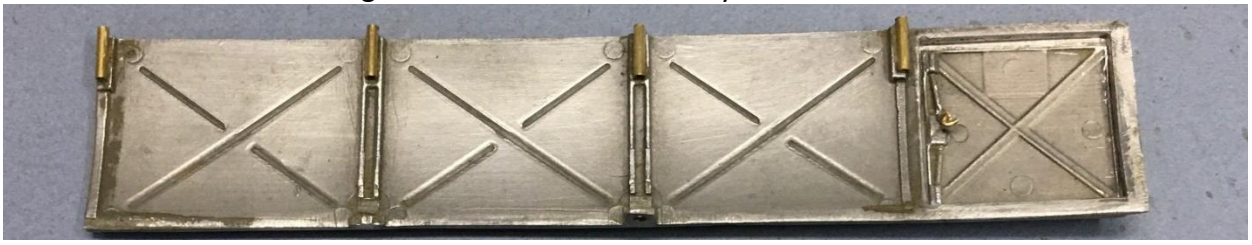
I next dealt with the Cargo Bed.

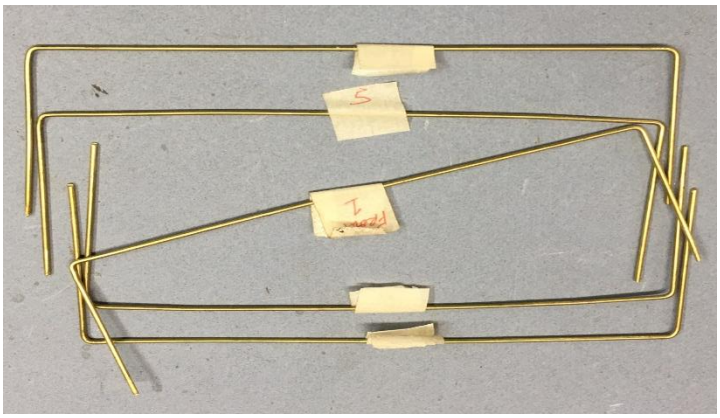
A. I added hinges to the two large service boxes at the front corners, and a hook/lock. Lots of tools and parts will be glued inside.





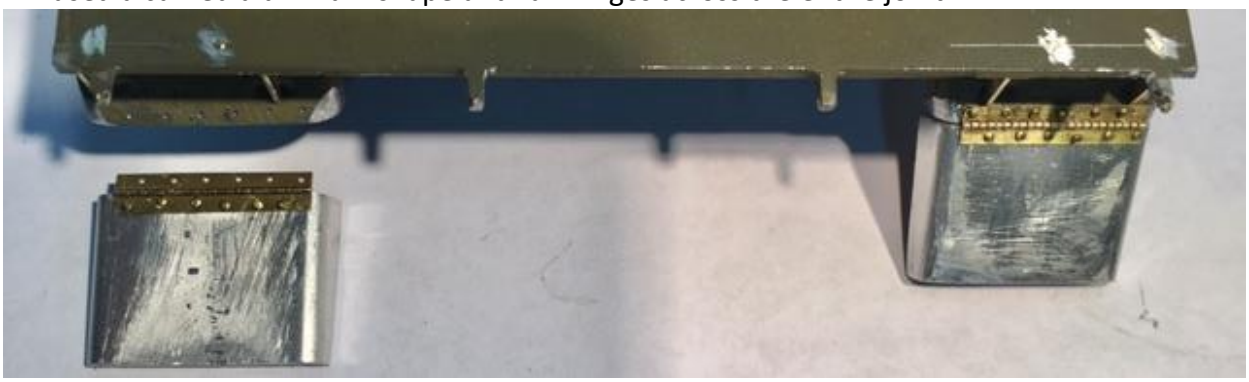
B. Brass tubes were glued in place so that the 5 metal stays could be mounted over the cargo area. A canvass covering can be added over the stays if desired.

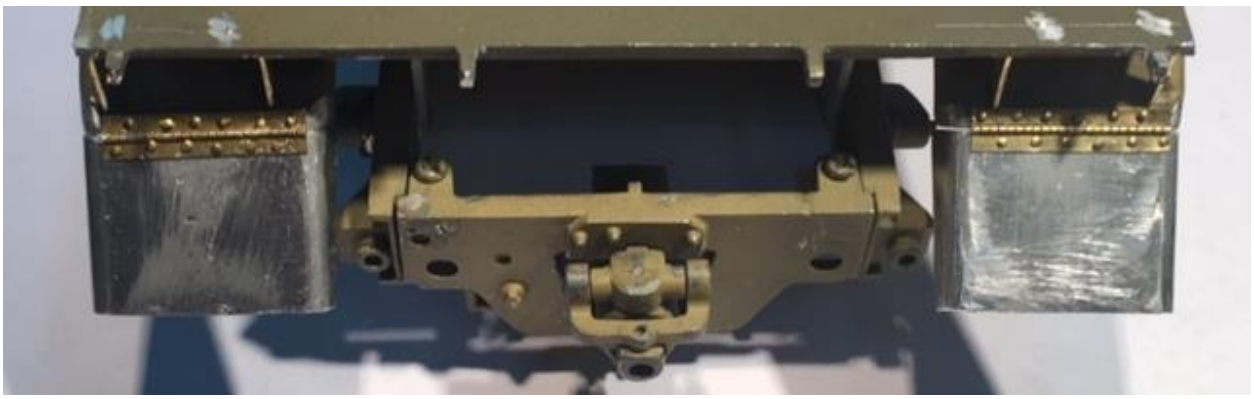




These will be etched with acid so the brass will not show thru, and then painted.

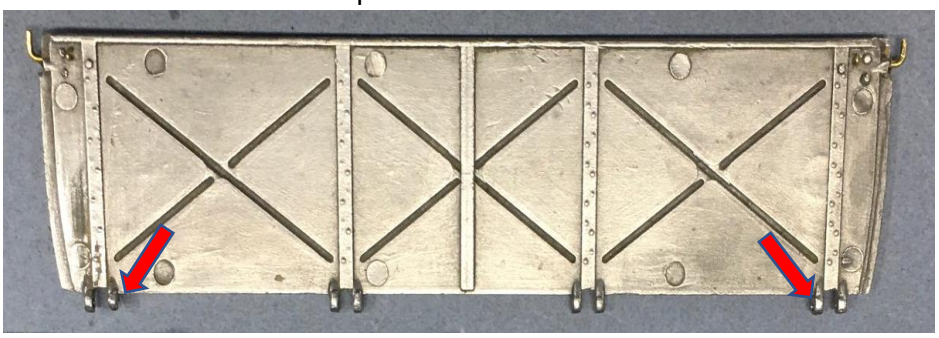
C. Most FAMOs had metal rear fenders that folded down, to which mud flaps were attached. I used a curved aluminum shape and ran hinges across the entire joint.





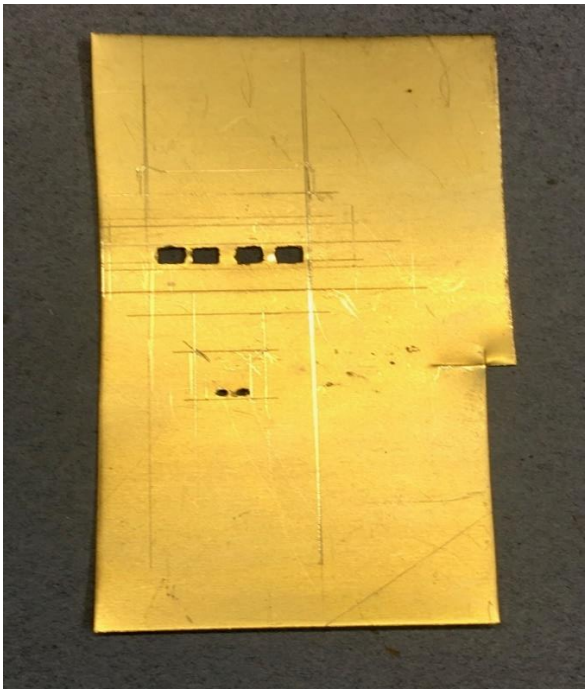
D. I was going to add actual rubber mud flaps to the these fenders but realized after painting that the fenders stuck out to far to the rear and the flaps would not hang down. I should have had a cut sharper angle where the hinges are located, so that the fender would hang down closer to the tracks. Therefore, I left the rubber mud flaps off the model.

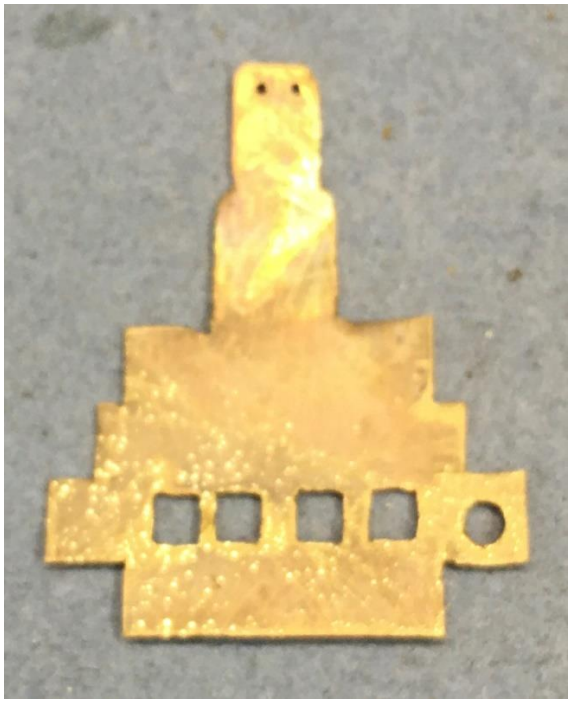
E. The 2 outside tailgate hinges were hollowed out for small bolts and nuts (0-09 size) and I added chain and hook at the top corners.



F. The electrical system calls for a brake light on the rear RH fender. I cast this in resin from a mold I had which had a hollowed-out area for the lightbulb. I added a .010” brass mounting bracket.

G. A convoy light was required on the rear left hand fender. I needed to totally fabricated it from .010” brass sheet. I scribed the outline of the design I wanted, drilled the 5 holes (squaring up the 4 on the front), then cut it out, folded it and soldered the joins together. This was then positioned on the fender and two holes drilled for the bolts and one for the bulb wires. After painting, the 4 squared holes were filled with Microscale’s Krystal Klear which dries as a clear liquid plastic and was painted green.





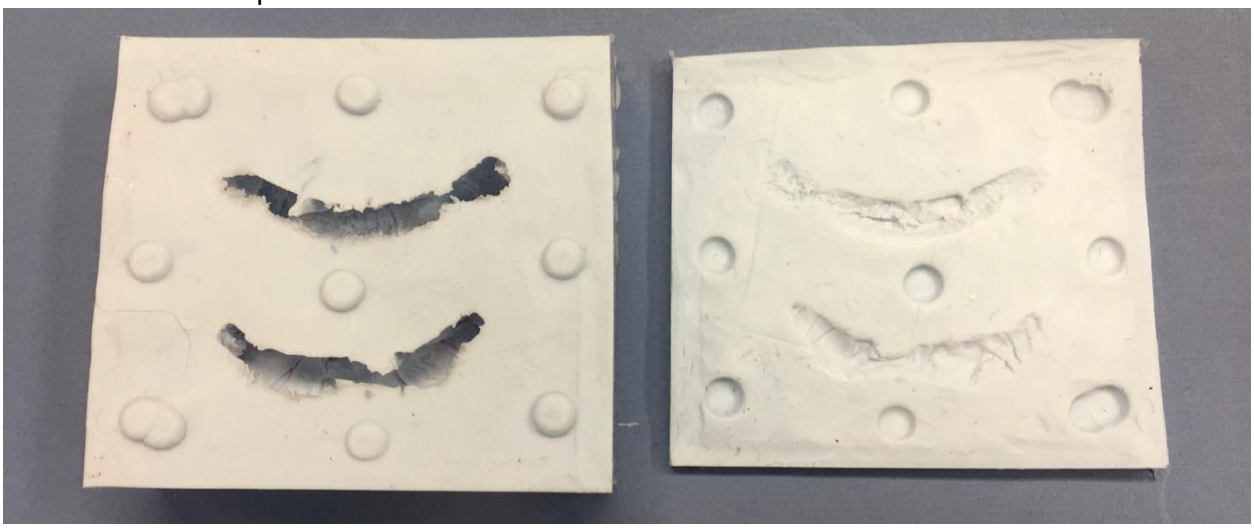
H. Tool box shelves were built inside the 2 service boxes and wood tool boxes were made to fill up the spaces. The boxes were filled with tools and misc. stuff and are loose fitting so they can be pulled out for inspection. Other loose parts were glued in place.

Step 5:

What follows are the other details and parts that will be added to finalize the model:

A. I wanted a rolled up tarp and camo net on the front fenders. This meant taking a straight resin casting of each part and bending it in its final curing process, so that it was close to fitting the fender profile. Then trimming each so that it fit better. I then added clay to the front edge so that I'd have a tighter looking fit to the fender.

Next these two parts were mounted so that RTV molds could be made. This is the result.



Once the RTV is fully cured, I then cast each part to see how it fit to the fenders.

Notice that a notch was cut out in each casting so that the position indicator rods would fit.

B. Fire Extinguishers are mounted on each side of the front hood, lined up under the windshield.

C. Jerry cans will be tied down to the perforated metal shelf that is added to the front bumper.

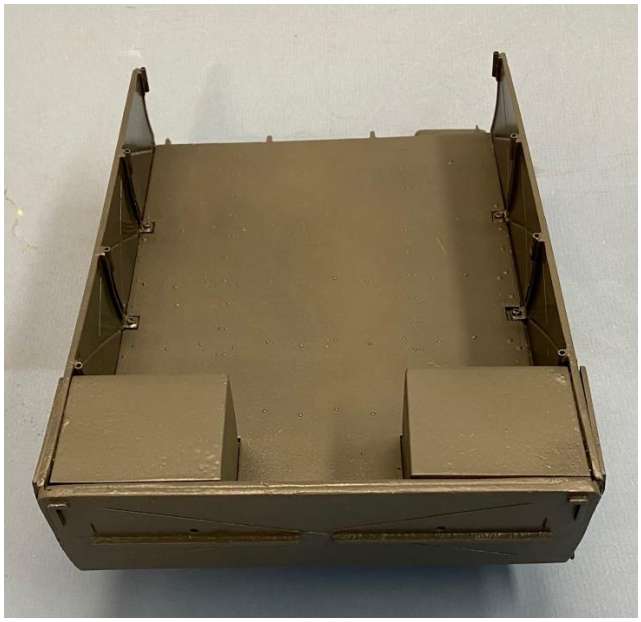
D. Various misc items will be glued into the cargo bed to look like tools.

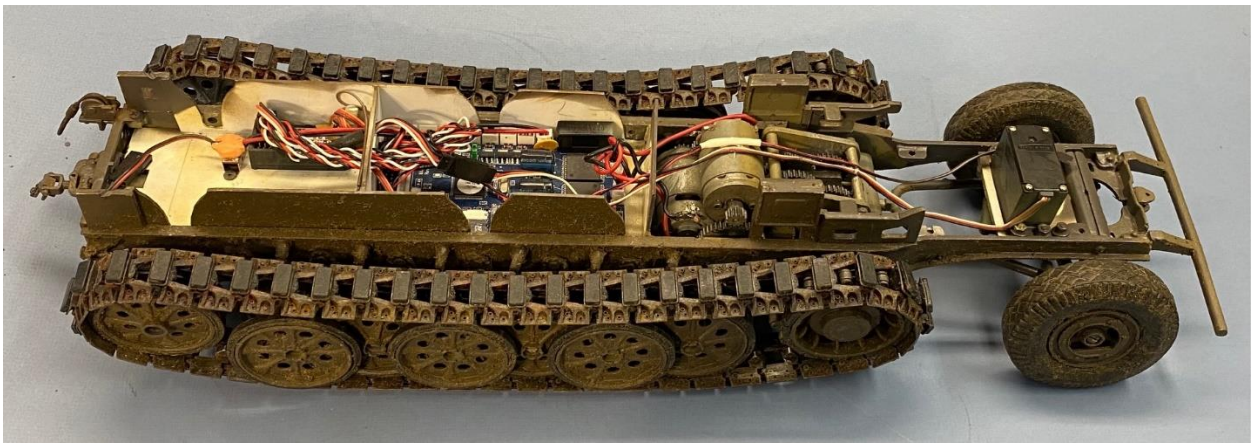
E. There will also be some barrels and metal drums in the cargo bed.

F. Other misc. parts were added such as rope, tow cables and pipes etc. (see last picture and commentary on page 34).

Step 6:

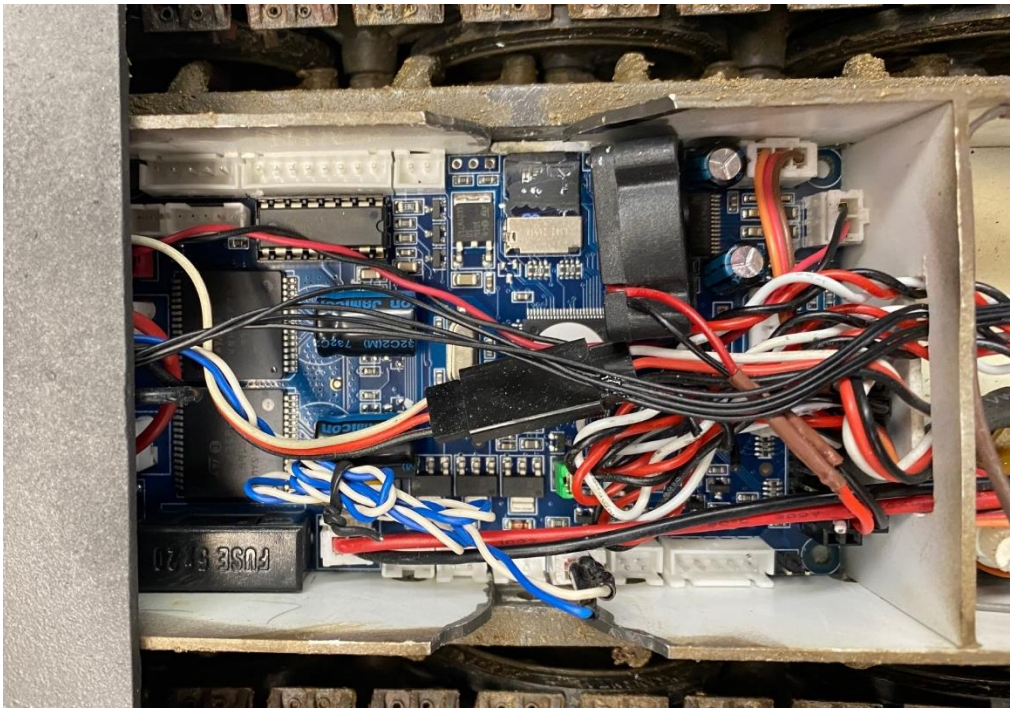
It's now time to paint the model: I sprayed the Iron Matte Enamel after the Red Primer had dried. This finished color is a dark gray. In appropriate areas, I highlighted using more of the AIM Pigment Product (dark gray, light earth, and small amounts of rust). Once the model was assembled but before all the details were added, I sprayed everything with Testors Dullcoat and a very light highlight of Model Master's Afrika "flat mustard" (#195506)….be sure the spray can is well shaken so no big droplets come out, and make fast swinging passes over the model as you spray…this way only a light coating will fall on the model. Here are pics of the basic model parts painted before assembly.





In the picture above you can see the heavy application of Vallejo's European Mud (73.801 and 73.807) that I put on just about everything…..tracks, wheels, hubs, frame, underside of the rear cargo deck and front wheel wells, both tires and on the rear and front parts that stick out. I also added highlights of this mud on the lower sides of the cargo deck and front cab area, as well as anywhere the boots of the soldiers would have stepped or walked.

Note in the picture below how all the wires are finally positioned and that a small 5v fan was added to help dissipate the heat from the IBU2U module. It is plugged into one of the extra 3 pronged servo output jacks. Connect the black and red wires only, not the white. The 4 black wires running thru the middle of the picture are for the convoy light and tail light.



I next assembled all the major parts together and made sure the model worked properly.

Then I added all the details and parts that I had painted, weathered and set aside previously.

Don’t forget to add the instrument panel decals.

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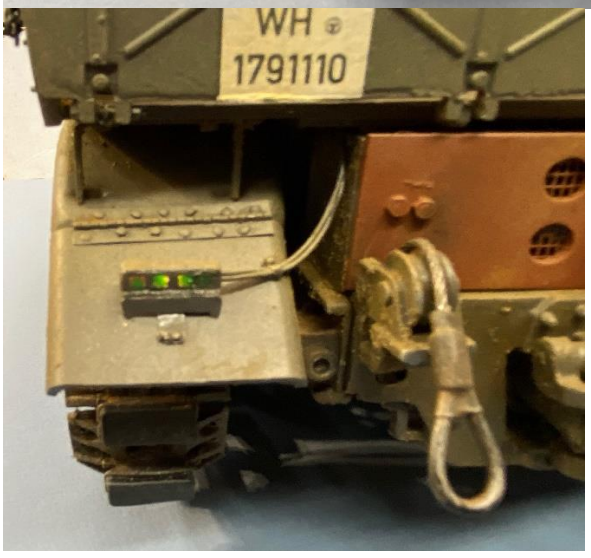
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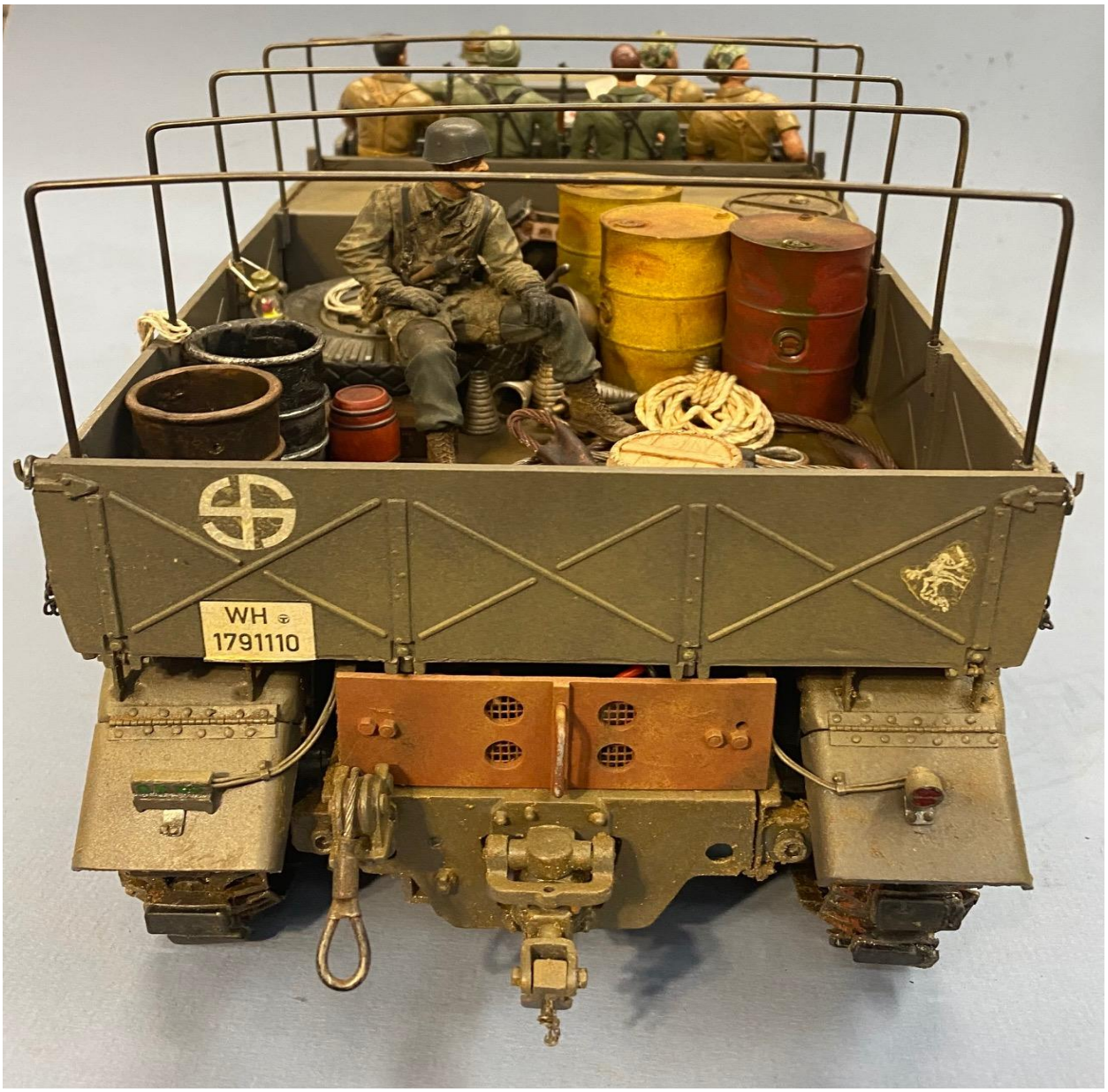
The headlight lamps do not show up very well, but can be seen.

I used silver paint to replicate worn off paint.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I elected not to reinstall the canvass cover over the crew area or over the metal stays above the cargo area, as these detracted from or hid all the other details that were added. But you could show the crew canvass cover folded open or extended over the seats to the windshield if you elect not to add a lot of the details I installed.

And finally…….somewhere, somehow in all the confusion of modeling war machines, a German Fallschirmjäger hitched a ride with the crew at the last minute…… 😊

Hope you enjoy building your FAMO as much as I did mine. It took a lot longer than anticipated due to a 90 day bout with Covid 19, but I finally got it done. Please send pictures of your finished work to FRAG at FRAGRCClub@aol.com or thru our website at www.fragarmor.com