Build Instructions for 1/16th Scale German Opel Blitz 3 ton Truck Started: May 18, 2023 Finished: July 4, 2023

by Paul E. Howald © 2023

Notes:

- 1. This construction article involves the disassembly, modification, painting and reassembly of a factory assembled but unpainted model from Asiatam in Germany. There are no instructions from Asiatam for this model or how to assemble all the individual parts if you bought the model in that manner.
- 2. I researched pictures and plans on the internet and referred to the 5 books listed below for modeling information, paint schemes and weathering ideas.

Parts used per truck:

1.	Basic pre-assembled model	\$ 220.00
2.	Brass bar stock for canvass cargo bay stays	\$ 12.00
3.	Taigen 2.4 GHz & Receiver upgrade to gas sound system (Item #IMX77204)	\$ 40.00
4.	Tower Pro Micro Servo SG90	\$ 10.00
5.	(2) MV Products # 402	\$ 10.00
6.	Modeling time and talent	<u>\$ 200.00</u>
	Total Cost	\$ 492.00

Research Materials used:

- 1. Opel Military Vehicles 1906-1956; Eckhart Bartels
- 2. Trucks of the Wehrmacht; Reinhard Frank
- 3. German Military Transport of WWII, 1933-1945; John Milsom
- 4. Truck Profile: Opel Blitz #2; Wolfgang Westerwelle
- 5. Opel at War; Eckhart Bartels

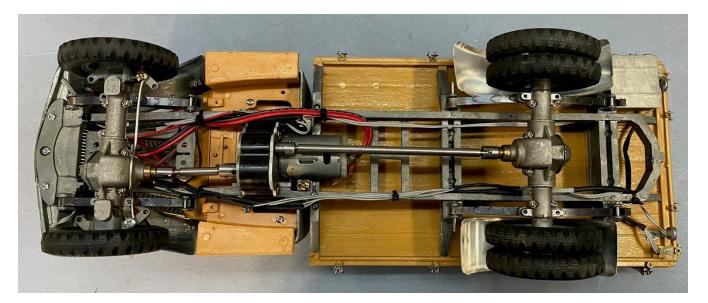
Commence Work:

1. The factory built Asiatam 3 ton model:



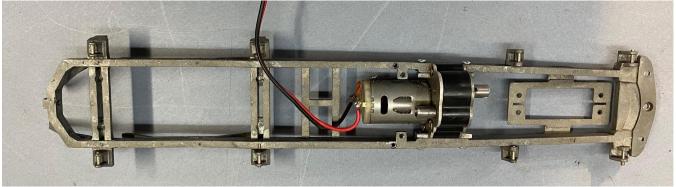


Comes with these extra parts:

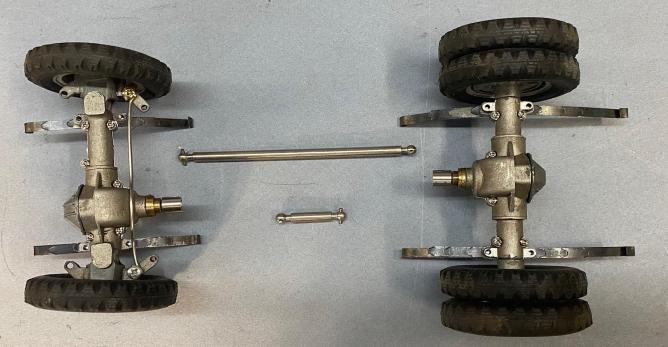




2. These pics show the model dis-assembled: During this process two wires to the rear running lights were broken bc they are glued into the frame. I decided to remove these lights (front and rear) as they were not commonly found on the vehicle. To disassemble the model, all the wiring needs to be cut from the zip ties, but take pictures so you can reassemble correctly.....although not all wires will be needed.

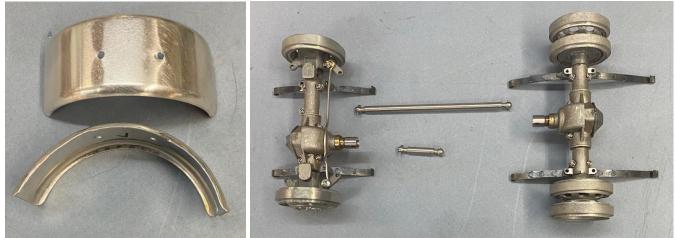








Remove the rubber tires before painting axles.



3. Improvements on Design....Better Details and Modifications:

Cargo bed hinges: Exchange the wire hinges for 0-80 bolts and nuts. 12 required.



Cargo Stay Mounting: Add cargo stays for canvass to cover the deck. Drill holes as shown (total of 8) for the 4 stays.





I solder short 1/16" dia. brass rod onto bottom of Stays, which insert into the 8 holes in the cargo body sides. Then I painted them Gunmetal Gray.



Spare Tire: I had some extra German rubber tires so I decided to add a spare tire under the front of the cargo bed on the left side. I secured it to the frame with a 1-72 brass bolt





Cargo Stays: Stays are made from K&S Metals flat bar #815026 1/32" x 1/8"



Rear Brake/Back-up lights: I decided to rebuild the 2 brake lights and add a license plate panel to the left one. This involves carefully digging the rubber glue out of the small aluminum housings and off of the 2 micro LEDs (this is very hard to do....I broke off one wire lead and had to re-solder it.....very tedious). Next, I enlarged the holes in the back of each housing, then coated the inside with ACC glue to create an insulated surface, then glued the LEDs back in as recessed as possible and then glued a clear glass headlamp over top (MV Products # 402)



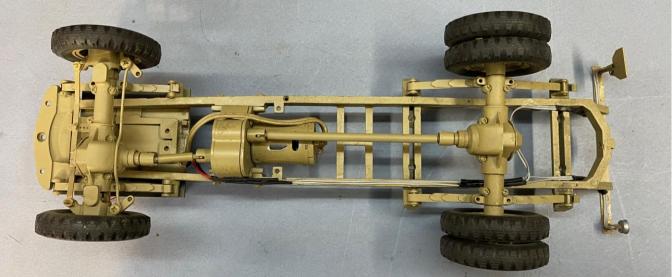


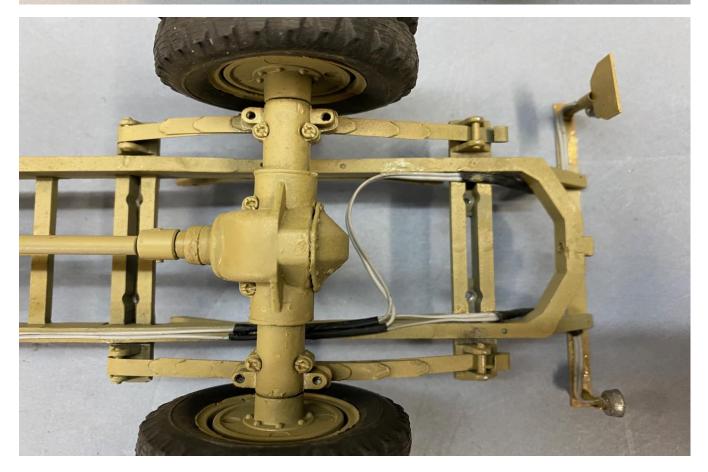




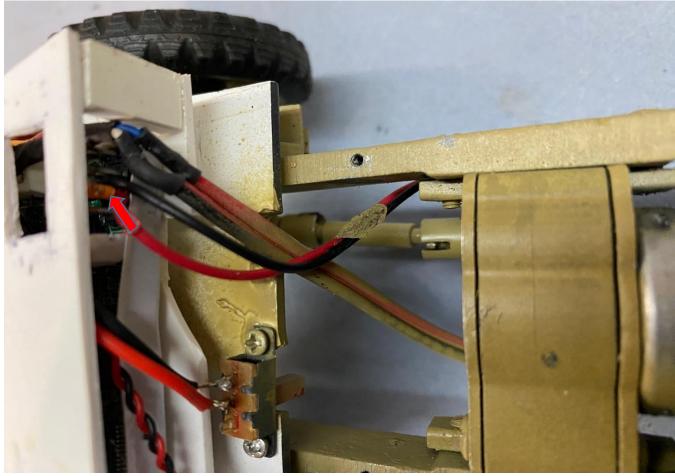








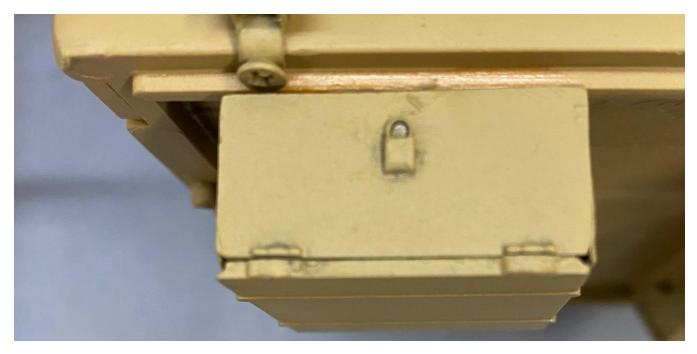
Hard wire the 2 leads to the control board (red arrow)



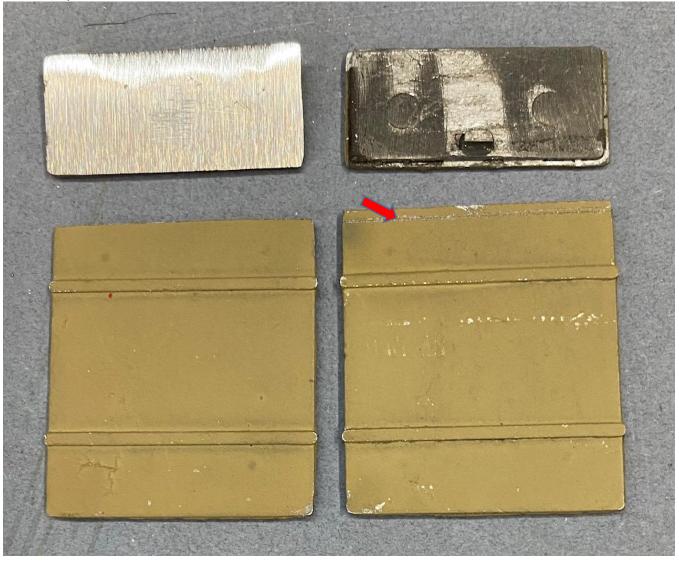
After gluing all the wires to the frame and to the control board, paint everything yellow. Periodically check to make sure the lights come on when backing up.

Tool Boxes: Both tool boxes that are mounted below the cargo deck are wrong. Remove them from the deck by prying off the lid and removing the 2 screws. Then pry the front face plate off that has the pad lock on it....grind off the pad lock and the 2 hinges..... using a bench grinder is an easy way to do this. Clean up all the old glue.



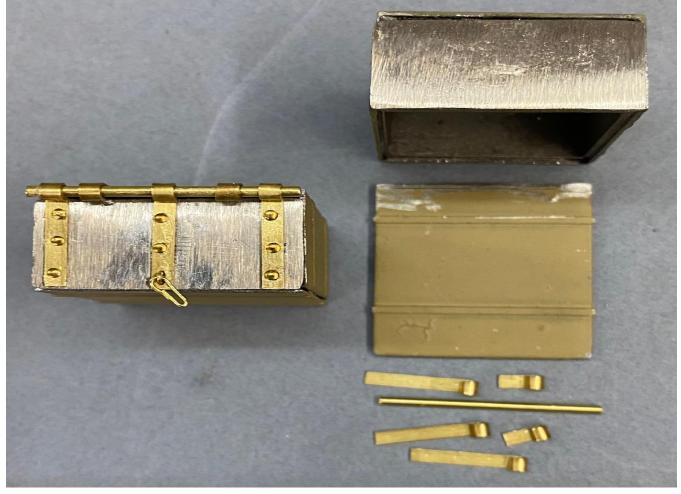


Next mark a 0.050" wide mark on the top lid and grind that amount off (see red arrow). This allows the front faceplate to be shifted downward.



Now glue the front faceplate back onto the box and add the brass strips as shown below & the simulated hinges (make operable if you want). Also make a new lock & loop (w/ small chain if desired to anchor it so it won't be lost). If your box faceplate is operable, the loop is affixed inside and sticks thru the front

faceplate so it can be locked. My 2 boxes are not operable. I did not create a new padlock as I felt they weren't typical in WWII to the German Army.



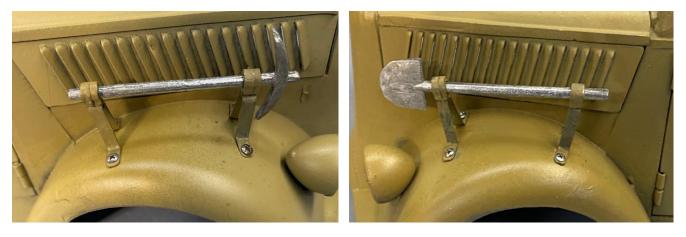
This is how everything looks once painted yellow.



Tools mounted on Fenders: The kit supplies 4 "V" brackets to mount the tools to each fender, but no screws are provided. I used very small ones and filled in the Phillips X slot w glue before final painting.







Notek Light: The kit is missing 3 brads or tiny screws to mount the bracket to the hood, and 1 screw to mount the light to the bracket. And you have to drill 3 small holes for mounting.



Triangle Towing Indicator: A truck that was towing a gun or trailer had to have the Triangle Indicator in its upward position. I was missing 1 bracket in the kit so had to make one in resin from an RTV mold that I had. I also had to enlarge to holes in the brackets so the Triangle piece fit smoothly.



Width Indicators (Curb Guides): These consist of a rod attached to the outside of the front 2 fenders with a white ball on top. It gives the driver an idea of when he is too close to the edge of a road or bridge. Solder the rod to the bracket you make from brass, bc it will be prone to breaking off when handling. I used a 3/64" dia. brass rod (30mm long) and a round bead 3.22mm dia. (from Hobby Lobby).





Locking Handles for Cargo Bed Sides & Ends: I searched and searched for picture of the tailgate locking handles and never found any quality pictures. I finally found a set for sale on eBay. I made 4 sets, one for each corner. I anchored the lift handle with 0-90 brass bolts, washers and nuts.



Driver: I used a 1/18th 21st Century German soldier but even so he did not fit the Asiatam driving compartment. The seat is made too low, which could have been raised, but instead I chose to cut the lower legs and boots down on the soldier to fit. Doesn't look real cool but then the door will be closed when in use. I inserted a .030" dia brass wire into his bottom and drilled a corresponding hole in the seat cushion to anchor the driver. Glue in place.



Window Glass: All but the windshield glass panels (plastic pieces) are inserted from the outside into each area. All seem to fit this way easily except the front windshield which is inserted from the inside. Carefully glue each piece in place. But do this "after" painting is done. Here is one example...the front window.



Windshield Wipers: I ground off all the extra flash at the bottom of the part (red arrows) and made it thinner so that this part could set as close to the windshield as possible. Then I drilled a small hole for a brass wire (.019" dia.) into the wiper and into the corresponding location at the bottom of the front windshield. Once the windshield has been glued into the front space, each wiper can then be glued in place and hopefully the hood doors will still open. Paint these parts black.



Front & Rear Tow Assemblies: The rear towing shackle and hitch were scratch built of styrene and white metal parts that I had, and then a mold was made and a resin part was cast. I did this bc this towing assembly can be used with other trucks. The front hitch was scratch built of brass and bolted to the frame's front cross piece.

Rear Shackle and Hitch:





Front Hitch: I made this from scrap brass flat stock, bent twice w/ rear piece solder on and hole drilled for pin. Pin was a white metal casting I had, in which I drilled a small hole for a chain.



Front chain hooks: A master of this hook was made from a white metal casting I had, then a mold and finally 2 resin castings were made. Mount the bar stock portion to the frame's front cross piece.



Paint Wood Tool Handles: I first painted the shovel and pickaxe heads with a silver color, then the handles were painted a wood color and after dry, lightly buffed with a very thin mahogany color. These are mounted over the fenders.



Pioneer Wire Cutter: This tool is mounted under the driver's door. It is not part of the Asaitam kit. It was painted with a thin coat of gunmetal color and the handles were painted wood and treated as the tools were. I drilled a hole in the rear of the piece for a .019" dia wire which is glued in a hole in the foot step side.



Add Opel Blitz Emblem on Radiator Grille: This part is from Asaitam but I lost mine so had to cast one in resin from a mold I had. Then I embossed the letters in Gunmetal paint.



Canvass Tie Downs on Cargo Bed Side Boards: Made from .047" dia. brass rod, flattened on one end curved on the other with 2 brads in the holes.



Canvass: NOTE: This is the last thing to do after all the other build steps are complete. Use an old while cotton dress shirt. The pattern for this is 8&13/16" square. When cutting it out, allow an additional 1/2" per side, which will be folded over to allow for sewing a fine tight line that is 1/8" in from the fold line. Cut off excess material from the $\frac{1}{2}$ " folded over piece after sewing is complete. The overall length is 1" longer than needed to fit over the stays, which allows for slop and depressed areas of canvas between the stays. Insert 1.5 mm dia. eyelets along the two long sides to match up to the stays (see picture). On the two canvass ends insert a very fine white string/thread inside the sewn area (use a tiny wire to pull it thru) which will represent the rope that pulls the end flap tight over the 2 end stays. The string/thread is tied to the two end tie-downs on each side of the cargo bed walls. Another string/thread is fed alternately thru the eyelets on each side and anchored to the side tie-downs. You will need to work from the front to the back on both sides simultaneously so that the slop can be achieved between the stays. I painted a very light coat of yellow on the underside of the white material (but not on the outside) before stringing it over the stays and tying it down (glue the thread to the tie-downs). If you spray too much paint on the underside it will be too thick and won't fold properly over the stays. Then once it is all fully tied down, spray the outside of the white material yellow....which also coats the string/thread. Go back afterwards and dirty up the string that is showing so it stands out. The second picture below has the part of the canvass that is up against the cab, shown at the top of the picture (Red arrow).

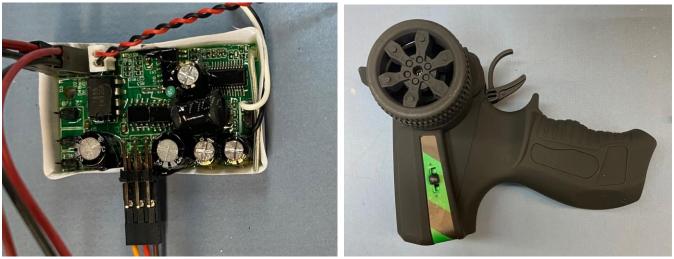




Nazi Flag: I elected to string a Nazi flag on top the canvass cover once everything was done. This is an ID panel for German planes so they don't shoot up their own convoys. I used 1mm eylets on each corner.

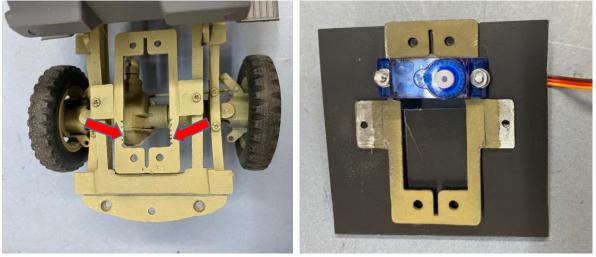


Electronics: I wanted a gasoline engine sound for the Opel Blitz so I bought a Taigen 2.4 GHz & Receiver upgrade to gas sound system (Item #IMX77204) or you could also use an RES-V3 combo set from WPL in China.

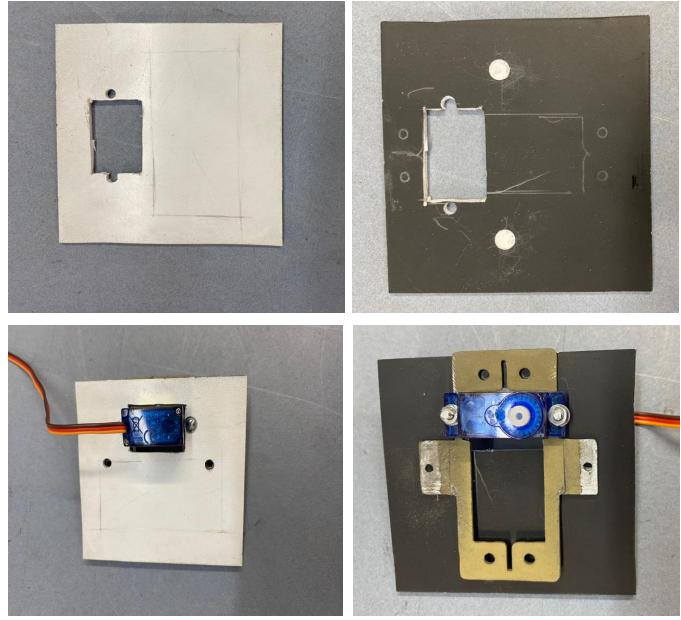


5. Engine Compartment: Install all electronics into Engine Compartment. Here is a series of pictures to show how I installed the components in a 3 tier set-up. The servo and on/off switch are on the lower level, w/ the control board and speaker in the middle and the battery is on top.

First cut and file at the red arrows so a micro servo can be inserted and screwed down both to the metal frame as well as a styrene plate.

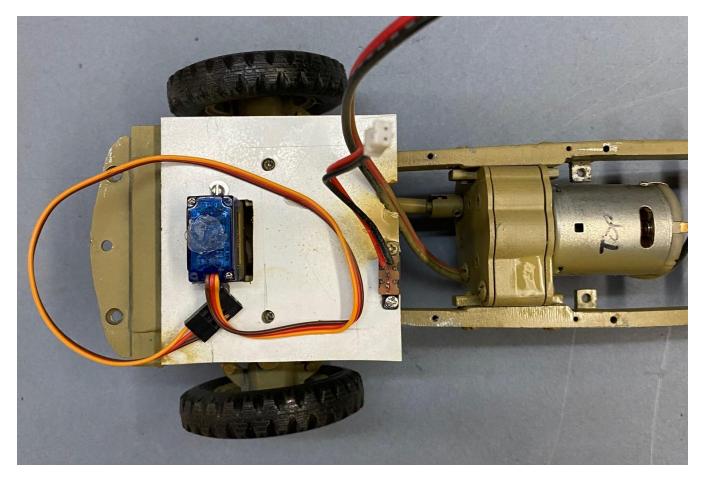


Make a styrene panel to screw the servo to.....this panel will have 2 more larger holes thru it so you can insert the screws which hold the metal plate to the frame.

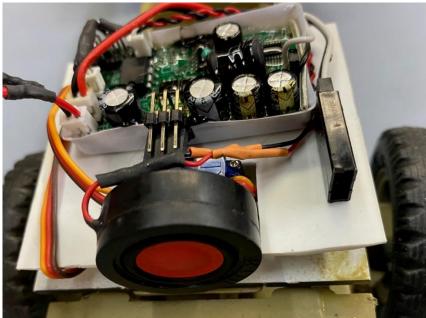


Be sure to notch the back of this plate for the on/off switch Red arrow below), and cut and solder the switch wires to a length which will reach the control board on the next level.

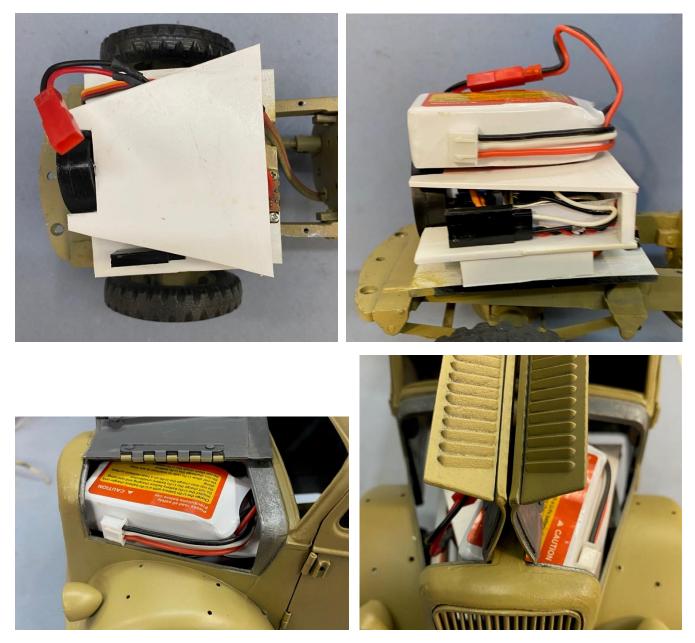




Next cut a styrene piece to lay on top the servo and on/off switch to hold the speaker and electronic board.



Next cut and fit a styrene piece for the third layer which holds the battery. Shorten and resolder all the wires to make as compact a fit inside the engine area as possible.



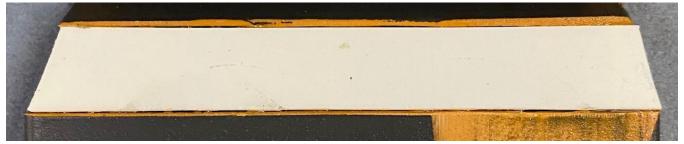
6. **Cab Interior:** Because the Engine compartment is filled up with electronics, the Cab firewall will no longer fit because the Asiatm designed part sticks into the compartment too far. I found this out as I was reassembling the painted cab interior......So, before you paint and detail the Cab interior, make these changes. For the redesign, I ended up using the bottom and top parts of the firewall, and made a new center section that was flat. The total height of the new firewall is 48mm. Start by cutting the firewall apart as the next 2 picture show. The top section is cut down to be 18mm wide (high) at each end Where red arrows show).



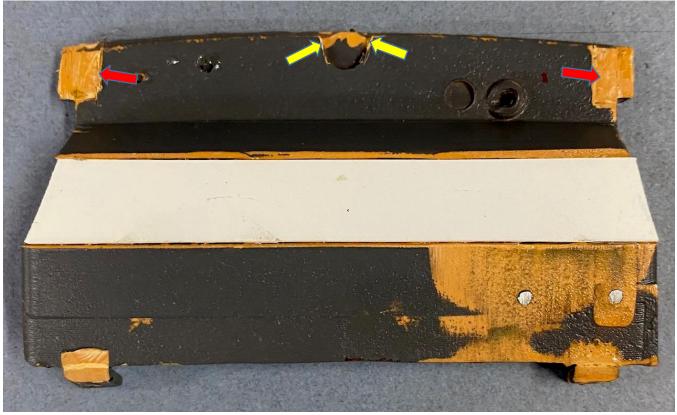
The bottom section is 16.5mm wide (do not count the thickness of the feet.



The new center section is 11mm wide (high) and is tapered on each end to mate up to the top and bottom section of the firewall.

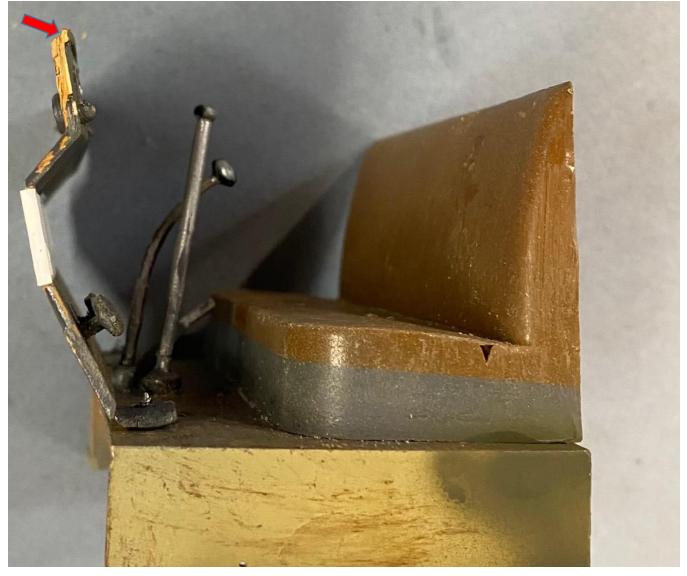


Before gluing the center piece on, grind off all the plastic that sticks out on the back side of the top and bottom piece (including that portion of the 2 feet, which results in the front part of the feet being able to be bent slightly). Remove the steering wheel and column if it was attached. Also cut down the width and thickness of the 2 tabs that stick out on the top section (red arrows), so it will fit properly up against the metal area of the cab where the windshield will be glued. And widen the opening in the center of the top section so it will fit over the tab cast into the metal cab (yellow arrows).



Once the part is reassembled and screwed to the floor, it should look like this next picture. Be careful as the feet are now lots thinner and will break off easily. This also allows the firewall to be positioned in

more vertically in the right location once it is reinstalled in the cab. Glue the firewall at the top to the cab just under the windshield (red arrow) but don't slop glue as the windshield glass also fits in this area.



Once fully installed, it will look like this.



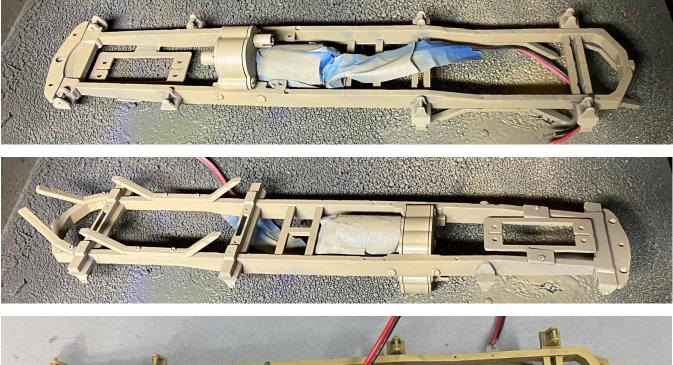


7. **Painting Steps:** All the parts are first painted in a yellow base coat because the final paint scheme will be Normandy 2 color....yellow with green camo pattern.

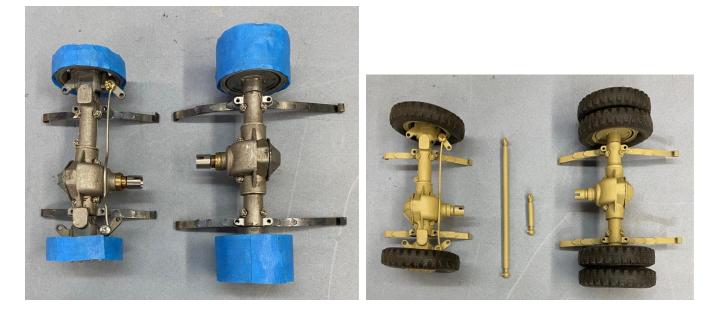












Once the yellow is all painted , the model looks like this.





This is the freelance camo pattern I sprayed on. Next comes weathering and mud.





A few details not to forget:

Hub Caps:

Yellow/orange center of towing marker:

Decals on odometers and license plates front and back:

Weathering: I used Vallejo #73.807 European Mud ...not too heavy, but put it on just about everything on and below the frame.

Cargo Load: I added a few boxes and barrels to the back so it looked like the truck had a load.













Final Comment: This is not a well engineered model. The cab was not designed and built for 1/16th size soldiers. I usually install 1/18th scale people, so this should not have been a problem. But I had to greatly cut down the size of the lower half of the driver to the point that he looks like a midget. Also there is way too much wiring to deal with when you tear this model apart. And the small parts (like mirrors) are not cast with strong enough material, as they break easily. Lastly, the head and tail lights are "over" glued (sloppy work) and are very difficult to modify if you want the lenses added.

But the "improved" model looks good and runs decent (doesn't turn sharply enough) but I am satisfied with the results.